

2023-2024

UNDERGRADUATE BULLETIN

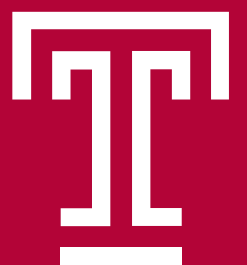
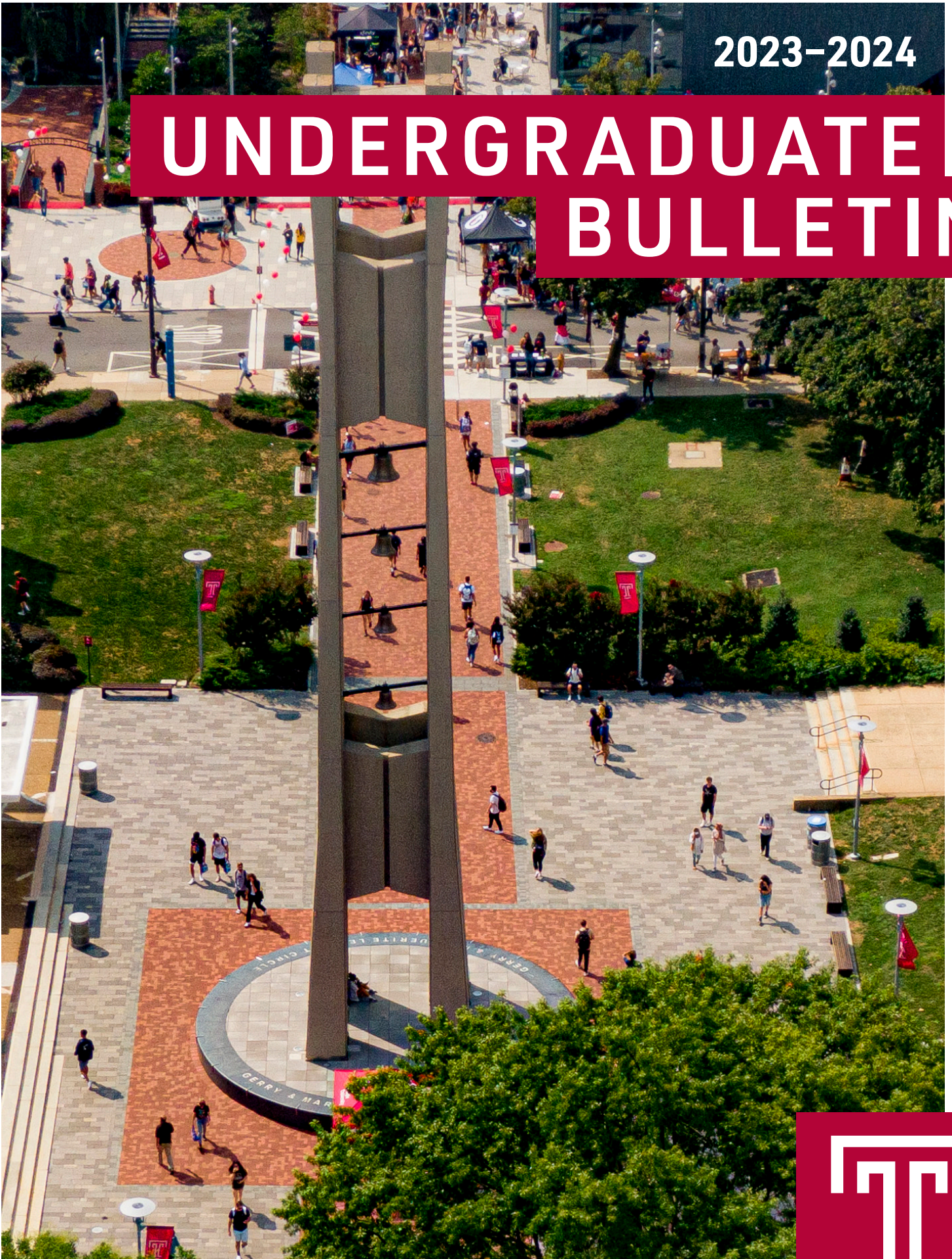


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Temple Bulletins 2023-2024

The Bulletin provides enrolled students with the information they need regarding their chosen academic path and helps prospective students make important enrollment decisions.

The information in this bulletin is subject to change by Temple University at any time. Neither this bulletin nor any parts of it may be relied upon as a contract between Temple University and any student, applicant, or other user of this site. All prospective and current students should consult with appropriate University Offices to verify current information and the status of policies, programs, descriptions of curricula, or other information in this bulletin.

Disclaimer: Temple University expressly reserves the right to deliver some or all instruction remotely at its discretion. Tuition, the university services fee and certain other fees are required to be paid in full and will not be refunded regardless of the method of instruction, the inability to access university-maintained facilities, or any disruption to or cancellation of classes, activities, events, services or programs.

Undergraduate Bulletin

The current Undergraduate Bulletin is for students who began school in Fall 2023.

For students who began prior to Fall 2023, see the Archives.

- [2023-2024 Undergraduate Bulletin \(p. 21\)](#)
- [Archived Undergraduate Bulletins](#)

Graduate & Professional Bulletin

The current Graduate and Professional Bulletin is for students who began school in Fall 2023.

For students who began prior to Fall 2023, see the Archives.

- [2023-2024 Graduate & Professional Bulletin](#)
- [Archived Graduate & Professional Bulletins](#)

Other Resources

[Admissions](#)

[Courses](#)

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Undergraduate

Welcome to the 2023-2024 Temple University *Undergraduate Bulletin*. Inside, you will find tools to help you map your academic plan and complete your college degree.

There are numerous resources in this *Bulletin*, including:

- A searchable database of more than 4,000 undergraduate courses.
- Overviews of degree programs and requirements for more than 150 undergraduate majors, as well as for minors, concentrations and certificates.
- Information on study abroad and research opportunities.
- Academic policies and procedures.
- A directory of student support services.

We strongly encourage you to take advantage of the opportunities described in this *Bulletin*. You should make it a point to meet with your advisor regularly, participate in rewarding learning experiences, and commit to graduating on time. And if you're an incoming freshman or transfer student, visit fly.temple.edu to learn about Fly in 4, Temple's innovative plan to fast-track your future and limit your debt.

Our first priority is providing you with a well-rounded education that prepares you to be "real world ready." With the tools available in this *Bulletin*, you are well on your way to personal and professional success.

About This Bulletin

The *Undergraduate Bulletin* is produced by the Office of the Provost to present general information about Temple University and specific information about undergraduate academic programs. The information in this *Bulletin* is subject to change by Temple University at any time. Neither this *Bulletin* nor any parts of it may be relied upon as a contract between Temple University and any student, applicant, or other user of this site. All prospective and current students should consult with appropriate University Offices to verify current information and the status of policies, programs, descriptions of curricula, or other information in this *Bulletin*.

Attention New Freshmen and Transfer Students

If you are a new undergraduate student at Temple this year, this *Bulletin* contains the requirements of programs into which you will be enrolling. For that reason, your advisors may refer to Fall 2023 as "your Bulletin year."

All new undergraduate students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

New freshmen are required to complete the GenEd (p. 83) curriculum. Advanced Placement (AP), International Baccalaureate (IB), and Dual Enrollment credits may fulfill GenEd areas. Students who have fewer than 15 transferable credits are considered freshmen. Additionally, students whose transfer credits were earned while in high school, regardless of the number of transfer credits, are considered freshmen.

New transfer students are required to complete some version of the GenEd (p. 83) curriculum. (See the Transfer Students (p. 30) section of this *Bulletin*.) Students who attempted 15 or more transferrable credits after high school and prior to being admitted to Temple University are considered transfer students.

Attention Current Students

Current students who started at Temple University before Fall 2023 should refer to the Archives to find the requirements of their program of study for their Bulletin year.

Other Resources

For a complete list of academic programs offered at Temple University, refer to the Academic Programs List (p. 2908).

Specific information on undergraduate academic programs is located within the individual schools, colleges and divisions (p. 103). Additional information is located in the following sections:

- University General Education Curriculum (p. 83)
- Writing Intensive Course Requirements (p. 102)
- Intercollegial Programs (p. 1796)

In addition to this *Bulletin*, you will also find several other resources that provide important information for Temple University undergraduate students. These resources include, but are not limited to, the Course Descriptions, Course Catalog, Class Schedule, Campus Safety Services, Disability Resources and Services, Military and Veteran Services, Transfer Student Information, and University Housing and Residential Life.

We hope this *Undergraduate Bulletin* will prove informative and useful to you as a Temple student. Questions or suggestions regarding the content of the *Undergraduate Bulletin* may be directed to the Office of Undergraduate Studies (phone: 215-204-2044; e-mail: ug-bulletin@temple.edu).

About Temple University

Founded as a night school by Russell Conwell in 1884, Temple University has evolved into an international powerhouse in higher education and a top-tier research institution with roughly 40,000 undergraduate, graduate and professional students.

As the largest university in one of the nation's most iconic cities, Temple educates diverse future leaders from across Philadelphia, the country and the world who share a common drive to learn, prepare for their careers and make a real impact.

Temple offers students a dynamic and nurturing learning environment with the support of a renowned faculty, dedicated academic advisors focused on setting a clear path to graduation and a broad curriculum of more than 500 academic programs. A longtime leader in professional education, Temple is also among the nation's largest educators in the combined fields of dentistry, law, medicine, pharmacy and podiatry.

Investments in the campus learning environment have elevated the university's capabilities across its 17 schools and colleges with impressive results. In 2015, Temple achieved the R1 Carnegie Classification of Institutions of Higher Education, placing it among the most active research universities in the nation. Temple also recently celebrated several milestones, including a Rhodes scholar, a Goldwater scholar, and its largest and brightest graduating class.

Temple's bustling Main Campus is set against the backdrop of the Philadelphia skyline. Green space, athletic facilities and eclectic architecture ranging from the historic Temple Performing Arts Center to an emerging state-of-the-art Charles Library form a vibrant residential setting. Temple's NCAA Division I athletic programs and hundreds of student organizations thrive on campus.

Philadelphia's public university, Temple provides an unparalleled value to families in the region and serves as an essential resource to the surrounding community. Temple also offers a gateway to the world with long-standing international campuses in Tokyo and Rome and study abroad opportunities across six continents.

Mission Statement

Opportunity. Engagement. Discovery.

Temple University educates a vibrant student body and creates new knowledge through innovative teaching, research and other creative endeavors. Our urban setting provides transformative opportunities for engaged scholarship, experiential learning, and discovery of self, others and the world. We open our doors to a diverse community of learners and scholars who strive to make the possible real.

We are committed to the ideals upon which Temple was founded:

- providing access to an excellent, affordable higher education that prepares students for careers, further learning and active citizenship.
- creating a collaborative community of outstanding faculty and staff who foster inclusion and encourage the aspirations of Temple students.
- promoting service and engagement throughout Philadelphia, the Commonwealth of Pennsylvania, the nation and the world.

President

Temple's president is the public face of the university and is responsible for supporting and managing all of its academic, administrative and financial operations. The President works closely with faculty, administrators, trustees, students and alumni to set the university's goals and uphold its mission. Learn more about the president of Temple University.

Trustees

The Board of Trustees is Temple's governing body, responsible for the educational mission and fiscal policies of the university. The trustees also are responsible for electing the university president, adopting an annual plan of financial operation and establishing degrees to be awarded. Learn more about the Board of Trustees.

Campus Development

Temple is investing millions of dollars into new and upgraded facilities as part of the Visualize Temple campus plan, the complementary Verdant Temple landscaping plan and the newest Boundless Temple campus plan. Temple's vibrant residential campus continues to evolve, with exciting new academic and recreation spaces, as well as significant renovations and upgrades. Learn more about Temple's changing campus.

Community

Temple's ties to its community are strong and deep, dating back to its founding in 1884 as an institution that served working people in the local community. Today, the university has not strayed from its original mission and remains a beacon of public service, social activism and community engagement. Learn more about Temple's community.

Admissions Information

Temple University Office of Undergraduate Admissions
 Conwell Hall 103
 1801 N. Broad Street
 Philadelphia, PA 19122-6096
 phone: 215-204-7200
 toll free: 888-340-2222
 fax: 215-204-5694
 askanowl@temple.edu
 admissions.temple.edu

The Office of Undergraduate Admissions processes all undergraduate applications for admission to the Main and Ambler campuses, as well as the Entry Year Programs at the Rome and Japan campuses of Temple University. First-year applicants are encouraged to apply Early Action through the Common Application and must have a completed application on file before November 1st to receive a decision by January 10th. All other applicants (first-year or transfer) are reviewed on a rolling basis, and candidates are usually notified of decisions four to six weeks after receipt of a completed application.

The web site to apply is admissions.temple.edu/apply.

Students must apply by the stated deadlines on the undergraduate application web site for the semester in which they wish to enroll. Applications received after these dates will be considered on a space-available basis. Applicants must activate a TUportal account and submit any required application materials to the Office of Undergraduate Admissions. The admissions application fee is \$55.00.

Special Requirements for Admission

The following programs have additional requirements for admission: the College of Public Health (Nursing, first-year and transfers), Dance, Music, Musical Theater, and the Tyler School of Art and Architecture. Refer to the individual program description for the details on these special requirements.

Tuition and Residence Hall Deposits

All students admitted to the university must pay a non-refundable tuition deposit of \$200 in order to reserve a place in the incoming class. In addition, students who wish to live in the residence halls must pay a housing deposit of \$250. First-year students are guaranteed on-campus housing if they commit to Temple by May 1.

Applying for Re-enrollment

For further information, see Academic Policy 02.10.16.

Also see the Leave of Absence, Academic Forgiveness, and Academic Standing policies in the Academic Policies (p. 1835) section of this *Bulletin* and the Academic Policies and Regulations section of each school or college. An application for re-enrollment is submitted to the school or college of the intended major.

First-Year

Diploma and Required High School Credits

The university requires that students hold a diploma from an accredited high school with the following recommended distribution of courses:

Subject field	Units
English	4
Mathematics, college preparatory	4
Foreign language (same language/culture)	2
History/Social Studies	3
Science (2 years lab)	3
The Arts	1
Other college preparatory courses	3
Total	20

Students are required to have earned a minimum of 16 units in academic subjects from the above chart. Students 18 years of age and older may submit a high school equivalency diploma earned through the General Education Development Test and the high school transcript for all grades completed.

Test Optional

Temple University offers a test optional path for talented students whose potential for academic success is not accurately captured by standardized test scores. We support the holistic evaluation of our first-year candidates, and we appreciate the many ways they can demonstrate their academic strengths and potential to succeed in college. You have the option of submitting your standardized test scores (SAT or ACT) or choosing to apply as test optional (not sending your test scores). All candidates will be considered for merit scholarships and our Honors Program. For more information, see admissions.temple.edu/apply/first-year-students/test-optional.

College Entrance Examinations

For those applicants who submit test scores, Temple accepts either of the following tests for college entrance:

- Scholastic Aptitude Test (SAT) of the College Entrance Examination Board, Box 592, Princeton, NJ 08540
- American College Test (ACT) of the American College Testing Program, Box 168, Iowa City, IA 52250

Temple suggests that students take either test in the spring of their junior year, as well as in the fall of their senior year. Results should be forwarded directly to the Office of Undergraduate Admissions.

Placement Assessments

Success at Temple University does not follow one particular pathway, as our students are varied and diverse in their backgrounds. For incoming students, it is important that they start on the right track, beginning with determining the appropriate courses for their first semester. Some incoming students may be placed into courses using their SAT or ACT scores while others will need to take placement assessments. Placement Assessments are offered in English, Math, and Foreign Languages. For more information about Placement Assessments, go to the Institutional Research and Assessment web site at ira.temple.edu/placement-assessments.

Orientation for New Students

Following admission to the university and payment of the tuition deposit, students will receive information regarding their orientation requirements. For further information, refer to the Office of New Student and Family Programs.

Immunizations

See Student Health and Wellness for required immunizations.

International Students

Students come to Temple from all over the world. In fact, we have students from more than 100 countries. You're considered an international student if you hold, or will need to obtain, a non-immigrant visa, including a student visa (F-1), or an exchange visitor visa (J-1).

To apply to Temple, use the Common Application. For additional information, see International Students admissions.

If you require a student visa, please review the information for incoming students and contact International Student and Scholar Services with any questions.

Questions can be directed to:

e-mail: international.admissions@temple.edu

phone: 215-204-4900

Orientation and Immunizations

For orientation information see International Student and Scholar Services or the International Student Services (p. 72) section under Student Services.

For immunization requirements see Student Health Services.

Special Admissions Programs

Dual Admissions Programs

See Transfer Students (p. 27).

Pre-Professional Admissions Programs

Pre-Med Health Scholar Program and Accelerated Programs for Dentistry, Pharmacy, Podiatry, Physical Therapy

Pre-Professional Health Advising
Mitten Hall, Suite 110
215-204-2513
healthadvising@temple.edu
<https://undergradstudies.temple.edu/healthadvising>

Pre-Med Health Scholar Program

The Pre-Med Health Scholar Program is offered to highly talented high school seniors interested in pursuing a career as a physician. It is designed to recruit exceptional students to Temple University by offering a Linkage Agreement with the Lewis Katz School of Medicine at Temple University. Applications are accepted from high school seniors and interviews are conducted in February of their senior year of high school. **Health Scholar Program Applications for interested high school seniors are available through the** Pre-Professional Health Advising web site. **Completed applications are due by December of each student's senior year in high school. Students entering Temple University as Pre-Med Health Scholars may consider an Accelerated BA/MD (3+4) Degree option during their first semester of undergraduate studies.**

Accelerated Programs for Dentistry, Pharmacy, Physical Therapy, and Podiatry

Accelerated Programs allow Pre: Dentistry, Pharmacy, and Podiatry (3+4 Tracks) as well as Physical Therapy (3+3 Track) students the option of earning both their Bachelor of Arts and Graduate degrees in a shorter period of time. Bachelor's degrees are conferred after successfully completing three years of undergraduate studies and passing all courses in the first year of professional school. The Accelerated BA/DMD, BA/PharmD, BA/DPM, or DPT Programs are designed for high-achieving students who have distinguished themselves with impressive academic records and a demonstrated interest in their respective field.

Applications are accepted from high school seniors and first year, first semester, freshmen. **Accelerated program Applications are available on the** Pre-Professional Health Advising web site.

Temple Law Scholars Program

<https://undergradstudies.temple.edu/opportunities/lawscholars>

Paul Crowe
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College of Liberal Arts
215-204-8591
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The Temple Law Scholars program provides an opportunity for outstanding students to gain provisional admission to Temple University's Beasley School of Law at the same time they are accepted into an undergraduate program of study. Law Scholars are expected to participate in the University Honors Program while undergraduates, after which they enroll in the Beasley School of Law, leading to the degree of Juris Doctor. For more information or an application, please visit the Temple Law Scholars Program.

University Honors Program

The University Honors Program includes students enrolled in every undergraduate school and college. Incoming first-year students are automatically reviewed upon acceptance to Temple University. Current Temple students or transfer students can apply for admission through the Honors web site. Applications for current Temple students and transfer students are reviewed at the end of each semester.

For more information, please visit the Honors Program.

Also see University Honors Program (p. 58) in the Academic Opportunities section of this *Bulletin*.

Transfer Students

Transfer Admissions

Applicants who wish to be considered for transfer admission must have maintained at least a 2.50 grade point average in 15 or more college-level credits completed after high school at an accredited two- or four-year institution of higher education, although this is no guarantee of admission. The average GPA for entering transfer students is a 3.00+. Temple requires the same high school units of transfer students as of first-year students.

Applicants must submit official transcripts from high schools and each college previously attended. The university defines "official transcript" as that which is sent directly from a high school or college to Temple's Office of Undergraduate Admissions.

An evaluation showing accepted transfer credits and a list of Temple course equivalencies is made available in TUPortal for admitted students. Evaluations are based on the majors students indicate on their applications. The Temple school/college in which they enroll will make the final determination of which transfer credits are applicable to the degree.

Transfer Credit Policy

Generally, Temple accepts academic, college-level courses beyond the developmental level completed with a grade "C" or better from schools with institutional accreditation. College-level coursework completed at an institution that is not accredited by an institutional accrediting agency will be evaluated for course equivalencies. Exceptions may be considered on appeal. Temple also awards limited academic credit for previous academic, employment, military, and/or other learning experiences not earned in a traditional college/university classroom setting. Grades are not assigned to transfer credits and therefore credit awarded will not affect a student's grade point average at Temple.

All transcripts, including dual enrollment in high school, military transcripts and official score reports for standardized exams, such as Advanced Placement, International Baccalaureate, CLEP, etc. should be sent directly to the Office of Undergraduate Admissions (<https://admissions.temple.edu/>). There is an expectation that final transcripts are received prior to the beginning of registration for the next semester after initial matriculation to ensure that students' academic records are up-to-date.

- Evaluation of transfer credits is based on a student's major. Undergraduate Admissions initially determines which credits will transfer to the University; the student's school/college at Temple makes the final determination of which transfer credits are applicable to the student's degree program. Transfer evaluations may change for students who change majors or if additional transcripts or scores are received. All requirements of Temple's schools and colleges and major programs of study remain in force. Students should consult the appropriate sections of the *Bulletin* and their academic advisor about school/college requirements.
- Evaluations of transfer credit will reflect information available to Temple at the time of the evaluation by the Admissions Office (see Appeals Process for information regarding transfer equivalency changes.)

In addition to meeting the accreditation standards of the Middle States Commission, some schools, colleges, and programs at Temple are governed by national accrediting bodies which oversee the number and quality of transfer credits permitted. After matriculation, transfer students should consult with their respective school, college, or program to determine transfer credit eligibility. Go to the Accreditation site at <https://provost.temple.edu/aaair/accreditation> and click "View other Accrediting Bodies" to view the list of other accrediting bodies.

In most instances, credit is awarded:

- in academic subjects with a corresponding/related Temple University department;
- when the official score information or official transcript is received by the Office of Undergraduate Admissions;
- when possible, for courses completed more than 10 years prior to the date of admission. (Individual schools and colleges may have additional limitations, e.g. FSBM and CST. See individual school/college policy page.)

and credit is not awarded

- for the same course twice;
- for a course(s) in progress at the time of application;
- for a course that is equivalent to a course previously attempted (earned a letter grade, CR, CD, NC, P, W, or I) at Temple;
- for courses with non-standard grades such as, but not limited to AU, F, I, P (unless P is equal to a grade of C or higher), or W.

To earn a degree from Temple, students must complete at least 45 semester hours of the last 60 semester hours as a matriculated student at Temple, fulfill all university requirements (the General Education Program) and fulfill all degree requirements of the Temple school or college in which they are enrolled. (See Academic Residency (p. 1838).)

- Transfer credits do not count towards academic residency.

To graduate from Temple with Latin Honors, transfer students must complete at least 60 hours in residence as matriculated students at Temple University. (See Honors for Academic Achievement (p. 1855).)

Non-University/College Credit including Military Credit

Students may earn credits through Dual Enrollment, Advanced Placement Tests, International Baccalaureate Exams, College Level Examination Program (CLEP), DANTES Subject Standardized Tests (DSST), transcribed military experience and Portfolio Review for work or life experience (CLEX).

Individual schools and colleges may have additional limitations regarding the type and the total number of semester hours granted through non-traditional means. (For an individual school/college policy, refer to https://undergradstudies.temple.edu/sites/undergradstudies/files/Prior_Learning_Credit.pdf.)

Students will receive the equivalency that is in effect at the time of the evaluation by the Admissions Office for the following:

- Credits earned through Dual Enrollment while in high school will be evaluated according to the guidelines established for transfer credits. Courses must be on an official transcript from the post-secondary institution.
 - When students submit dual enrollment credit for an AP course on a university or college transcript and also submit scores for the corresponding AP exam, Temple will only award credit based on the evaluation of the dual enrollment credit presented on the university or college transcript. Duplicate credit will not be awarded for both the university/college credit and the AP score(s), since according to Temple University policy, students cannot receive credit for the same course twice.
 - To see how Dual Enrollment credits might transfer to Temple, refer to Temple's Transfer Equivalency Tool: <https://admissions.temple.edu/apply/transfer-students/transfer-equivalency-tool>.
- For a listing of Advanced Placement equivalencies and required scores refer to <https://undergradstudies.temple.edu/transfer/course-equivalency-tables>.
 - Although the AP credits do not transfer as direct equivalents to Temple GenEd courses, Temple University will allow students to satisfy the designated GenEd area with AP Credits.
 - For a listing of International Baccalaureate (IB) equivalencies refer to <https://undergradstudies.temple.edu/transfer/course-equivalency-tables>.
 - Students who have earned the International Baccalaureate Diploma and meet minimum eligibility requirements complete the IB GenEd Program in place of the full GenEd Program. For more information refer to <https://undergradstudies.temple.edu/transfer/gened>.
 - This program still requires students to complete up to 18-19 credits of the GenEd program.
 - Students may be able to satisfy additional GenEd areas with the IB equivalencies.
- Cambridge International GCE A-Level (British A-Level)
 - GCE A-Levels results are recognized for credit by Temple University. (Grades must be a "C" or higher.)
 - A maximum of 8 semester hours per GCE A Level may be granted with up to one year's credit available.
- College Level Examination Program (CLEP) provides a recognized assessment for students to meet requirements of a class through examination.
 - Temple will only award credit as indicated on the chart provided at <https://undergradstudies.temple.edu/transfer/course-equivalency-tables>. Exams that are not listed are not accepted for credit at Temple University, even if the student received credit for the exam at a previous institution.
 - Credit for CLEP examinations posted on transcripts from other institutions will not be used to update a student's academic record at Temple. Students are responsible for requesting that their scores be sent directly to the Office of Undergraduate Admissions, Temple University, 1801 N. Broad Street, Philadelphia, PA 19122.
 - Currently, all literature, history, and political science CLEP exams require an additional Temple essay in order to receive credit for these tests. For the CLEP credits to be posted to the student's academic record, the student must have both the minimum score on the CLEP test and a grade of "pass" on the essay.
 - CLEP credits completed prior to matriculation at Temple will count towards the 45+ GenEd designation and will apply to the General Education program according to the course attribute.
 - Credits brought in through CLEP exams are considered the same as transfer credits and if completed after matriculation are subject to Policy 02.10.18: Transfer Credit Policy for Matriculated Undergraduate Students.
- Credit is awarded for DANTES Subject Standardized Tests (DSST) completed prior to matriculation according to the American Council on Education (ACE) recommendations.
 - Temple will only award credit as indicated on the chart provided at <https://undergradstudies.temple.edu/transfer/course-equivalency-tables>. For credit to be awarded, the credit must be useful in a student's program of study and is only awarded in academic subjects with a corresponding Temple department.

- Colleges and Schools may have limitations on the type and number of DSST credit that can be applied to a degree. For more information about School and College specific policies refer to https://undergradstudies.temple.edu/sites/undergradstudies/files/Prior_Learning_Credit.pdf.
- Students are responsible for requesting that their scores be sent directly to the Office of Undergraduate Admissions, Temple University, 1801 N. Broad Street, Philadelphia, PA 19122.
- Temple awards college credit for documented military experience according to the ACE guide recommendations. Examples of acceptable electronic documentation include, but are not limited to:
 - Community College of the Air Force Transcript
 - Joint Services Transcript
- Decisions to process a Portfolio Review for Prior Work or Life Experience (CLEX) are made in the individual schools and colleges by a faculty committee. The evaluation may be based on the submission of papers, presentation of a portfolio of completed work, and/or a demonstration of acquired skills.
 - If a student changes his/her program of study after the awarding of CLEX credits, the CLEX credits may not be usable in the new major.
 - CLEX credits will be posted only after the completion of a minimum of 30 credits of formal coursework at Temple University.
- College-level coursework completed at colleges and universities that are not members of one of the six regional accrediting associations may be eligible for Credit by Validation after matriculation.
 - Students will need to provide the syllabus used in each class to be evaluated along with the qualifications of the instructor of the course.
- Temple University accepts for transfer credit most college-level, liberal arts courses taught at institutions participating in Pennsylvania's College Transfer System (PA TRAC).
 - View Temple's Transfer Equivalency Tool Information at <https://admissions.temple.edu/apply/transfer-students/transfer-equivalency-tool>.

Different Credit Systems

Quarter hours are converted to semester hours using the ratio of 3:2:

- 2 quarter hour credits are equivalent to 1.5 semester hour credits;
- 3 quarter hour credits are equivalent to 2.0 semester hour credits;
- 4 quarter hour credits are equivalent to 2.5 semester hour credits.

International Credits

- European Credit Transfer and Accumulation System (ECTS) units are converted using 5 ECTS credit to 3 US semester hour credits.
 - 1.667 ECTS credits = 1 Temple credit
 - Additional equivalencies:
 - 1 ECTS credit = 0.5 semester hour credits
 - 1.5 ECTS credits = 1 semester hour credits
 - 2 ECTS credits = 1 semester hour credits
 - 2.5 ECTS credits = 1.5 semester hour credits
 - 3 ECTS credits = 2 semester hour credits
 - 3.5 ECTS credits = 2 semester hour credits
 - 4 ECTS credits = 2.5 semester hour credits
 - 4.5 ECTS credits = 2.5 semester hour credits
 - 5 ECTS credits = 3 semester hour credits
 - 10 ECTS credits = 6 semester hour credits
 - 20 ECTS credits = 12 semester hour credits
 - 25 ECTS credits = 15 semester hour credits
 - Note: Different US institutions have different conversion ratios for ECTS credits.

Transfer Credit Appeals Process

Initial evaluation of transfer credits is made in the Office of Undergraduate Admissions. Re-evaluation of credits will be done first by Undergraduate Admissions.

Re-evaluation of credits will be facilitated by academic advisors in the student's school/college according to standard Temple policies and procedures. The Office of Undergraduate Studies will assist with the re-evaluation when necessary.

Credit (re)evaluation/appeals process continues if:

1. final transcript(s) received during first semester of matriculation;
2. course(s) needs to be (re)evaluated for General Education (GenEd) Curriculum equivalency;
3. course(s) needs to be (re)evaluated for College/School/Department credit;
4. student changes major, declaration of minor or a second major;
5. original evaluation needs modification;
6. student receives E000 (Elective - needs evaluation) on Credit Evaluation Statement.

Students may have to complete one or more of these processes. The entire process can take as little as a few days to as much as the entire semester, depending on the complexity of each student's situation. Factors that may impact the re-evaluation process are: student's major, student changing major, addition of certificate or minor, missing information, incomplete student record, and transfer institution.

Transfer Agreements

To encourage and facilitate transfer for students from other colleges to Temple University, Temple has established transfer agreements with other institutions:

- Dual Admissions agreements conditionally admit students to Temple while they are enrolled at a partner community college, and provide the opportunity for merit scholarships to Temple for eligible students. To be eligible for Dual Admissions, students must enroll in the Dual Admissions Program at the partner institution before completing 30 college credits, including credit from any colleges previously attended. For a list of Dual Admissions agreements, go to <https://undergradstudies.temple.edu/transfer/agreements>.
- GenEd-to-GenEd Transfer agreements accept the general education requirements of associate degrees from partner institutions in lieu of Temple's GenEd Program requirements. For a list of partner institutions and eligible programs, go to <https://undergradstudies.temple.edu/transfer/agreements>. (All students complete two Writing Intensive courses at Temple.)
- Program-to-program agreements are between Temple's academic schools and/or departments and other two-year and four-year institutions. These agreements align the degree requirements of both institutions, so students know what courses they need to complete prior to earning both an Associate's degree from their community college and a Bachelor's degree from Temple. They provide students with a four-year pathway to degree completion for selected programs. For more information on Program-to-Program agreements, go to <https://undergradstudies.temple.edu/transfer/agreements>.

Transfer Students and the University General Education Curriculum

Every Temple student fulfills the 35-36 credit General Education Program (GenEd (p. 83)) in some way. Transfer students may be able to use their transfer credits to satisfy General Education requirements. The following GenEd policies for transfer students apply only to University GenEd requirements.

Basic GenEd Transfer Policies (for additional information on program details, refer to <https://undergradstudies.temple.edu/about/gened>):

- Initial evaluation of transfer credits will be made in the Temple Office of Undergraduate Admissions. Re-evaluation of credits will be done by the academic advisor in the schools and colleges, in consultation with the General Education Program when necessary, according to standard Temple policies and procedures.
- Transfer courses will be applied to major and minor requirements first and then to GenEd.
- Students cannot use the same course to fulfill a General Education and a major or minor requirement.
- The Analytical Reading and Writing requirement may be met by placing out of Temple's Analytical Reading and Writing through a placement test, by transferring in the equivalent of Temple's Analytical Reading and Writing course, by earning a score of 4 or higher on the AP English: Language & Composition exam, or by placing out of English Composition at a previous institution:
 - Transfer students who completed an English placement test at their previous institution and tested out of their previous institution's English Composition or comparable requirement can be waived from the Analytical Reading and Writing requirement if they have documentation of their placement and have successfully completed a higher-level English/Writing course. Acceptable documentation includes an official letter from the university's registrar, advising unit, a faculty member, or other appropriate university official. If approved, the student's advisor will post a DARS exception after matriculation.
- The Global/World Society requirement (GG) also may be met by participating in an approved Study Abroad program that is a minimum of 28 days in length in-country. Transfer students who completed a study abroad at their previous institution should check with their advisor for additional

information. Foreign National students admitted Fall 2014 or later, whose permanent residence is outside of US boundaries are also eligible for a GG waiver.

- All students are required to take two Writing Intensive courses at Temple University in addition to completing the GenEd requirements. Writing Intensive courses in transfer cannot be used to fulfill this school/college requirement. The two Writing Intensive courses will be designated by the student's major.
- Credit for Prior Learning (completed prior to matriculation at Temple) such as Advanced Placement (AP), International Baccalaureate (IB), College Level Examination Program (CLEP), and DANES Subject Standardized Tests (DSST) will satisfy General Education requirements according to current practice, i.e. using course attributes/core equivalents.
- All requirements of Temple's schools and colleges and major programs of study remain in force. Students should consult the appropriate sections of the *Bulletin* and their academic advisors about school/college major requirements.

GenEd-to-GenEd, 45+ GenEd, and IB GenEd students must still complete the required number of credits for their baccalaureate degree, using courses in transfer as well as credits completed at Temple.

- A GenEd-to-GenEd student has completed the GenEd Program as stipulated in the agreement. For a list of agreements by institution go to <https://undergradstudies.temple.edu/transfer/agreements>.
 - Students must meet the academic residency requirement that requires students to complete 45 of the last 60 credits be taken at Temple University.
- Students with fewer than 45 transfer credits and have not completed an approved degree at a GenEd-to-GenEd partner institution, complete the full GenEd Program. Refer to <https://undergradstudies.temple.edu/transfer/gened>.
- Students with 45 or more transferable credits and have not completed an approved degree at a GenEd-to-GenEd partner institution, complete the 45+ GenEd Program. Refer to <https://undergradstudies.temple.edu/transfer/gened>.

Eligibility Requirements for 45+ GenEd:

- For students new to Temple: The courses have been taken elsewhere before the student matriculates at Temple.
- For reenrolled students: 45 or more transferable credits have been taken elsewhere since the student's last date of enrollment at Temple and before the date of the student's return to Temple.
- Courses taken at Temple as a non-matriculated student are not counted toward eligibility for 45+ GenEd.
- Courses taken elsewhere by students once they are matriculated at Temple are not counted toward eligibility for 45+ GenEd.
- Credits for prior learning (e.g., AP, IB, CLEP, DSST, etc.) are not counted towards eligibility for 45+ GenEd, if completed after matriculation to Temple.
- Students who have earned the International Baccalaureate (IB) Diploma and meet minimum eligibility requirements complete the IB GenEd Program. For more information go to <https://undergradstudies.temple.edu/transfer/gened>.
 - This program still requires students to complete up to 18-19 credits of the GenEd Program.

Special Programs

Temple University offers credit-bearing certificate programs (p. 33), non-credit programs (p. 35), off-campus/corporate programs (p. 37) and programs with academic credit (p. 37) that are available for all students intending to study at Temple University without having to be enrolled in a degree program.

The academic policies and regulations generally apply to all students and provide a framework within which schools and colleges may specify further conditions or variations appropriate to students in their courses or programs. Statements of academic policies and regulations apply to both degree and non-degree undergraduates unless explicitly noted otherwise. In addition to the description below, please refer to the Responsibilities (p. 42), Rights (p. 45) and Academic Policies (p. 1835) sections of this *Bulletin* for further information on particular policies that relate to students in these programs.

Temple University provides a broad administrative framework to present and support a wide range of university offerings not falling within the province of typical undergraduate and graduate degree work on Temple campuses. Registration for credit-bearing courses is administered through the Office of Continuing Studies on the various campuses. Registration for non-credit courses is handled through the Office of Non-Credit and Continuing Education. Students taking non-credit courses at Temple University's Ambler and Center City campuses may register and pay online for non-credit courses through the Office of Non-Credit and Continuing Education web site. The online registration and payment system allows for easy registration and payment for non-credit courses anytime of the day or night through a secure network.

Course offerings under special programs respond to the differing needs of adults seeking additional education. Some offerings are of common interest to all, such as writing and general computer skills. Other courses, tailored for those adults who wish to change their work situation, focus on new skill and knowledge development. Coursework is also designed for adults who wish to maintain their current work position in a profession that requires re-certification to maintain appropriate licenses. Course offerings are also geared to those adults seeking personal enrichment as their primary goal.

The form of programming includes credit certificates, non-credit professional certificates, and non-credit personal enrichment courses. The courses are offered at Temple University Ambler, Temple University Center City, Temple University Harrisburg, and a variety of public and private off-campus sites through the auspices of Office of Off-Campus Programs and Training.

Information about the services offered at each campus is presented below.

Main Campus

The Main Campus Office of Continuing Studies is the university's central office for serving non-degree students. Non-degree students are those who have not been formally admitted to a degree program. The office serves a variety of students, including adults returning to school for undergraduate or graduate courses, professionals updating their skills, qualified students seeking undergraduate admission, students taking courses for personal enrichment, and visiting students planning to transfer Temple credits to their home institution. There is no formal application to enroll as a Continuing Studies student; however, first-time enrollers are required to provide documentation of education completed (high school transcript, GED certificate, college transcripts [minimum 2.00 GPA required], or college diploma). Prior to their enrollment, degree-seeking students may be required to take one or more university placement tests.

Services include:

- individual academic advising
- informal evaluation of academic transcripts
- registration and schedule revisions
- referrals to other university services and programs

First-year, non-degree students may register for a maximum of 11 credits per semester. Second-year, non-degree student registrations are based upon academic progress. However, non-degree seeking students are prohibited from registering via Self Service Banner (SSB) and must register through their Continuing Studies office. All non-degree students must maintain satisfactory academic progress in order to continue taking courses through Continuing Studies. Continuing Studies students must apply for admission by the completion of 30 s.h. Pre-admission counseling, academic advising, registration, and other support services are provided for non-degree students.

Refer to the Academic Policies section of this *Bulletin* for more information on non-degree students (p. 1857).

Ambler

Temple University's Ambler campus offers extensive undergraduate, graduate, and non-credit courses and programs that are available during days, evenings, and weekends. The listing of all offerings is available at <https://ambler.temple.edu/>. Students interested in credit courses or programs should contact the Office of Academic Advising and Student Success at Ambler Campus by phone (267-468-8200) or go to the web site at <https://ambler.temple.edu/campus-resources/advising-and-student-success>. This office coordinates the services for students, as described under Main Campus above. For more information on non-credit offerings and registration, see Non-Credit Programs (p. 35).

Center City

In addition to undergraduate and graduate-level programs and courses, Temple University Center City offers a rich selection of non-credit programs and classes. These include courses for your personal enrichment from Music Prep, courses leading to state licensure in the real estate field from the Real Estate Institute, lively classes on every conceivable subject for retirees provided by members of the Osher Lifelong Learning Institute at Temple University (OLLI), and career development seminars and professional certificate programs which are administered through Temple University Ambler campus. For more information on non-credit programs, refer to Non-Credit Programs (p. 35) and/or visit <https://centercity.temple.edu/>.

Health Sciences Center (HSC)

The Lewis Katz School of Medicine (<https://medicine.temple.edu/>), the Maurice H. Kornberg School of Dentistry (<https://dentistry.temple.edu/>), the School of Pharmacy (<https://pharmacy.temple.edu/>), and the College of Public Health (<https://cph.temple.edu/>) sponsor continuing education activities for their graduates as well as for graduates of other institutions. Many programs meet the requirements of professional accrediting agencies to take refresher courses or seminars in order to keep abreast of changes in the field.

Credit-Bearing Certificate Programs

At Temple University, a certificate is a credit-bearing program of courses leading to a credential that recognizes the student's work in a specialized area of knowledge. An undergraduate certificate may be part of a degree program, or it may stand alone. It is distinct from an academic major or minor and should not be confused with the process of professional certification for teaching and other fields. Certificate programs often focus on the acquisition of specific skills recognized in the job market. They are open to undergraduates in all Temple schools and colleges and majors and are particularly useful to students seeking to document their exposure to fields and disciplines outside of their academic major and minor. Some majors recommend particular certificate programs to their students. Non-degree students should contact the school or college offering a certificate, as some certificates are restricted to degree students. Below is a list of undergraduate certificate programs. For detailed information, contact the school or college.

Certificate of Completion	Department	School
Acting	Theater	School of Theater, Film & Media Arts
American Sign Language	Communication Sciences & Disorders	College of Public Health
Applied Behavior Analysis	Teaching & Learning	College of Education & Human Development
Arabic	Asian & Middle Eastern Languages & Studies	College of Liberal Arts
Asian Business and Society	Asian & Middle Eastern Languages & Studies	College of Liberal Arts
Astrophysics	Physics	College of Science & Technology
Business Basics (restricted to non-degree students)		Fox School of Business & Management
Business Plus (restricted to non-degree students)		Fox School of Business & Management
Chamber Music	Instrumental Studies	Boyer College of Music & Dance
Children's Media	Media Studies & Production	Lew Klein College of Media & Communication
Chinese	Asian & Middle Eastern Languages & Studies	College of Liberal Arts
Classical Piano	Keyboard Instruction	Boyer College of Music & Dance
Classical Voice	Vocal Arts	Boyer College of Music & Dance
Community Arts Practices	Art Education & Community Arts Practices	Tyler School of Art & Architecture
Computer Security and Digital Forensics	Computer & Information Sciences	College of Science & Technology
Cooperative Education	Teaching & Learning	College of Education & Human Development
Creative Entrepreneurship		Tyler School of Art & Architecture
Cybersecurity and Human Behavior	Criminal Justice	College of Liberal Arts
Dance	Dance	Boyer College of Music & Dance
Data Science: Computational Analytics	Computer & Information Sciences	College of Science & Technology
Diversity and Inclusion	Psychological Studies in Education	College of Education & Human Development
Emergency and Sports Injury Management	Health & Rehabilitation Sciences	College of Public Health
English as a Second Language	Teaching & Learning	College of Education & Human Development
English Language Teaching	Teaching & Learning	College of Education & Human Development
Entertainment Industry Studies	Film & Media Arts	School of Theater, Film & Media Arts
Entrepreneurship and Innovation Management	Strategic Management	Fox School of Business & Management
Environmental Professional Training	Earth & Environmental Sciences	College of Science & Technology
Environmental Sustainability	Landscape Architecture & Horticulture, Community & Regional Planning	Tyler School of Art & Architecture

Esports	Sport & Recreation Management	School of Sport, Tourism & Hospitality Management
Ethics	Philosophy	College of Liberal Arts
Event and Entertainment Management		School of Sport, Tourism & Hospitality Management
Film	Film & Media Arts	School of Theater, Film & Media Arts
French	French/German/Italian/Slavic	College of Liberal Arts
Fundamentals of Physics	Physics	College of Science & Technology
Fundamentals of Programming	Computer & Information Sciences	College of Science & Technology
Gender, Sexuality and Women's Studies		College of Liberal Arts
Genomic Medicine	Biology	College of Science & Technology
Geographic Information Systems	Geography & Urban Studies	College of Liberal Arts
Geography of Sports, Recreation and Tourism Planning	Geography & Urban Studies	College of Liberal Arts
Geography of Tourism	Geography & Urban Studies	College of Liberal Arts
German	French/German/Italian/Slavic	College of Liberal Arts
Health Research	Sociology	College of Liberal Arts
Historic Preservation	Architecture	Tyler School of Art & Architecture
Horticultural Therapy	Landscape Architecture & Horticulture	Tyler School of Art & Architecture
Italian	French/German/Italian/Slavic	College of Liberal Arts
Japanese	Asian & Middle Eastern Languages & Studies	College of Liberal Arts
Jazz Arranging	Music Studies	Boyer College of Music & Dance
Jazz Improvisation	Music Studies	Boyer College of Music & Dance
Jazz Piano	Music Studies	Boyer College of Music & Dance
Jazz Studies Composition	Music Studies	Boyer College of Music & Dance
Jazz Voice	Music Studies	Boyer College of Music & Dance
Jewish Secular Studies	Religion	College of Liberal Arts
Landscape Plants	Landscape Architecture & Horticulture	Tyler School of Art & Architecture
Language and Cross-Cultural Communication	Anthropology	College of Liberal Arts
Latin American Studies	Spanish & Portuguese	College of Liberal Arts
Leadership and Military Science	Policy, Organizational & Leadership Studies	College of Education & Human Development
Linguistics	Communication Sciences & Disorders	College of Public Health
Management Career	Economics	College of Liberal Arts
Management Information Systems	Management Information Systems	Fox School of Business & Management
Media Arts	Film & Media Arts	School of Theater, Film & Media Arts
Mobile Application Development	Computer & Information Sciences	College of Science & Technology
Music	Music Studies	Boyer College of Music & Dance
Music Composition	Music Studies	Boyer College of Music & Dance
Music History	Music Studies	Boyer College of Music & Dance
Music Performance		Boyer College of Music & Dance
Music Technology	Music Studies	Boyer College of Music & Dance
Music Theory (Jazz)	Music Studies	Boyer College of Music & Dance
Music Theory (Traditional)	Music Studies	Boyer College of Music & Dance
Native Perennial Garden Design	Landscape Architecture & Horticulture	Tyler School of Art & Architecture
Orchestral Music	Instrumental Studies	Boyer College of Music & Dance
Performing Arts		Boyer College of Music & Dance
Political Economy	Economics	College of Liberal Arts
Professional Writing	English	College of Liberal Arts
Science and Technology Writing		College of Science & Technology
Screen Studies	Film & Media Arts	School of Theater, Film & Media Arts
Social Science Research	Sociology	College of Liberal Arts
Spanish	Spanish & Portuguese	College of Liberal Arts
Spanish and Latin American Studies for Business	Spanish & Portuguese	College of Liberal Arts

Spanish and Latinx Studies for the Health and Human Services Professions	Spanish & Portuguese	College of Liberal Arts
Specialized Studies in Science and Mathematics		University College
Sport Management	Sport & Recreation Management	School of Sport, Tourism & Hospitality Management
Sport Marketing	Sport & Recreation Management	School of Sport, Tourism & Hospitality Management
Sports Media		Low Klein College of Media & Communication
Sports and Society		College of Liberal Arts
Stage Management	Theater	School of Theater, Film & Media Arts
Sustainability		University College
Sustainable Food Systems	Landscape Architecture & Horticulture, Community & Regional Planning	Tyler School of Art & Architecture
Theater and Community Engagement	Theater	School of Theater, Film & Media Arts
Theater Education	Theater	School of Theater, Film & Media Arts
Tourism and Hospitality Management	Tourism & Hospitality Management	School of Sport, Tourism & Hospitality Management
Voice and Speech for the Actor	Theater	School of Theater, Film & Media Arts

Non-Credit Programs

Temple University offers a wide variety of non-credit and continuing education programs. The Office of Non-Credit and Continuing Education, located at the Ambler campus, provides training and seminars in professional development and personal enrichment topics, as well as computer applications. Courses and certificates are offered at all Temple University campuses. For further information on non-credit programs, visit our online registration system. For campus-specific information, visit the web sites of Temple University Ambler, Temple University Center City and Temple University Harrisburg.

Non-Credit Programs: Professional Development and Continuing Education

Professional development certificates and courses can be completed in many areas, including:

- Project Management
- Editing and Business Writing
- Financial Planning
- Floral Design
- Master Home Gardening & Landscape Design
- Interior Design
- Wedding Planning and Consulting
- Digital Advertising

Real Estate Institute

The Real Estate Institute is the largest professional real estate education program in the tri-state area offering pre-licensure or real estate broker courses, as well as a broad spectrum of elective courses, all taught by state-certified real estate instructors. The Real Estate Institute's courses are fully accredited by the Pennsylvania Real Estate Commission and are intended for those seeking state licensure and/or professional advancement, but not an academic degree. The courses allow you to qualify for the Pennsylvania Salesperson Licensing examination and, together with a three-year apprenticeship and additional courses, for the Pennsylvania Real Estate Brokers examination. All students who successfully complete a course of study are awarded Real Estate educational credits and a Temple Real Estate Institute transcript. For more information, call 215-204-1539 and/or visit the Real Estate Institute web site.

Tyler School of Art & Architecture Professional Development

The Tyler School of Art and Architecture offers continuing education opportunities in art topics, including professional development programs in painting and sculpture, graphic and interactive design and educator workshops. For more information, call 215-777-9010, e-mail tylerpce@temple.edu and/or visit the Tyler School of Art and Architecture Professional Development web site.

Act 48 Programs for Educators

Educators can find high quality continuing education at Temple University to upgrade their knowledge and skills in the classroom and to comply with Pennsylvania's Act 48 requirements for certified educators. Temple offers a variety of Act 48 non-credit courses, conferences and workshops

for educators at flexible times and in various formats. For more information, call 215-204-4866, e-mail destiny1@temple.edu and/or visit the Act 48 Continuing Education web site.

Non-Credit Programs: Personal Enrichment

Personal enrichment certificates and courses are offered in a variety of areas, including:

- Digital Photography
- Arts, Literature and History
- Languages
- Food and Entertainment
- Horticulture
- Healthy Lifestyles and Exercise
- College and Test Prep (SAT, GRE, GMAT, LSAT Review Workshops)

For more information about non-credit courses and programs, or to receive catalogs, call the Office of Non-Credit and Continuing Education at 267-468-8500, e-mail nce@temple.edu and/or visit the Non-Credit Programs web site.

Music Prep

Music Prep offers continuing opportunities for musical growth and enrichment for people of all ages and abilities, from the beginner to the experienced musician. There are programs designed for preschool through high school age students who are considering music as a future career or serious avocation and for adults who wish to develop their musical skills and interests. For more information, call 215-204-1512 and/or visit the Music Prep web site.

Pan-African Studies Community Education Program (PASCEP)

The Pan-African Studies Community Education Program (PASCEP) is a low-cost, non-credit continuing education service of the Office of Community Relations. PASCEP has remained a pillar in the community for over 40 years, and is the most unique community education program in Philadelphia. With over 25 volunteer faculty members, PASCEP offers a multitude of diverse courses, including Introduction to Personal Computers, Credit Education, American Sign Language, GED Preparation, Genealogy Research, Etymology, Sewing, Grant Proposal Writing, Hip Hop, Spanish, and much more. For more information, call 215-204-1993, e-mail pascep@temple.edu and/or visit the PASCEP web site.

Tyler School of Art & Architecture Adult Enrichment Programs and Teen/Pre-College Programs

The Tyler School of Art and Architecture offers a variety of adult enrichment programs, including life-long learning, summer workshops and weekend workshops. Class topics range from digital design to painting to working with clay. Tyler also offers teen and pre-college programs. For more information, call 215-777-9010, e-mail tylerpce@temple.edu and/or visit the Tyler School of Art and Architecture Adult Enrichment Programs and Teen/Pre-College Programs web sites.

Pre-College and Youth Programs

Pre-College

Pre-college programs are an excellent opportunity for high school students to experience what life is really like as a student at Temple University. With programs for grades 9-12, high school students can explore potential majors through non-credit workshops, take undergraduate courses at Temple for college credit, experience residential life on Temple's campus, and network with Temple's faculty and potential future classmates. For more information, call 215-204-2712, e-mail precollege@temple.edu and/or visit the Pre-College programs web site.

Summer Camps

Temple Ambler has been offering Summer Education Camps for more than 25 years at its convenient suburban campus. Camps are available for kids, tweens and teens (between the ages of 8 and 17) during the months of June, July and August. Most camps are one-week, full-day camps that run Monday to Friday from 9 a.m. to 4 p.m., although some shorter and longer camp sessions are also available. The Temple University Ambler Summer Education Camps provide a wonderful opportunity for youths to learn about a specific area of interest, experience a college campus and have lots of fun at the same time. For more information, call 267-468-8500, e-mail nce@temple.edu and/or visit the Summer Education Camps web site.

Institute of Reading Development

Reading is a habit that lasts a lifetime. Our reading programs provide students with an engaging curriculum that improves reading and fosters strong language skills. Reading programs are designed and taught by instructors from the Institute of Reading Development and are offered online. For more information, call 1-800-964-8888 and/or visit the Institute of Reading Development web site.

Lifelong Learning

Osher Lifelong Learning Institute at Temple University Ambler and Temple University Center City

The Osher Lifelong Learning Institute at Temple University (OLLI) is an educational program for people who are retired, near retirement or adults with discretionary time to take daytime classes. The organization provides a lively, no-pressure atmosphere and offers a variety of courses. The Osher Lifelong Learning Institute offers courses at the Ambler and Center City campuses. OLLI provides stimulating classes with great teachers, topics and students. Classes are designed for learners 50 and up.

OLLI instructors are also OLLI members, representing many professions, vocations and life experiences. Classes are held Monday to Friday. OLLI also presents the Friday Forum, featuring speakers with diverse and interesting backgrounds. Members may sit in on one undergraduate course each semester, subject to university policy and instructor approval. All classes are held at Temple's Center City campus—convenient for public transportation. For more information, call 215-204-1505, e-mail olli@temple.edu and/or visit the OLLI web site.

Senior Scholars at Temple University

Temple Senior Scholars invites alumni and their spouses or partners age 50 and older to return to Temple's vibrant educational community and sit in on credit classes. For hundreds of Temple alumni each year, the Senior Scholars program means no tests and no grades, just the joy of learning with Temple's diverse students and acclaimed faculty. Choose from a variety of courses in subjects as diverse as American studies and anthropology, history and horticulture, political science and theater. Classes are offered weekdays and evenings at Main Campus, Center City and Ambler. For more information call 215-204-2712, e-mail seniorscholars@temple.edu and/or visit the Senior Scholars web site.

Off-Campus/Corporate Programs

Temple University has been bringing its rich educational resources to off-campus sites for over 60 years. Through the Office of Off-campus Programs and Training, Temple University provides both off-campus and customized corporate programs throughout the Philadelphia region. The Office of Off-campus Programs and Training offers a wide array of credit courses, certificate and full degree programs.

This office develops and customizes training programs designed to be taught on site at the client's workplace while assuring the utmost quality in instruction and customer service. The staff of Off-campus Programs and Training serves as the liaison between the university faculty/trainers and its external customers. They have developed strong affiliations with businesses, school districts, units of government, and non-profit associations in the area, building thriving educational partnerships. For more information, call 215-204-5018 or e-mail customtraining@temple.edu.

Programs with Academic Credit

Temple University offers a variety of special programs with academic credit. For more details, contact the school, college, or campus where the program is offered.

Visiting Students

Temple University welcomes students from other colleges and universities who wish to enroll in courses on any of our campuses. All students must provide a transcript of their previous academic work and must have earned at least a 2.00 cumulative GPA. Students must demonstrate that they have received permission from their home institution, listing the specific Temple courses that have been approved for transfer. If the courses have prerequisites, students must provide proof of having taken and passed them. Some courses may also require special authorization from instructors or departments at Temple (e.g. business courses numbered 2000 and above).

Students may request enrollment as a Visiting Student through the Continuing Studies web site. Further information is available at Summer Programs Visiting Students.

Credit Transfer to Your Home Institution

In order to facilitate the transfer of credits, students should request that an academic transcript be sent from Temple to their home institution. Instructions for requesting a transcript can be found at Temple's Office of the University Registrar web site. The transcript will not be sent out automatically. For further information, please visit the Office of the University Registrar web site, call 215-204-1131, or visit in person on the second floor, Conwell Hall, Broad Street and Montgomery Avenue, on the Main Campus. You may also visit the registration office at your campus of choice.

Undergraduate Non-Degree Students

Students who are not currently enrolled at another institution may be permitted to register for some courses as non-degree students. To enroll in undergraduate courses they must have earned a high school diploma or a G.E.D. certificate. Students who have attended another college or university must provide a transcript of their previous academic work and must have earned at least a 2.00 cumulative GPA. With some exceptions, these students are required to take university placement assessments before they can register. However, meeting these minimum requirements does not

guarantee enrollment as a non-degree student. For more information, and to speak with an academic advisor, please contact the Main Campus Office of Continuing Studies or the office of the campus you wish to attend.

High School Students

High school students who will be entering their senior year may be eligible to register for college-level courses. Before they can register, they must secure and provide written authorization from their guidance counselor or high school principal, specifying the course(s) the student is authorized to take.

Summer Sessions

Temple University welcomes students from other colleges and universities, international students, as well as our own students, to enroll in a summer course at any one of our several campuses. We offer credit, non-credit, day and evening courses at our campuses. We also have several Study Abroad Programs in France, Germany, Italy, Spain and the United Kingdom.

Registration

Office of the University Registrar
200 Conwell Hall
1801 North Broad Street
Philadelphia, PA 19122

215-204-1131

Web: registrar.temple.edu

General Information

Advising is required for students registering at Temple for the first time and is strongly recommended for all students before registering through Self-Service Banner (SSB). Students should contact their school, college, or department advisors for appointments or information. Generally, advisors and students review options and requirements, select courses, and complete and sign a registration form when necessary. For further information on academic advising, please see Advising (p. 62) under the Academic Support section of the *Bulletin*. Detailed course information (day, time, location, instructor) is available on the Class Schedule.

Registration Policies

Registration for courses is not optional, and students must not attend courses for which they are not registered. Once a student registers for a course—or is registered by an advisor at the student's request—the student remains financially obligated for the course unless and until he or she drops the course by the prescribed deadlines for dropping and adding courses. Prior to registering for the first time each semester, students are required to accept Temple University's Financial Responsibility Agreement, which outlines the financial terms and conditions associated with course registration.

Students may drop courses and otherwise modify their registrations in Self-Service Banner (SSB) or by working with an academic advisor. Please see the academic calendar for add/drop and withdrawal deadlines for each semester and summer session.

Once registered, students must pay tuition and fees according to the Bursar's Office billing schedule. Failure to satisfy billing and financial obligations may result in withholding of official transcripts and diplomas, denial of the right to register for future sessions, and the assessment of late fees and collection costs.

Students who are not planning to attend the semester must drop their course registration. Students who do not drop classes by the end of the official drop/add period (see Academic Calendar for specific dates) remain financially obligated for the amount due. Instructors are advised to issue letter grades for students who have not been attending but are on their roster of registered students.

Students who drop classes by the end of the published drop period of a semester or summer session will have their courses deleted. This will relieve the student of academic and financial responsibilities associated with the course.

Students who withdraw from classes after the published drop period are responsible for full payment of all tuition and fees, along with any payment plan fees, and late payment charges. These courses will be recorded on the transcript with the notation of "W," indicating that the student withdrew. Unpaid tuition balances may be referred for collection, and students may be held liable for paying all associated collection costs and/or legal fees.

Disclaimer: Tuition and fees are set annually each summer, regardless of the method of instruction. Temple University expressly reserves the right to deliver some or all instruction remotely at its discretion. Tuition, the university services fee and certain other fees are required to be paid in full and will not be refunded regardless of the method of instruction, the inability to access university-maintained facilities, or any disruption to or cancellation of classes, activities, events, services or programs.

Continuing Student Registration

Continuing (or priority) student registration is the period in which all currently enrolled, degree-seeking students may register. Each semester, currently enrolled students are sent an e-mail containing the registration schedule. This schedule is also available on the Office of the University Registrar web site under "Course Registration." In general, eligibility for priority registration is based upon the number of earned credit hours; however, active duty US servicemembers and veterans are eligible to register on the first day of priority registration, regardless of the number of earned credits.

An installment tuition payment plan is available for students who register for the fall or spring semesters during these periods. See the Tuition and Fees (p. 1800) section of the *Bulletin* for payment information.

Late Registration

Any student registering for the first time after the start of the term will be assessed a \$100.00 late registration fee.

Schedule Revision (Add/Drop)

Students may revise their schedules at any time after they have registered, through the add/drop deadlines. Students who cannot register online but wish to make changes in their course schedules must do so with the assistance of their academic advisor. An approval from the instructor may be required if adding a course after it has begun. Visit the Office of the University Registrar web site for more information.

Students may not add or drop courses after the published deadline. Dropping the course results in the deletion of the class from the student's roster. It also relieves the student of the financial liability associated with the deleted course. If a refund is due, the provisions of the refund policy will apply.

Registration Waitlisting

Students may choose to be placed on a waitlist for closed sections of select courses.

Important considerations:

- Student placement on the waitlist will be on a first-come, first-served basis. Special circumstances may be considered by academic advisors or program coordinators in each school/college.
- Students are not automatically registered for the section but will be notified if a seat becomes available.
- Notified students must act by the action deadline, or they will be dropped from the waitlist.
- Students must meet the course requirements, such as prerequisites, co-requisites, etc.
- Students cannot waitlist for a section of a course while already registered or waitlisted for a different section of the same course.
- Waitlisting ends prior to the start of the classes.

Additional Registration Information

Veterans

A *covered individual* is any individual who is entitled to educational assistance under chapter 31, Vocational Rehabilitation and Employment, or chapter 33, Post-9/11 GI Bill® benefits.

Newly admitted or currently enrolled students seeking to use their veteran education benefits towards tuition and fees for the first time should begin by contacting the VA at 1-888-442-4551 or visit VA.GOV for eligibility information.

Prior to enrolling at Temple University, students using Tuition Assistance should discuss the educational plan with their Educational Services Officer (ESO) or the counselor within the military service.

Priority Registration (PA Act 46)

Pennsylvania Act 46 of 2014 requires public institutions of higher education in Pennsylvania to provide veteran students, as defined in the Act, with preference in course scheduling. Active duty US servicemembers and veterans are eligible to register on the first day of priority registration, regardless of the number of earned credits.

Non-compliance may be reported to the Pennsylvania Department of Education by submitting the Higher Education Student Complaint form found at www.education.pa.gov.

Eligible students will receive an email with their priority registration date, time, and a special registration PIN. Eligible students who are on Academic Warning or Probation must meet with an academic advisor prior to registration to have the PIN updated to allow registration on the first day of priority registration.

Residency Status (PA Act 11)

Pennsylvania Act 11 mandates Temple University to charge the in-state tuition rate to out-of-state students living in Pennsylvania and using their GI Bill® benefits under chapters 30, 31, 33, 35 and sections 1606 and 1607. Eligible students will have their student account adjusted to reflect the in-state tuition rate. Temple will also review the financial aid package and make any necessary adjustments based on the in-state tuition rate.

Note: GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government web site at <https://www.benefits.va.gov/gibill/>.

Veteran Education Benefit Certification Process

Servicemembers or veterans may enroll as full-time or part-time students; however, education benefits are based on enrollment status. For newly admitted students or first-time using education benefits, please follow these steps to declare benefit use via GIBenefits in TUportal:

1. Obtain the Certificate of Eligibility* or eBenefits summary* (one-time only)
2. Access GIBenefits in TUportal
3. Submit Servicemember/Dependent information (one-time only)

4. Register for courses
5. Declare to use your benefits for the registered term
6. Upload your certificate of eligibility or eBenefits information (one-time only)

For students receiving Chapter 31/Vocational Rehabilitation benefits, Form VA-1905 will be sent to the Office of the University Registrar by the VA counselor in lieu of Certificate of Eligibility.

Information regarding additional services available for servicemembers and veterans can be found on the Military and Veteran Services Center web site.

Temple University will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries, or other institutional facilities, or the requirement that a covered individual borrows additional funds, on any covered individual because of the individual's inability to meet his or her financial obligations to the institution due to the delayed disbursement funding from VA under chapter 31 or 33.

International Students

If a student is on a non-immigrant visa, enrollment for a minimum of 12 credits each semester is required to meet immigration regulations. Non-resident tuition charges are assessed.

Continuing Studies Students

(Non-degree-seeking students attending Temple prior to formal admission into a degree program)

First-year, non-degree-seeking students may register for a maximum of 11 credits per semester. Second-year, non-degree-seeking student registrations are based upon academic progress. However, undergraduate non-degree-seeking students are prohibited from registering via Self-Service Banner and must register through their Continuing Studies office. **Visit the Continuing Studies web site for more information.**

Student Responsibilities

Every registered student agrees to abide by an overall set of values, principles and regulations mandated by the university. In order for a student to remain in good standing, it is imperative that each student assumes responsibilities throughout his/her enrollment at Temple. Students also have a number of rights (p. 45) which protect their interests. This section details these important responsibilities.

Academic Honesty

The Temple University community believes strongly in academic honesty and integrity. Essential to intellectual growth and the university's core educational mission is the development of independent thought and respect for the thoughts of others. Academic honesty fosters this independence and respect. Academic dishonesty undermines the university's mission and purpose and devalues the work of all members of the Temple community. Every member of the university community is responsible for upholding the highest standards of academic honesty at all times. Students, as members of the community, are responsible for adhering to the principles of academic honesty and integrity.

Plagiarism includes, but is not limited to, the use, by paraphrase or direct quotation, of the published or unpublished work of another person without full and clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling or distribution of term papers or other academic materials. Normally, all work done for courses—papers, examinations, homework exercises, laboratory reports, oral presentations—is expected to be the individual effort of the student presenting the work. Any assistance must be reported to the instructor. If the work has entailed consulting other resources—journals, books, or other media—these resources must be cited in a manner appropriate to the course. It is the instructor's responsibility to indicate the appropriate manner of citation. Everything used from other sources—suggestions for organization of ideas, ideas themselves, or actual language—must be cited. Failure to cite borrowed material constitutes plagiarism. Undocumented use of materials from the World Wide Web is plagiarism.

Cheating includes, but is not limited to,

1. use of any unauthorized assistance in taking quizzes, tests, or examinations;
2. use of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments;
3. the acquisition, without permission, of tests or other academic material belonging to a member of the university faculty or staff;
4. engaging in any behavior specifically prohibited by a faculty member in the course syllabus, assignment, or class discussion; or
5. otherwise engaging in behavior that gives the student an unfair academic advantage including, but not limited to, fabrication of data or sources, resubmitting work already submitted for another academic requirement without prior authorization, or other similar behavior.

Refer to the Student Conduct Code (policy # 03.70.12) for more specific definitions of cheating and plagiarism.

The penalty for academic dishonesty can vary from receiving a reprimand and a failing grade for a particular assignment, to a failing grade in the course, to suspension or expulsion from the university. The penalty varies with the nature of the offense, the individual instructor, the department, the school or college, and the Office of Student Conduct and Community Standards.

Students who believe that they have been unfairly accused may appeal through the school or college's academic grievance procedure. For more information see Grievances (p. 47).

Attendance

Enrollment in a course presupposes intention to attend regularly. Attendance requirements should be announced by the instructor at the beginning of the course. The student who is absent for any reason is responsible for work missed. If a pattern of excessive absences develops, the instructor may report this fact to the student's advisor through the department in which the student is enrolled.

The student should understand that excessive absences may, at the option of the instructor, jeopardize the grade and/or continuance in the course. Although attendance is basically a matter between the student and the instructor, either may request the counsel of the advisor or the Office of the Dean in special cases.

Students should consult the policies and regulations of their own school or college for any further specifications of attendance policy.

Clearing Holds

A hold is an action placed on a student's record. Holds may affect a student's ability to register for courses, to apply for graduation, or to receive transcript services or degree audit reports.

Students may receive holds on their records for financial, academic, or disciplinary reasons. Students are obligated to resolve holds as quickly as possible, working with their academic advising office, student financial services, or other offices, as appropriate. Academic holds may be caused by failure to declare a major by the appropriate time, low GPA, or failure to make academic progress. Students receiving a "See College Dean" hold should meet with their academic advisor as soon as possible.

Student Conduct Code

The Temple University *Student Conduct Code* can be viewed at <https://secretary.temple.edu/sites/secretary/files/policies/03.70.12.pdf>.

Temple University has the responsibility to formulate and enforce rules of conduct which are necessary for the furtherance of its educational goals and essential activities. In particular, the university has an obligation to protect itself from any acts which tend to impede, obstruct, or threaten its normal operations. While this authority is inherent, the university attempts to delineate its expectations as clearly as possible and publish its regulations. Students, both as individuals and as members of student organizations, are responsible for apprising themselves of, and complying with, all applicable, existing regulations in the *Undergraduate Bulletin* and any regulations that may be subsequently promulgated through appropriate publications of the university community. Copies of *Student Conduct Code* may be obtained from the Office of the Dean of Students.

The Student Conduct Administrator is responsible for administering the Student Conduct Code. Violations of the university's Code, including, among other things, theft, underage consumption of alcohol, disorderly conduct, plagiarism, sexual assault, dating or domestic violence, stalking and possession of a weapon, can result in a student being brought before a Student Conduct Board. A finding of responsibility may result in, among other sanctions, a fine, suspension, and/or permanent expulsion from the university. A disciplinary hold is placed on the student's record if sanctions are unfulfilled. The hold prevents students from registering for courses, receiving their transcript or graduating.

Financial Obligation to the University

Being a Temple student means incurring a financial obligation to the university. An important part of taking responsibility for your education is to be aware of tuition and fee charges, payment and financial aid procedures, and all relevant deadlines, and to make sure that forms are submitted and balances paid on time. Even if someone else is paying your balance, you are responsible for remaining in good financial standing with the university. Failure to satisfy financial obligations, when due, can result in denial of the right to register for future sessions, delay in graduation, and withholding of official transcripts and diplomas after graduation. Unpaid balances are subject to referral to outside collection agencies.

Prior to registering for the first time each semester, students are required to accept Temple University's Financial Responsibility Agreement, which outlines the financial terms and conditions associated with course registration.

Your registration for courses is not final until all applicable tuition and fees are paid through the Bursar's Office. For information on registration, its financial aspects, and the impact of registration changes on your financial obligation to the university, please see Registration (p. 39).

For current tuition rates and fees, see Tuition and Fees (p. 1800) and the Bursar's Office. For information and instructions concerning your student account, online tuition payments and answers to frequently asked questions, please visit the Bursar's Office.

For information about Financial Aid, Financial Aid requirements for satisfactory academic progress, and the impact of registration changes on your eligibility for aid, see Financial Aid (p. 1809) and Student Financial Services.

For information on campus housing and meal plans, see Student Services (p. 70) and the Office of University Housing and Residential Life.

See your school's or college's policies on graduation procedures for information on the impact of unmet financial obligations on clearance for graduation.

Health and Safety Issues

Alcohol Policy

In accordance with Pennsylvania law, no individual under the age of 21 may possess or consume alcohol on university property. Student organizations may not serve alcohol at campus events. The use of alcohol in the residence halls and university-owned housing is covered in the Proprietary Policies developed by the Office of University Housing and in the Student Conduct Code. Please also see the university's Student Drug and Alcohol Policy, Student Conduct Code and the Rights, Resources & Responsibilities Guide.

Drug Policy

The unlawful manufacture, distribution, dispensation, possession or use of controlled substances in any facility or work site of Temple University is strictly prohibited. Please see the university's Student Drug and Alcohol Policy.

Immunizations

Temple University requires all full time students to receive the Meningococcal (meningitis) vaccine. The required vaccine is MPSV4 (brand name is Menomune) or MCV4 (brand names are Menactra, Menveo or MenHibrix).

In addition, all newly enrolled or re-enrolled students born after 1956 are required by Temple University to show proof of two vaccinations for Measles, Mumps and Rubella (usually given as MMR). Positive Laboratory titer results are acceptable if proof of vaccination is not provided.

All newly enrolled or re-enrolled students should have received the Tetanus/Diphtheria/Pertussis (TDaP) vaccination within 10 years or TDaP older than 10 years and Diphtheria Tetanus (DT) within 10 years.

All newly enrolled or re-enrolled students are required to receive two doses of Varicella (chicken pox) vaccine. Positive Laboratory titer results are acceptable if proof of vaccination is not provided.

Other immunizations that are strongly recommended (but not required) for all Temple students are Hepatitis B vaccine series, Meningococcal B vaccine series, Human Papillomavirus (HPV) series, Hepatitis A vaccine series, Influenza vaccine and COVID-19 vaccine. Note that students working in healthcare settings are required to receive the COVID-19 vaccination.

Students from countries with a high rate of tuberculosis must be screened for the disease. These students will be informed of how to complete this screening. Prior BCG vaccination does not exempt students from this evaluation.

Detailed information about immunizations is available at Student Health Services.

Medical Fees and Insurance

Students are responsible for any medical fees incurred outside of Student Health Services, including those incurred at Temple University Hospital. Group medical insurance is offered at the beginning of each semester through the Benefits Office. Full-time students may enroll for health coverage in the months of September (effective September 1) or February (effective March 1). Students are urged to carry this insurance or a comparable policy. Students who are insured should keep in their possession the receipt of the above group policies or identification cards for other policies. All new and continuing international students in both J-1 and F-1 status are required to carry health insurance that meets certain minimum standards determined by the United States Information Agency (USIA). These students will be enrolled in the Low Option of Blue Cross/Blue Shield Plan, as well as the International Group Services Plan. More information is available on the Benefits web site and by calling 215-204-1321.

International Students

Temple University requires all new and continuing international students in Nonimmigrant Student (both F-1 and J-1) status to carry health insurance that meets certain minimum standards determined by the United States Department of State. Students may purchase before arriving at the university or purchase health insurance upon arrival through the university. For further information, please contact the university's Benefits Office at 215-926-2270, e-mail StudentInsurance@temple.edu, or visit careers.temple.edu/hr-resources/our-functional-areas/benefits-administration/health-insurance-plans/student-health-0.

In addition, some international students may be required to demonstrate that they are free of active tuberculosis by submitting to Student Health Services a Tuberculosis Screening Record which has been certified by a licensed physician. International students may meet this requirement upon arrival at Temple University by taking a PPD test at Student Health Services.

All international students in Nonimmigrant Student (F-1 and J-1) status must maintain their nonimmigrant status insofar as regulations of the United States Citizenship and Immigration Services (USCIS) and the United States Department of State (DOS) are concerned. In general, students in this status must complete a full-time course load each academic term while they remain in the United States and must not accept unauthorized on-campus or off-campus employment. For detailed information, please see iss.temple.edu/students/current-students.

Eligibility for employment for individuals in Nonimmigrant Student (F-1 and J-1) status is based on regulations of the US Citizenship and Immigration Services and the Department of State. For detailed information, please see iss.temple.edu/students/current-students/student-employment-options.

A mandatory orientation session is held for new international students at the beginning of each academic term. For more information, please see the International Student and Scholar Services web site at iss.temple.edu/international-student-affairs/pre-arrival-new-students and the Office of New Student and Family Programs web site at <https://orientation.temple.edu/>.

For more information about maintaining Nonimmigrant Student (F-1 and J-1) status, please see iss.temple.edu/.

Registration

Students must be appropriately registered for courses to receive credits and grades. Students not registered will not receive a grade or credit for a course. Go to Self-Service Banner in the TUportal to confirm your billing and registration status. If you add or drop a course, or revise your class schedule, check Self-Service Banner to make sure that your registration record is accurate. Be warned, if you are registered for a course but don't attend, you will be held financially responsible and receive a grade.

Temple E-mail Accounts

All students are required to obtain a Temple e-mail address and follow guidelines for university use of e-mail; the policy establishes your Temple e-mail account as an approved channel of communication for sending you official university notifications and important information. Visit <https://accounts.temple.edu/> in order to activate your account.

Student Rights

Student and Faculty Academic Rights and Responsibilities

Temple University students who believe that instructors are introducing extraneous material into class discussions or that their grades are being affected by their opinions or views that are unrelated to a course's subject matter can file a complaint under the university's policy on academic rights and responsibilities (Temple Policy 03.70.02).

The policy encourages students to first discuss their concerns with their instructor. If a student is uncomfortable doing so, or if discussions with the instructor do not resolve the student's concerns, an informal complaint can be made to the Student Ombudsperson for the student's school or college. Unresolved complaints may be referred to the dean for handling in accordance with the school or college's established grievance procedure. Final appeals will be determined by the Provost.

Course Syllabus

Instructors are required to supply a detailed syllabus explaining course rules and expectations for courses in which you are enrolled. The content requirements for course syllabi are enumerated in Temple Policy 02.78.13.

Student Feedback Form (SFF)

Each course (with few exceptions) is required to employ a standard form for student evaluation of courses and teaching. Please fill out the Student Feedback Form thoughtfully at the end of your course. (Temple Policy 02.78.14)

FERPA/Privacy Guidelines

As is required by the Family Educational Rights and Privacy Act (FERPA) of 1974, with certain exceptions, generally Temple University cannot disclose a student's education records without the written consent of a student or without proof by a parent that the student is dependent on his/her parents for federal income tax purposes.

FERPA provides the following rights for students and for the parents of dependent students, as described above, attending Temple University:

- The right of a student, with minor limitations, to inspect and review his or her education records;
- The right to request amendment of a student's education records to ensure that they are not inaccurate, misleading, or otherwise in violation of the student's privacy or other rights;
- The right, with certain exceptions, to consent to disclosures of personally identifiable information contained in the student's education records;
- The right to withhold public disclosure of any or all items of so-called "Directory Information" by written notification to the Office of the Dean of Students within two weeks after publication of this notice. Under current university policy, the item "Directory Information" includes a student's name, street address, e-mail address, confirmation of enrollment status (full-time/part-time), dates of attendance, degree received, awards received (e.g., Dean's List), major field of study, participation in officially-recognized activities and sports, and weight and height of members of athletic teams.
- The right to file a complaint with the United States Department of Education concerning the alleged failure of Temple University to comply with the requirements of FERPA and of the implementing regulations.

The procedures for exercising the above rights are explained in the Policy Regarding Confidentiality of Student Records (Temple Policy 03.20.11), copies of which are available in the Office of the Dean of Students. Included in this policy is a description of the types and locations of educational records maintained by the university.

If you or your parents' primary or home language is not English, upon your request, reasonable efforts will be made to provide you with a translated copy of this "Annual Notice," as well as with "Temple University's Guidelines Pertaining to Confidentiality of Student Records."

Please note that, in compliance with a 1997 federal statute designed to advance military recruiting, Temple may release dates of birth to the military unless the student notifies Temple that he or she wishes this information withheld.

FERPA Waiver

A student may consent to the release of information from education records to parents, guardians or other appropriate persons. The students may provide the university with their consent by completing the FERPA waiver online via TUportal. Once logged into TUportal, click on the "Self-Service Banner" link, then click the "Student" link, and then the "FERPA Contacts" link. After reading the informational text, click the "New Contact" link and enter the requested information before clicking the "Submit Changes" link.

Americans with Disabilities Act (ADA)

Under the Americans with Disabilities Act (ADA), Section 504 of The Rehabilitation Act of 1973, and Section 508 of the Rehabilitation Act of 1998, Temple University strives to make programs, activities and services accessible for persons with disabilities. Disability Resources and Services (DRS) is

the department that facilitates access for students with disabilities at the university. Please see the Student Services (p. 70) section of the *Bulletin* for information on Disability Resources and Services.

Protection from Discrimination and Harassment

Office of Equal Opportunity Compliance

Sandra A. Foehl, Director
sandra.foehl@temple.edu
215-204-6772

Rosa Parks-Green, Assistant Director
rosa.parks-green@temple.edu
215-204-7438

Tuttleman Learning Center, Suite 101
1809 N. 13th Street, Philadelphia PA
diversity.temple.edu/eoc

Equal Opportunity

Temple University is committed to a policy of equal opportunity for all in every aspect of its operations. The university has pledged not to discriminate on the basis of individuals' protected characteristics or statuses: age, color, disability, marital status, national or ethnic origin, race, religion, sex (including pregnancy), sexual orientation and gender identity, veteran status and genetic information.

Temple University's equal opportunity/affirmative action program has these inclusive objectives: To support the admission and successful participation of disadvantaged students, students with disabilities, and those for whom English is a second language; and to employ and advance in employment qualified women, minorities, individuals with disabilities, Armed Forces service medal veterans, disabled veterans, recently-separated veterans, and other protected veterans.

Temple University's equal opportunity/affirmative action program complies with federal regulations. For more information or to review Temple's Affirmative Action Program, contact the Office of Equal Opportunity Compliance.

Discrimination and Harassment

Students or employees who think they are being discriminated against or harassed because of a protected characteristic or status should contact the Office of Equal Opportunity Compliance. It is this office's responsibility to help the student or employee file a complaint through the appropriate grievance procedures and to investigate complaints of discrimination and harassment.

Complaint Resolution Procedures

Persons who feel they have been victims of discrimination or harassment may make an informal complaint to any Equal Opportunity (EO) Ombudsperson or to the Office of Equal Opportunity Compliance. For a list of the names of the EO Ombudspersons designated in a specific school, college, or administrative unit, contact the Dean's Office or visit the EO Ombudspersons web page, which includes a list of the current EO Ombudspersons.

Students, faculty members, and staff members may bring a formal administrative complaint of discrimination or harassment by filing a complaint directly with the university's Office of Equal Opportunity Compliance.

Title IX Coordinator

Andrea Caporale Seiss
andrea.caporale@temple.edu
215-204-3283

Sexual Misconduct

Temple University is committed to providing a learning and working environment that emphasizes the dignity and worth of every member of its community, free from discriminatory conduct. Sexual harassment in any form or context is contrary to this commitment and will not be tolerated. Sexual harassment subverts the mission and the work of the university and can threaten the career, educational experience, and well-being of students, faculty, and staff.

The university recognizes that sexual harassment includes harassment based on gender, sexual orientation, gender identity, or gender expression and may occur regardless of the formal position or status of each person involved. Sexual harassment is especially offensive, however, when it occurs in relationships between teacher and student or between supervisor and subordinate. In those situations, sexual harassment exploits unfairly the power inherent in the position of the faculty member or supervisor.

Sexual harassment also constitutes a form of sex discrimination that is illegal under Title VII of the Civil Rights Act of 1964, Title IX of the Elementary/Secondary Education Amendments Act of 1972, as amended, and state law. The university recognizes that sexual assault, domestic violence, dating violence, and stalking may also be considered sexual harassment.

University Resources and Complaint Resolution Procedures

Procedures for reporting a complaint of sexual assault are set out in the university policy Preventing and Addressing Sexual Misconduct. This policy, on-campus and community resources for those affected by sexual misconduct, and the university's sexual misconduct education and prevention programs can be viewed at the Title IX web page.

Grievances

Title IX of the Elementary/Secondary Education Amendments Act of 1972 requires that each college or university establish due process for the resolution of academic grievances. Undergraduate students enrolled at Temple University have the right to appeal any academic or non-academic matter in which they feel they have been treated unfairly.

While each school and college at Temple University has established and adheres to its own grievance procedure, all have in common the following steps:

1. Students attempt resolution through discussion with the instructor.
2. Failing agreement, students present appeals to the chair of the department, specifying the nature of the grievance, the result of the previous discussion, and the resolution sought.
3. Failing agreement at the department chair level, students may appeal to the Office of the Dean of the College.
4. When appeals warrant review beyond the school or college, students, faculty members, or the dean's office may appeal to the Vice Provost for Undergraduate Studies.

Details that may vary from school to school include the involvement of a student-ombudsperson; the constitution of grievance hearing committees, which may be a part of either step two or three; and time limits, both for students' filing and for the administrative response.

Students should be advised that filing a formal grievance, that is, beyond the level of the instructor, is serious and should be avoided until all informal methods of adjudication have been used.

For further information on academic grievance procedures, students should inquire in their dean's office or with an advisor or the student-ombudsperson in the relevant school. For non-academic grievances, further information is available in the Dean of Students' Office, 215-204-7188 or the Dean of Students web site. (Temple Policy 03.70.12)

Instructor Office Hours

Full-time faculty are required to hold a minimum of three office hours per week and should schedule one hour immediately before or after one of the scheduled class meeting times for each course. Adjunct instructors are required to schedule one office hour per week for each class they teach and should schedule that hour either immediately before or after one of the scheduled class meeting times for that course. Make it a point to talk with your instructors about your academic work and progress. (Temple Policy 02.78.12)

Smoking and Tobacco Use Policy

Temple University is committed to providing a tobacco-free environment for the entire Temple community. All U.S. university properties are designated as tobacco-free, including the use of all combustible tobacco, electronic smoking devices and smokeless tobacco products, as defined in policy 04.62.11. In addition, all indoor and outdoor university-sponsored activities taking place in facilities not owned or operated by Temple University will be tobacco-free in those areas under the university's control. This policy will be enforced according to established university policies and procedures.

Student Services Office Hours

All Temple University offices directly serving students will maintain uniform business hours (8:30 a.m. to 5:00 p.m.). (Temple Policy 04.31.11)

Academic Opportunities

Experiential Learning and Internships

Internships give students the opportunity to capitalize on what they are learning in the classroom and apply it in a work setting. Internships help students to build and enhance their skills, provide practical experience so often sought by employers, and offer excellent opportunities to establish contacts in their career field. Professional internships are available both on- and off-campus, and may be paid, unpaid and completed for academic credit in many majors. Internships for all academic majors are posted in Handshake, the university-wide internship and professional job database. To access Handshake, go to <https://temple.joinhandshake.com/login>. To obtain information about receiving academic credit for an internship, students should contact their respective school or college.

Temple University's Office of Community Affairs and Engagement is dedicated to providing students with the resources and guidance necessary to immerse themselves in action for positive social change. Through our "Volunteering at Temple" program we work with staff and students to establish strong relationships within and beyond the Temple campus through community service. The office partners very closely with the Temple University Community Service Association and other student organizations to plan and implement short- and long-term opportunities primarily in North Philadelphia where Temple's Main Campus is located. The office also hosts "Scouting at Temple" to connect volunteers with the Boy Scouts and Girls Scouts organizations for engagement. For more information, contact Andrea Swan at aswan@temple.edu or at 215-204-7409.

First Year and Transfer Programs

Michael Lawlor, Associate Vice Provost
500 Conwell Hall
215-204-8580
michael.lawlor@temple.edu

University Seminar Series

First-Year (Freshman) Student Seminars

First-Year (Freshman) Student Seminars are academic courses designed to support student learning and development in the critical first semester of college. UNVS 1001 can be taken as part of a Learning Community or as a stand-alone course. College-specific seminars are offered by the College of Liberal Arts, College of Science and Technology, the LeW Klein College of Media and Communication, and the Center for the Performing and Cinematic Arts.

UNVS 1001 is a 1-credit course that introduces first-year students to the opportunities and rigors of higher education, as well as to the skills needed to use academic resources successfully in college. The topics covered in the seminar help first-year students articulate and reach their academic goals.

UNVS 1002 is a 1-credit course that introduces first-year students to the opportunities to discover major interests through applied learning and other career-oriented experiences. The course exposes students to career paths and encourages major exploration through discussions with faculty, informational interviews, readings, and opportunities to practice skills needed to be a more effective student.

UNVS 1003 is a 3-credit course that includes instruction in all four language skills (reading, writing, speaking and listening). It also focuses on additional academic skills and strategies necessary for students to succeed in undergraduate courses. Emphasis will be on critical thinking and independent research along with the introduction to technologies that support course requirements.

UNVS 1006 is a 1-credit course that provides students instruction in critical thinking skills. Through the study of historical and contemporary learning theories and research-based cognitive strategies, students will be able to meaningfully reflect upon their learning and have an opportunity to develop and implement techniques to improve their success.

UNVS 1007 is a 2-credit course that introduces first-year students, who are also Cecil B. Moore scholarship recipients, to resources and strategies that contribute to a successful transition into college. The course is designed to develop academic skills and establish a supportive campus network. This course allows students to reflect on their academic and personal experiences and practice new skills to promote student success.

Sophomore Seminar

UNVS 2001 is a 1-credit academic course that provides sophomores opportunities to work on professional planning and development. Topics will include individual strengths exploration, academic majors, potential career paths, internship preparation, research opportunities, campus involvement, graduate school preparation, and career transition preparation.

Transfer Seminar

UNVS 2002 is a 1-credit academic course that introduces new transfer students to the opportunities and resources at Temple University. The course is designed to assist students in their transition as well as assist in preparing them for their future career/educational plans.

Global Citizenship Seminar

UNVS 2003 is a 1-credit academic course that assists students in their development of global perspectives and competencies that are important for successful navigation of the world. This course explores topics and themes related to helping students prepare to move forward as global citizens.

Junior Seminar

UNVS 3001 is a 1-credit academic course that provides junior-level students with an opportunity to work on pre-professional planning and development. It will focus specifically on preparation for post-graduate educational opportunities and entrance exams for graduate and professional programs.

Peer Mentor Development Seminar

UNVS 3002 is a variable credit course (0 to 1 credit) that introduces students to content and communication skills identified as integral to serving as a peer mentor in the college setting. Through this course, students become proficient guides to Temple and community resources, well-versed in college and academic success strategies, and equipped with effective interpersonal communication skills.

Student Staff Development Seminar

UNVS 3003 is a variable credit course (0 to 1 credit) that introduces students to leadership models and theory to prepare them to serve as leaders in their Student Staff roles in University Housing & Residential Life and beyond. In addition, this seminar encourages students to explore key competencies connected to Student Staff leadership roles (e.g. supervision, crisis management, confrontation/mediation, critical thinking, administrative resources, professional development, inclusivity, and student and community engagement).

Learning Communities

A Learning Community consists of two or more linked courses designed to provide students with a more integrated and meaningful learning experience. Learning Communities foster an intellectual environment where learning can flourish and help smooth the transition to college by providing an opportunity for students to form bonds with fellow first-semester students who are in these same classes.

Learning Communities are designed primarily for the special student populations. During New Student Orientation, an academic advisor will help students select the learning communities which best meet their academic interests and needs.

Living Learning Communities (LLCs)

LLCs enhance students' academic, personal, and professional growth by offering dedicated residential communities ranging from thematic to academic interests. LLCs bring together a challenging curriculum with co-curricular experiences that expand learning beyond the classroom and integrate it with daily campus life. For more information go to housing.temple.edu/.

Online Learning

Andrew Lessman
Office of Digital Education
Atlantic Bell Technology Center, Suite 403
215-204-3391
online.temple.edu

Temple University's Online Learning Program is designed to give students a rigorous, high-quality education that provides more flexibility in when and how they attend classes. Courses are offered at both the undergraduate and graduate levels and also for continuing education students.

Continuing degree-seeking (matriculated) students can register online via Self-Service Banner in the TUportal. Non-degree seeking students must register through the Office of Continuing Studies in the Academic Resource Center at Mitten Hall, Suite 110 (215-204-2500). Refer to the request enrollment process for details.

How online learning works: Each week, a student will access Canvas to view assignments and reading materials and participate in collaborative discussions or projects with instructors and classmates. Some online programs and courses require students to meet virtually using live web conference video technologies. Students should understand that online learning experiences are rigorous and require the same level of preparation and effort as traditional courses.

The Online Learning Program provides access to over 500 course titles via online, blended, virtual and videoconferencing formats. Visit online.temple.edu/offerings to view a roster of academic programs that can be completed fully online.

For successful completion of an online course, students are recommended to have daily access to a computer with a fast internet connection. Visit online.temple.edu for more information.

Pre-Professional and Pre-Graduate Programs

Pre-Law Program

Temple offers undergraduates a wide range of courses, programs of study and majors that will contribute to their preparation for law school and for a career in the legal or a related profession. Temple undergraduates will find numerous opportunities to sharpen their critical thinking, reading and writing skills, both in and out of the classroom. Interested students can participate in the Mock Trial Team, get involved in the pre-law organizations (Phi Alpha Delta and the Pre-Law Society), or undertake an internship in the Philadelphia area. Speakers on legal issues, on careers in law and on preparing for the LSAT provide additional opportunities for the Temple student to learn more about the study of law and prepare for the intellectual challenges ahead.

Entering first-year students in the College of Liberal Arts and the Fox School of Business and Management can apply for the Temple Law Scholars Program, an early assurance program offered by Temple University's Beasley School of Law. See the Special Admissions Programs (p. 25) section of the *Bulletin* for details.

Pre-Professional Health Advising

Mitten Hall, Suite 110
215-204-2513
healthadvising@temple.edu
undergradstudies.temple.edu/healthadvising

The office of Pre-Professional Health Advising assists students in their academic and experiential preparation for applying to programs in dentistry, medicine, optometry, pharmacy, podiatry, veterinary medicine, physical therapy, occupational therapy and physician assistant. Advising offered by this office supplements the academic advising (course registration, major requirements and graduation review) provided by the academic advisors in each student's primary college based on their major program of study.

Advising through Pre-Professional Health Advising will help students stay organized as they identify the tracks or programs best suited to their interests in the health care professions. Beginning in their first semester, students can take advantage of our ePortfolio system as well as a special section of the First-Year Seminar designed specifically for students interested in professional school. Temple undergraduates will find numerous opportunities both in and out of the classroom to develop the knowledge, skills and experiences to prepare them for their future endeavors.

Pre-Med Health Scholars

The Pre-Med Health Scholar Program is offered to highly talented high school seniors interested in pursuing a career as a physician. It is designed to recruit exceptional students to Temple University by offering a Linkage Agreement with Lewis Katz School of Medicine at Temple University. Applications are accepted from high school seniors and interviews are conducted in February of their senior year of high school. **Pre-Med Health Scholar Program Applications for interested high school seniors are available through the Pre-Professional Health Advising web site. Completed applications are due by December of each student's senior year in high school. Students entering Temple University as Pre-Med Health Scholars may consider an Accelerated BA/MD (3+4) Degree option during their first semester of undergraduate studies.**

For more information, please visit the Pre-Professional Health Advising web site.

Accelerated Programs for Dentistry, Pharmacy, Physical Therapy and Podiatry

Accelerated Programs allow Pre: Dentistry, Pharmacy, and Podiatry (3+4 Tracks) as well as Physical Therapy (3+3 Track) students the option of earning both their Bachelor of Arts and Graduate degrees in a shorter period of time. Bachelor's degrees are conferred after successfully completing three years of undergraduate studies and passing all courses in the first year of professional school. The Accelerated BA/DMD, BA/PharmD, BA/DPM, or DPT Programs are designed for high-achieving students who have distinguished themselves with impressive academic records and a demonstrated interest in their respective field.

Refer to Accelerated Programs for more information.

Military Science (ROTC) Credits Applicable for Graduation

Undergraduate students whose degree programs allow for free electives (those beyond required course credits needed to satisfy university General Education, school or college, and major requirements) may be able to apply up to 12 credits of upper-division military science courses toward the total number of credits required for graduation. The allowable military science credits applicable toward graduation requirements include four upper-division courses at the 3000- and 4000-level in Aerospace Studies (Air Force ROTC), or Military Science (Army ROTC), or Naval Science (Navy ROTC).

The courses for which credits may be applicable to graduation include:

Department	Course #	Course Name	Credits	Semester
Military Science	MLSC 3001	Applied Leadership & Management I	2	
Military Science	MLSC 3002	Applied Leadership & Management II	2	

Military Science	MLSC 4001	Advanced Leadership & Management I	2	
Military Science	MLSC 4002	Advanced Leadership & Management II	2	
Aerospace Studies	AIRF 3011	Air Force Leadership Studies I	3	
Aerospace Studies	AIRF 3021	Air Force Leadership Studies II	3	
Aerospace Studies	AIRF 4031	National Security Affairs I	3	
Aerospace Studies	AIRF 4041	National Security Affairs II	3	
Naval Science	NAVS 3001	Naval Ships Systems I: Engineering	3	Fall only
Naval Science	NAVS 3002	Naval Ships Systems II: Weapons	3	Spring only
Naval Science	NAVS 3003	Evolution of Welfare	3	Fall only
Naval Science	NAVS 4001	Naval Operations and Seamanship	3	Fall only
Naval Science	NAVS 4002	Leadership & Ethics	3	Spring only
Naval Science	NAVS 4003	Fundamentals of Maneuver Warfare	3	

For more information about the applicability of Army ROTC, Navy ROTC and Air Force ROTC courses for graduation credit, please call the Undergraduate Studies Office (215-204-2044).

Military Science: Army Reserve Officers' Training Corps (Army ROTC)

Raymond A. Maszarose, Lieutenant Colonel

Ritter Hall, Lower Level

215-204-7480 or 215-204-2482

Fax: 215-204-7481

goarmy.com/careers-and-jobs/find-your-path/army-officers/rotc

Through a curriculum offered by the Temple Department of Military Science, qualified full-time students can earn a commission as an Active Duty, Reserve, or National Guard Officer, while concurrently satisfying academic requirements for a baccalaureate or graduate degree. Interested students not convinced that a career in the military is right for them can also learn more about how The Army of the United States selects and trains its future leaders and conducts operations on a day-to-day basis.

Military Science courses are open to all Temple students. There is no requirement for students taking Military Science courses to enroll in the commissioning program. Students taking Military Science courses are under no military service obligation of any kind if not enrolled in the commissioning program.

Students enrolled in the commissioning program incur either an active duty or reserve forces duty commitment commencing upon successful completion of the ROTC Advanced Course program and graduation from college. Temple's Department of Military Science offers both two-year and four-year curricula leading to a commission in the United States Army.

Army Reserve Officers' Training Corps (AROTC) Four-Year Commissioning Program

The Four-Year Program consists of two phases: the Basic Course and the Advanced Course.

In the Basic Course, the student takes one Military Science course each semester during the freshman and sophomore years. This instruction orients the student to activities frequently encountered during military service. Though students may voluntarily participate in weekend exercises and ROTC-sponsored events, they are under no obligation to do so. Additionally, students enrolled in the Basic Course are under no obligation for present or future military duty.

During the Advanced Course (normally the junior and senior years), the student receives instruction designed to enhance leadership abilities; reinforce managerial, supervisory, and accountability skills; and further develop the individual's foundation of military knowledge. The highlight of this instruction is the student's attendance at the five-week Cadet Summer Training Course, usually during the summer between the junior and senior years. The camp is a series of rigorous leadership challenges in which the Temple student competes against students from 272 other colleges and universities. When students complete the Advanced Course, they are obligated to accept a commission as a Second Lieutenant and upon graduation from college, incur either an active duty or reserve forces duty service commitment in the United States Army.

Two-Year Commissioning Program

The Two-Year Program consists of the ROTC Advanced Course and any qualified full-time graduate or undergraduate student who has at least two years of academic study remaining at Temple University and has completed the Basic Course or its equivalent may apply. Basic Course equivalency can be granted for prior active or reserve military service. Additionally, Temple students can receive this equivalency by attending a five-week Cadet Summer Training Program at Fort Knox, Kentucky. Following successful completion of this challenging program, the student is eligible to enter the ROTC Advanced Course. Students attending the Cadet Summer Training can incur a military obligation, and they are required to enroll in the ROTC Advanced Course. Students of exceptional academic accomplishment may qualify for Basic Course Placement Credit without being required to attend Cadet Summer Training. If you are a sophomore or junior with between 54-65 credit hours completed, please contact us for additional information at 215-204-7480/7482/2482.

Scholarships

The Military Science Department administers the Army Scholarship Program, which includes numerous options. The scholarships are awarded based on local and national competitions and are for four, three, and two years. The scholarships pay tuition or room and board, a \$1200 annual allowance for books and lab fees, and a monthly stipend of \$420. The scholarships are awarded based on academic merit, and a student need not be enrolled in Army ROTC to apply. Inquiries should be directed to:

Mr. Marc Young
Enrollment Officer
Department of Military Science/ROTC
Ritter Hall - Lower Level
215-204-7482
myoung01@temple.edu

Course Offerings

Code	Title	Credit Hours
Military Science (Army ROTC)		
MLSC 1001	Introduction to Military Science I (Fall)	1
MLSC 1002	Introduction to Military Science II (Spring)	1
MLSC 2001	Small Unit Operations and Leadership I (Fall)	1
MLSC 2002	Small Unit Operations and Leadership II (Spring)	1
Advanced Courses		
MLSC 3001	Applied Leadership and Management I (Fall)	2
MLSC 3002	Applied Leadership and Management II (Spring)	2
MLSC 4001	Advanced Leadership and Management I (Fall)	2
MLSC 4002	Advanced Leadership and Management II (Spring)	2
MLSC 4003	Leadership Lab (All semesters)	0

Enrollment is open to all students, but full participation in some of the military training is limited to students enrolled in the commissioning program. Contact the Military Science Department for details.

Military Science Faculty

Raymond A. Maszarose, Lieutenant Colonel, Armor, Professor of Practice in Military Science, B.A. - United States Military Academy, M.A. - Command and General Staff College, Fort Leavenworth, KS.

Juan R. Urista, Captain, Logistics, Assistant Professor of Practice in Military Science, Battalion Executive Officer, B.S. - University of Las Vegas, Nevada.

Steven K. Van Esch, Sergeant First Class, Infantry, Commandant of Cadets.

Aerospace Studies: Air Force Reserve Officer Training Corps (AFROTC)

Department of Aerospace Studies
Saint Joseph's University
5600 City Avenue
Philadelphia, PA 19131
610-660-3190
rotc@sju.edu
<https://sites.sju.edu/afrotc/>

Students are eligible to participate in the Air Force Reserve Officer Training Corps (AFROTC) through an agreement with Saint Joseph's University. All aerospace studies courses will be held on the Saint Joseph's University campus, although students can register through Temple's Self Service Banner system for their AFROTC courses. The AFROTC program enables highly-qualified college students to earn a commission as an active-duty Air Force or Space Force officer while concurrently satisfying requirements for his or her baccalaureate degree.

AFROTC offers a three- or four-year curriculum leading to a commission as a Second Lieutenant in the United States Air Force (USAF) or United States Space Force (USSF). In the four-year curriculum, a student (cadet) takes General Military Course (GMC) classes during the freshman and sophomore years, attends a two-week summer training program between the sophomore and junior years, and then takes Professional Officer Course (POC) classes during the junior and senior years. Cadets in the three-year curriculum will be dual-enrolled in both GMC classes during the sophomore year, attend a summer training program, and take POC classes during the junior and senior years. A cadet is under no contractual obligation with the USAF until entering the POC or accepting an AFROTC scholarship. The GMC curriculum focuses on the scope, structure, organization and history of the USAF with an emphasis on the development of airpower and its relationship to current events. The POC curriculum concentrates on the concepts and practices of leadership and management, and the role of national security forces in American society.

In addition to the academic portion of the curricula, each cadet participates in a two-hour Leadership Laboratory once a week and physical training twice a week. Leadership Laboratory utilizes the cadet organization designed for the practice of leadership and management techniques.

Further information on the AFROTC program at Saint Joseph's University can be found at <https://sites.sju.edu/afrotc/>, or students can contact detachment personnel directly at:

Recruiting Flight Commander
AFROTC Detachment 750
Saint Joseph's University
Philadelphia PA 19131
610-660-3190
rotc@sju.edu
<https://sites.sju.edu/afrotc/>

Course Offerings

Code	Title	Credit Hours
Aerospace Studies (Air Force ROTC) Courses		
AIRF 1011	Foundations of the United States Air Force I (Fall)	1
AIRF 1012	Air Force Leadership Laboratory I (Fall)	0
AIRF 1021	The Foundation of the United States Air Force II (Spring)	1
AIRF 1022	Air Force Leadership Laboratory II (Spring)	0
AIRF 2031	The Evolution of U.S. Aerospace Power I (Fall)	1
AIRF 2041	The Evolution of U.S. Aerospace Power II (Spring)	1
AIRF 3011	Air Force Leadership Studies I (Fall)	3
AIRF 3021	Air Force Leadership Studies II (Spring)	3
AIRF 4031	National Security Affairs I (Fall)	3
AIRF 4041	National Security Affairs II (Spring)	3

Naval Science: Naval Reserve Officers' Training Corps (NROTC)

Director, Naval Science Department
University of Pennsylvania
NROTC Unit
417 Hollenback Center
3000 South Street
Philadelphia, PA 19104-6399
215-898-7436
Fax: 215-573-2067
nrotc.universitylife.upenn.edu

The Naval Reserve Officer's Training Corps (NROTC) Program enables a college student to earn a commission in the Navy or the Marine Corps while concurrently satisfying requirements for a baccalaureate degree. Temple students are eligible to participate in NROTC through an agreement with the University of Pennsylvania. Scholarship and non-scholarship programs are available and can be tailored to support students who join NROTC after the start of their freshman year or by the beginning of their sophomore year.

All NROTC students are required to enroll in NAVS 1003 during every semester they attend.

Navy-Option scholarship and College Program (non-scholarship) students must enroll in NAVS 1001 and NAVS 1002 during their freshman year, NAVS 2001 and NAVS 2002 during their sophomore year, NAVS 3001 and NAVS 3002 in their junior year, and NAVS 4001 and NAVS 4002 in their senior year.

Those seeking commissions in the Marine Corps will enroll in NAVS 1001 and NAVS 1002 during their freshman year, NAVS 2001 during their sophomore year, NAVS 3003 and NAVS 4003 during either their junior or senior year, and NAVS 4002 during their senior year only.

Temple students register for NROTC classes through the Temple Self Service Banner system and all naval science courses are held on the University of Pennsylvania campus.

Navy scholarship students must complete:

- 6 semester hours of calculus (not required for Nurse Corps candidates)
- 6 semester hours of calculus-based physics (not required for Nurse Corps candidates)
- 3 semester hours of American military history or national security policy (not required for Nurse Corps candidates)
- 3 semester hours of World Culture and Regional Studies
- 6 semester hours of English

Marine-Option scholarship students must complete:

- 3 semester hours of American military history or national security policy
- 6 semester hours of English

College Program students must complete:

- 6 semester hours of college-level algebra or advanced trigonometry (one year of calculus is recommended)
- 6 semester hours of physical science courses (one year of calculus-based physics is recommended)
- 3 semester hours of American military history or national security policy
- 3 semester hours of World Culture and Regional Studies
- 6 semester hours of English

Students must check with their naval science instructors to determine specific courses that fulfill the above requirements and to determine which Naval Science courses receive credit within their degree plan.

In addition to the above, all students are required to attend Naval Science Drill (NAVS 1003), a 2-hour professional laboratory period each week (no academic credit) that emphasizes military drill, physical fitness, professional performance, and leadership topics.

Course Offerings

Code	Title	Credit Hours
Naval Science (Navy ROTC) Courses		
NAVS 1001	Naval Orientation	3
NAVS 1002	Sea Power and Maritime Affairs	3
NAVS 1003	Naval Science Drill	0
NAVS 2001	Leadership & Management	3
NAVS 2002	Navigation	3
NAVS 3001	Naval Ships Systems I: Engineering	3
NAVS 3002	Naval Ships Systems II: Weapons	3
NAVS 3003	Evolution of Warfare	3
NAVS 4001	Naval Operations and Seamanship	3
NAVS 4002	Leadership and Ethics	3
NAVS 4003	Fundamentals of Maneuver Warfare	3

International Education at Temple

International education takes many forms at Temple: learning other languages; spending a summer, semester or year studying abroad; building an international concentration into a major; or enrolling in special programs such as the Latin American Studies Semester. Students are encouraged to consult their school/college and course descriptions for further information on international and language studies.

Education Abroad and Overseas Campuses

200 Tuttleman Learning Center
215-204-0720 | study.abroad@temple.edu
studyabroad.temple.edu

Study abroad is one of the most rewarding and beneficial experiences available to Temple students. Temple's transformative global learning experiences provide a firsthand understanding of cultures and languages, enabling students to better understand and contextualize world issues and develop as engaged global citizens, collective problem-solvers and leaders in their chosen fields.

Temple students have almost limitless options when it comes to studying abroad. Students may spend a semester, academic year or summer participating on one of Temple's numerous programs abroad or may choose to participate in an accredited, approved external program through another university or study abroad provider.

Financing Study Abroad

Students receiving financial aid can usually apply most, if not all, sources of aid to study abroad tuition and fees. Temple offers scholarships for semester, academic year, and summer study abroad for qualified students and advises students for external scholarships, including Gilman and Vira Heinz.

Visit the financial aid, scholarship and financing study abroad sections of Education Abroad's web site for more information.

Temple's Passport Scholarship

Temple provides a scholarship for the cost of a passport to all first-year and transfer students who intend to study abroad and are applying for a passport for the first time. Learn about the passport scholarship and application.

Program Updates and Status

Visit the Education Abroad web site to explore program offerings and to view current program status and waitlist information.

Semester and Academic Year Programs

Temple University, Japan Campus (TUJ)

Matthew J. Wilson, Dean

Undergraduate students from Temple and other universities around the U.S. may study abroad alongside degree-seeking students at Temple University, Japan Campus (TUJ) (p. 1827) for an academic year, semester, and/or summer, choosing from a broad range of courses including GenEd offerings, upper-level courses in a variety of fields, and Japanese language. All coursework, with the exception of language courses, is conducted in English. Many study abroad students also participate in credit-bearing internships coordinated by TUJ's Career Development Office.

To enrich the students' exposure to Tokyo and enhance their understanding of Japanese culture, TUJ organizes several optional field trips and excursions each semester. These include half-day excursions to sites in and around Tokyo, as well as day and overnight excursions to various locations throughout Japan.

Visit the Education Abroad web site for more details about the study abroad program at TUJ, .

In addition to study abroad, the Temple Japan Entry Year (TJEY) program offers incoming first-year students the opportunity to study at the Japan campus for one year and then continue their education at Temple University in Philadelphia. Interested students should select this option when applying to Temple University. Visit the Temple Japan web site for more information about the TJEY option.

Temple University Rome

Emilia Zankina, Dean

Temple University Rome was founded in 1966 and is one of the oldest and largest study abroad programs in Italy. Students from Temple and other universities around the U.S. may study abroad at Temple Rome for an academic year, semester and/or summer.

At Temple Rome, students enroll in courses designed to take advantage of the city's rich resources. With a broad range of courses offered in architecture, biology, business, communication, engineering, the humanities and social sciences, sports and tourism hospitality management, and visual arts, students can take an interdisciplinary approach to learning. GenEd courses are also available. Semester students who have not studied Italian previously must enroll in an elementary Italian language course to take best advantage of their stay in Italy. Study abroad students often participate in credit-bearing internships coordinated by Temple Rome.

An extensive field study program complements the traditional classroom and studio curricula. Classes make regular trips to museums, architectural sites, and other points of interest in Rome, and many courses include excursions outside of Rome. Several courses include opportunities to study and engage with Roman university students. Temple Rome arranges optional programs and volunteer opportunities each semester that further introduce students to life in Rome.

Visit the Education Abroad web site for more details about the study abroad program at Temple Rome.

In addition to study abroad, the Temple Rome Entry Year (TREY) program offers incoming first-year students the opportunity to study at the Rome campus for one year and then continue their education at Temple University in Philadelphia or Japan. Interested students should select this option when applying to Temple University. Visit the Temple Rome web site for more information about the TREY option.

Temple University in Spain

Dr. Jamie Durán, Program Director

The Temple in Spain program is based at the University of Oviedo in the northern province of Asturias. Students from Temple and other universities around the U.S. may study abroad at Temple Spain for a semester and/or summer.

Removed from the heavy tourism of some other Spanish towns, Oviedo, the capital of Asturias, is rich in Spanish history and culture and offers easy access to nearby cities, the mountains and the coast. This off-the-beaten-path location provides students with a truly immersive experience in northern Spanish culture. Students not only improve their language skills, but also learn about the region's traditions, history and cuisine, while studying at a world-class institution.

During spring and summer, students are enrolled in the Cursos de Lengua y Cultura Españolas para Extranjeros program at the University of Oviedo's humanities campus, El Milán. Courses are taught by native Spanish-speaking professors of the University of Oviedo, Temple faculty member, Dr. Jaime Durán, and in the summer, additional visiting Temple faculty.

As a complement to academic courses, cultural programming opportunities, organized leisure activities, and homestays help students acquire in-depth knowledge of various aspects of Spanish and Asturian culture, as well as strengthen students' Spanish language proficiency outside of a formal classroom setting.

Spring Semester Program

The spring semester program is designed for students with at least four semesters of college level Spanish, or the equivalent, who are committed to furthering their Spanish language skills. All students enroll in one of two tracks, intermediate or advanced, depending on their Spanish language background, and choose from coursework in Spanish language, literature, translation, history and art. The university also coordinates a one-week non-credit enrichment workshop, cultural activities, and organized visits to sites of interest studied in class.

Summer Program

The 4.5-week summer program includes coursework in Spanish language, literature, and cultural studies taught in Spanish. An additional course taught in English may be offered, such as a GenEd course (these additional courses vary). All students enroll in two courses.

To be eligible for the program, students are required to have successfully completed at least one or two semesters of university-level Spanish (or the equivalent). Language requirements may be lower for students planning to take the English-taught course.

Fall Semester Program

The fall semester program offers the option to take English-taught courses alongside local degree-seeking students at the University of Oviedo, while beginning or improving their Spanish language skills. The English-taught courses will be offered by University of Oviedo faculty in their degree programs, while Spanish courses will be taught by Temple Program Director Jaime Durán, as well as faculty in the La Casa de las Lenguas, the university's Spanish language center. The fall semester is ideal for students who have completed one or two semesters of Spanish, but it is open to students at any language level.

Students take a full course load of four to five classes, including Spanish language as well as other degree requirements, for 12–18 credits. Students proficient in Spanish may be eligible to take courses in additional subject areas.

Visit the Education Abroad web site for full details about Temple in Spain programs.

Exchange Programs

Temple University students may study for a semester or academic year in countries around the world, including Australia, England, France, Germany, Hong Kong, South Korea, Spain and Taiwan on Temple's university-wide exchange programs. Through Temple's established partnerships with a number of universities, Temple students study at an overseas university while paying Temple tuition, and "in exchange" give a student from the same university an opportunity to study at Temple. Exchanges provide a full immersion experience at the host university. In most cases, exchange students take classes with students from the host country and have opportunities to get involved in campus clubs, organizations, and activities.

Given the fully immersive nature of exchanges and the challenge of adapting to what is often a different, more autonomous educational structure, exchanges are most appropriate for an independent, highly motivated student with a strong academic history. Exchange participants take a full-time course load while abroad and earn transfer credit.

Visit the Education Abroad web site for detailed information about Exchange Programs.

Summer Programs Abroad

Each year, several Temple faculty members direct summer programs abroad for academic credit. Some programs change annually; others have been part of Temple's summer curriculum for many years. The programs generally last four to eight weeks, admit qualified students from Temple as well as other universities, and charge Temple's regular tuition rates. In recent years, summer programs have been planned for the Czech Republic, France, Germany, Ghana, Greece, India, Italy, Jamaica, Japan, Korea, Serbia, Spain, Taiwan and the UK.

Visit the Education Abroad web site for detailed information about Summer programs.

Klein College of Media and Communication, Global Opportunities

Allie K. Miller, Director
Klein College of Media and Communication
7 Annenberg Hall
215-204-2354
kleingo@temple.edu

The Global Opportunities programs are open to all Temple students regardless of their major. Credit offered on programs is available in Advertising, Communication and Social Influence, Journalism, Media Studies and Production, and Public Relations.

Temple University Dublin

Dublin is a modern metropolis and sophisticated European city on the forefront of innovations in film, design, music and architecture. Klein College is partnered with Dublin City University to send students for the spring term. Students will enroll in coursework with Irish and international students at Dublin City University; course topics include analyzing media content, digital marketing, ethics of journalism, and media's relationship with technology and society.

Visit the Klein College Global Opportunities web site for more information on Dublin.

Summer Programs

Klein College Global Opportunities offers several options for students in the summer, ranging from faculty-led programs to full-time internship programs, all for academic credit. Locations vary each summer and include both U.S. and international destinations. The specific topics change each summer but generally focus on intercultural communication, advertising, journalism, public relations, film, theater, media, storytelling and more and all integrate their host city as the classroom. Students can participate in summer programs that offer academic credit for full-time internships across the globe.

Global Internship Program: The Global Internship Program is offered every summer in over 15 major cities throughout the world. Regardless of their destination, students participating in the program will spend two weeks in May enrolled in *Intercultural Communication in the Workplace*, then after departure to their new city students complete an online internship course to supplement their in-person experience.

As part of this program, students will work one-on-one with an industry expert who will help refine interviewing skills, perfect résumés and help students secure an internship in their desired field. Each program destination combines exciting events, learning and travel with a résumé-building internship.

Children's Media Industry: Trends & Opportunities: The children's media industry is now a global, multi-billion-dollar industry. In addition to the legacy children's media brands of Nickelodeon, Disney and Cartoon Network, major digital and social media companies have invested heavily in creating content for kids, including Netflix, Amazon, YouTube, Universal Kids, Snapchat, HBO, KizBop and others. This course will "map" the children's media industry by blending articles and scholarship on the topic with on-site experiences at companies creating the content and meetings with the executives deciding the future of this industry.

Over two weeks in Los Angeles students will engage in class meetings that will include lectures, visits to the children's media companies, guest speakers and screenings on site in Los Angeles.

Visit the Klein College Global Opportunities web site for more information on Klein College's summer programs.

Short Term & Break Programs

Recognizing that not everyone can dedicate an entire semester to studying away, Klein Global Opportunities has created a variety of courses that incorporate an immersive short-term travel experience. A sampling of opportunities includes the following:

Rocking the World: Disrupting Stereotypes of Race, Class and Religion in Washington D.C.: Led by a team of Klein instructors, students will examine and gain an in-depth understanding of three caste systems: the history of slavery and racism in the United States, the history of the caste system in India, and the history of the Holocaust and Nazi Germany during World War II. Students will travel to Washington D.C. for three days to explore museums dedicated to these topics and create multimedia projects to educate others on the course subject matter.

The Art of Visual Storytelling in Puerto Rico: Over 7 weeks on campus followed by a week immersion in Puerto Rico over spring break, students will explore the Puerto Rican community of visual storytelling and the artists telling those stories. Examine the various channels through which these artists navigate. Investigate, experience and create content that examines both Philadelphia and Puerto Rico's vibrant art communities.

For more details and to apply for programs, visit the Klein College Global Opportunities Portal.

Other Education Abroad Programs

Several other schools and colleges at Temple offer options specifically designed for their students, including:

- Boyer College of Music and Dance
- College of Liberal Arts
- School of Theater, Film and Media Arts
- Fox School of Business and Management
- School of Sport, Tourism and Hospitality Management

Contact the schools and colleges to learn more about the education abroad opportunities they offer.

University Honors Program

Amanda Neuber, Director
204 Tuttleman Learning Center
215-204-0710
honors@temple.edu
admissions.temple.edu/honors

Temple Honors is an interdisciplinary hub of the university, promoting Intellectual Curiosity, Inclusive Community, Social Courage and Integrity in Leadership.

Our goal for students is that they leave Temple as well-rounded creators of knowledge with the confidence to advocate for themselves and others as engaged, global citizens.

To accomplish this, we provide enriching academic and co-curricular opportunities, cultivate a dynamic and inclusive community, and offer holistic advising, strong encouragement, and support.

Honors Program Admissions

Incoming first-year students are automatically reviewed upon acceptance to Temple University. Current Temple students or transfer students can apply for admission through the Honors web site. Applications for current Temple students and transfer students are reviewed at the end of each semester (dates available on our web site).

Honors Certificate Requirements

To earn the Honors certificate and transcript notation upon graduation, students must complete Honors course requirements (outlined below) and have at least a 3.25 cumulative GPA at the time of graduation.

- **Incoming First-Year Honors Student Course Requirements:**
 - All Honors students who enter the program as first-time, first-year students must successfully pass at least ten Honors courses at Temple to complete Honors Program requirements.
 - **English 0902 Requirement:** If a student needs to complete the English 0802 General Education requirement, they must take the Honors version, English 0902. If they are waived from this requirement for any reason (e.g., AP, placement test, dual enrollment), they must replace English 0902 with any other Honors course (the final number of Honors courses must equal 10 to complete requirements).
 - **Intellectual Heritage (IH) Requirement:** Intellectual Heritage 0951 and 0952 are required. If a student only needs one IH course (e.g., 45+ students (p. 27)), it must be taken in Honors and the other IH requirement can be replaced with any Honors course (the final number of Honors courses must equal 10 to complete the requirements).
 - **Upper-Level Requirement:** Four of the ten Honors courses must be at or above the 2000 level.
 - Students are permitted to take as many Honors courses as they wish.
- **Program Requirements for Transfer Students:**
 - Students admitted to Honors after their first college semester with **fewer than 30 credits** must complete ten Honors courses at Temple (four of the ten must be at or above the 2000 level).
 - Students admitted to Honors after their first college semester who have accrued between **30 and 59 credits** must complete eight Honors courses at Temple (four of which must be at or above the 2000 level).
 - Students admitted to Honors after their first college semester with **60 or more credits** need to complete six Honors courses at Temple (four of which must be at or above the 2000 level).
 - The English and Intellectual Heritage requirements listed above also apply.

Definition of an Honors Course

- Any three-credit designated Honors course will automatically satisfy an Honors course requirement (lower-level courses = 0900-1999 / upper level courses = 2900-4999). All Honors courses can be identified by the following course numbering system:
 - **0900 - 0999 General Education Honors Courses:** Courses numbered 0900-0999 are appropriate for any undergraduate General Education Honors course requirements.
 - **x9xx Honors Courses:** Undergraduate Honors courses will be identified by a 9 as the second digit of the course number and will have "Honors" as the first word of the title. The 9 in the second position will not be used by any non-Honors undergraduate course. General Education Honors courses are designated 09xx.
- One-credit Honors Labs (e.g. Chem 1953) do not count towards Honors course totals.
- Other courses that will satisfy Honors course requirements:
 - HNRS 1901 Honors First Year Seminar I - Honors REACT (as of Fall 2021) will satisfy 1 lower-level Honors course requirement. Any HNRS 1901 taken prior to Fall 2021 will not count.
 - HNRS 3902 Honors Peer Mentor Development (as of Spring 2023) will satisfy 1 upper-level Honors course requirement.
 - **Completion of Honors Thesis Course Sequence** (HNRS 4901 Creating Knowledge: Honors Thesis Project Design and HNRS 4999 Honors Thesis) will satisfy 1 upper-level Honors course requirement.
- Most Honors courses are designed to be taken outside of a student's major, field or college. As a center for interdisciplinary learning, it is imperative that Honors students receive a well-rounded education in and out of their chosen domain. Honors students are encouraged to take as many Honors courses as possible.
- Honors has a set of standards that articulates the philosophy and goals of an Honors course.

Suggested Academic Progress

To complete Honors courses in a timely manner, the following academic progress is suggested:

- Minimum of **3** total Honors courses completed by the end of your First year.
- Minimum of **6** total Honors courses completed by the end of your Second year or 30 earned Temple credits.
- Minimum of **8** total Honors courses completed by the end of your Third year or 60 earned Temple credits.
- Minimum of **10** total Honors courses completed by the time of graduation.

Honors Thesis (Optional)

The Honors Thesis Project is designed for Junior/Senior year Honors students who want to complete an advanced research project in addition to their other Honors Program requirements. This project is meant to be an interdisciplinary exercise—we ask that students collaborate with faculty outside of their primary field of study or incorporate multiple disciplines in the research design. Students will work closely with a faculty mentor and an outside reader to research, write, revise, and present their work prior to graduation. Your faculty mentor will ultimately be the arbiter of your success with this project.

Required courses:

- HNRS 4901 Creating Knowledge: Honors Thesis Project Design - To be taken spring semester of Junior Year.
- HNRS 4999 Honors Thesis - To be completed fall semester of your Senior year.

Students who wish to amend the Honors Thesis timeline may discuss possibilities with a member of the Honors staff.

Temple Honors Advising

Students can make an appointment with an Honors advisor through their TUPortal and/or may visit the Honors Program Office in Tuttleman Learning Center, Room 201.

Honors Advisors can help you with Honors Program requirements, 4-year planning, major selection, academic coaching, study abroad planning, professional development, and more.

If you have a specific question about your major or degree requirements, it is best to contact your school/college advisor.

Learn more about Temple Honors advising.

Temple Honors Community Experience

The Honors Student Forum is a selected group of Honors students who work to improve and uplift the Honors Program. Feel free to contact a member of the board or complete the suggestion box for any feedback for the Honors Program.

All students are welcome to utilize the Honors community spaces on the 2nd floor of Tuttleman Learning Center.

- 201 Tuttleman: The Huddle
- 204 Tuttleman: The Lounge

Honors Space Reservations

Students, faculty and staff may reserve 5 different spaces of various sizes for group events in the Honors spaces. Availability includes a small conference room (201), large classroom (201D), The Huddle main room (201), the Honors Lounge (204), and Tuttleman 202. Learn more about Honors spaces.

Undergraduate Research and Peer Teaching

Emily A. Moerer, Associate Vice Provost
500 Conwell Hall
215-204-4991
emoerer@temple.edu

Creative Arts, Research and Scholarship Program

The Creative Arts, Research and Scholarship (CARAS) Program provides funding to encourage and support undergraduate students engaged in scholarly, creative, and research projects that contribute to advancing their field of study. Two types of grants are made through the CARAS Program: Research/Creative Project Grants provide undergraduate students support for scholarly, research or creative arts projects undertaken with the supervision of a faculty mentor. Travel Grants provide funds for undergraduate travel to present research or creative work at professional conferences. Visit CARAS for more information.

Diamond Peer Teachers Program

The Diamond Peer Teachers Program is a competitive program providing upper division undergraduates at Temple University the opportunity to experience the challenges and rewards of college-level teaching, to develop their own pedagogical skills by working closely with their faculty mentors, and to provide supplemental instruction in lower-level and GenEd courses. Peer Teachers earn a stipend and one (1) internship credit. Visit Diamond Peer Teachers Program for more information.

Diamond Research Scholars Program

The Diamond Research Scholars Program offers a seven-month long funded research experience under the direction of a faculty mentor. Participants receive a summer stipend and register for a research or independent study course in the fall for their research or creative arts project. Scholars are expected to participate in Temple's annual Symposium for Undergraduate Research and Creativity. Visit Diamond Research Scholars Program for more information.

Symposium for Undergraduate Research and Creativity

The Symposium for Undergraduate Research and Creativity, held annually in the spring, provides ambitious, intellectually-motivated undergraduate students the opportunity to present and defend their original research or creative work among peers, faculty, family, and friends. Through its emphasis on original research and creative work, the Symposium seeks to inspire undergraduate students to analyze, critique, and engage with the world around them. Visit the Symposium for more information.

Honor Societies

Phi Beta Kappa

Phi Beta Kappa is an honor society open to juniors and seniors in the College of Liberal Arts, the College of Science and Technology, and the Department of Art History. To qualify for Phi Beta Kappa, a student must maintain a high grade point average in a broad, rigorous program of study in the liberal arts, including mathematics and foreign language. For a complete and detailed description of Phi Beta Kappa's requirements, visit <https://sites.temple.edu/phibetakappa/>.

For more information, please contact Chris Wolfgang, Secretary and Membership Chair (cwolfgan@temple.edu).

Golden Key

Golden Key is an international honor society whose mission is to enable members to realize their potential through the advancement of academics, leadership and service. Golden Key is interdisciplinary and unites the talents of the brightest undergraduate and graduate students. Golden Key also provides service opportunities for all university students.

Membership into Golden Key is by invitation only and applies to the top 15% of college and university sophomores, juniors and seniors, as well as top-performing graduate students in all fields of study, based solely on their academic achievements.

Contact Information:

Tuttleman Counseling Services, 1810 Liacouras Walk - 5th Floor, Philadelphia PA 19122
goldkey@temple.edu

<https://goldenkey.org/chapter/?id=280>

https://temple.campuslabs.com/engage/organization/golden_key_international_honour_society

Alpha Lambda Delta

Alpha Lambda Delta is a national society that honors academic excellence during a student's first year at college. For further information, visit <https://www.nationalald.org/>.

Additional Honor Societies

Check the pages for each school and college within this *Bulletin* for additional information on honor societies that are specific to each school / college's departments and programs. Additional honor societies may be listed at <https://temple.campuslabs.com/engage/organizations>.

Academic Support

Academic Resource Center

The Academic Resource Center serves non-degree students taking courses for university credit, international students, and matriculated undergraduate students who have not yet decided on a school/college or major, or who are in transition between academic programs. The team of professionally trained and dedicated academic advisors will assist students in navigating the transition to campus life as well as provide academic and career exploration assistance to our students. Services include individual and group advising appointments, academic success workshops, and major exploration programs all tailored to support personal growth and to promote scholastic achievement.

Appointments with academic advisors are scheduled Monday through Friday from 9:00 a.m. - 4:00 p.m., and on a walk-in basis during designated times, such as the add/drop period and priority registration. Appointments can be held in-person or remotely via video-conference. For assistance, please visit the Academic Resource Center web site where you will find a link to our virtual front desk, call 215-204-2500, or stop by the office at Mitten Hall, Suite 110.

Advising

Each school, college, and campus of the university offers a range of academic advising services for students. Professional advisors help students choose majors, plan curriculum, make vocational and post-graduate plans, connect students to university resources, and help resolve a variety of academic issues. Many schools and colleges offer the services of faculty advisors and peer advisors as well. Students should consult the specific advising unit in their school or college section of this *Bulletin* for locations and specific information about these units.

Students who are active in the Fly in 4 program agree to consult with an academic advisor in their school or college at least once per semester for academic planning. Advisors review proposed coursework and refer students to appropriate information regarding graduation requirements. In addition, advisors help students achieve breadth in the curriculum and provide other assistance as needed.

Students are required to meet with an advisor when they do not meet the academic standards set by the University. See the Academic Standing (p. 1840) policy in the Academic Policies section of the *Bulletin* for detailed information.

Academic advisors strive to teach students how to make the most informed decisions when planning their academic program, while satisfying all university, college, and major requirements. Students assume primary responsibility for knowing the requirements for their degree and for acquiring current information about their academic status.

Some of the services offered by the advising centers are listed below:

- **New Student Orientation:** for freshmen and first semester transfer students.
- **Registration Assistance:** This includes online processing of original registrations, schedule revisions, and course withdrawals, in accordance with deadlines published on the University Registrar web site.
- **Academic counseling:** Students work with advisors to develop a meaningful education plan compatible with life goals and current needs. Through contact with departmental faculty, students gain an in-depth appreciation of a specific discipline and discover opportunities associated with their field of interest.
- **Problem solving:** Students can meet with advisors to discuss a variety of academic concerns and develop some possible solutions. Students experiencing academic difficulty work with advisors to learn strategies for overcoming the obstacles to success.
- **Policy clarification:** The advising centers help students understand the policies and procedures integral to achieving a successful and fluid transition through university life. This includes such things as academic progress, academic standing, grievance procedures, and registration policies, including add/drop/withdrawal policies.
- **Honors advising:** In addition to receiving advising from their college, students enrolled in the University Honors Program may also be advised in the Honors Office in Tuttleman Learning Center until they have completed 60 semester hours, with the exception of the Fox School of Business and Management students, whose Honors program advising is conducted within the school.
- **Change of Program (CoP) advising:** Students changing programs or campuses at Temple meet in groups or individual sessions, by appointment. (Formerly referred to as Intra-University Transfer, or IUT).
- **Re-enrollment interviews:** Students may meet with advisors if they have taken time away from Temple University and wish to return.
- **Graduation Reviews:** Students meet with advisors prior to the start of their senior year to plan for graduation and beyond.
- **Petition processing:** Advisors facilitate processing of petition requests including completing a course at another institution, third registration for a course, withdrawal with approved excuse, registering for an academic overload, evaluating life experience credit and credit by examination, reviewing of transfer credit evaluation, considering DARS exceptions, academic forgiveness for re-enrolling students, and receiving approval for an exception to policy.
- **Referrals:** Advisors make referrals to such services as financial aid, career development, study abroad advising, counseling, tutoring, disability services, and testing.

- **Pre-registration advising:** Advisors work with students prior to fall and spring registration periods to review outstanding requirements and develop a registration plan. Prior to their pre-registration advising, students should review their DARS and course selections for the upcoming semester. DARS for all students are available on the web through dars.temple.edu.
- **Student retention initiatives:** Each school and college provides focused support for students to enhance their level of engagement with the school or college, and with the university. Advising units reach out to students to increase their awareness of the support services and resources available to all Temple students.

Academic Advising Mission

In support of the mission of Temple University, academic advisors work collaboratively with students, faculty, staff, and community partners to meet the diverse, evolving goals of students within our university community. It is our purpose to provide quality advising programs and services that support students in achieving their academic and career goals.

Nancy & Donald Resnick Academic Support Center for Student-Athletes

Tara Evans, Director, Resnick Academic Support Center for Student-Athletes
1800 N. Broad Street
Pearson Hall 150
215-204-9002
studentathlete.temple.edu

Hours of Operation

Monday-Thursday: 8:00 a.m. - 9:00 p.m.

Friday: 8:00 a.m. - 5:00 p.m.

Sunday: 5:00 p.m. - 8:00 p.m.

Temple University's Nancy and Donald Resnick Academic Support Center for Student-Athletes (RASC) provides superior academic, personal and professional guidance to support all Temple University student-athletes. Through core values of diversity, integrity and collaboration across the University, the Center strives to inspire student-athletes to learn and succeed to their greatest academic and professional potential.

Service Philosophy

The Nancy and Donald Resnick Academic Support Center for Student Athletes (RASC) and its staff of advisors, learning specialists, tutors, and academic coaches are in place to help ensure the academic success of Temple's student-athletes. The staff seeks to encourage and motivate each and every student-athlete to reach their academic potential, while meeting NCAA eligibility benchmarks and progressing towards graduation.

Resnick Academic Support Center Facilities

The RASC is located on the first floor of 150 Pearson. The RASC is open Monday - Thursday 8 a.m. - 9 p.m., Friday 8 a.m. - 5 p.m. and Sunday 5 p.m. - 8 p.m. during the fall and spring semesters (summer hours are Monday – Friday 9 a.m. - 5 p.m.). There is a computer lab which houses Macs and Dell computers, as well as a printing station. There is a space dedicated to tutor and academic coach appointments, with the additional option to reserve a breakout room to complete study hall hours, group meetings, academic coach or tutor session, etc. Student-athletes are encouraged to utilize the RASC for all academic and computing needs.

Academic Advisors

Each intercollegiate sport at Temple University is assigned an academic advisor within the RASC, who provides day-to-day academic support for members of that team. Advisors within the RASC work very closely with not only student-athletes, but also coaches and athletic administrators to ensure that each individual team member is fulfilling their obligation as a student-athlete.

Learning Enhancement and Academic Development (LEAD)

Learning Enhancement and Academic Development (LEAD) is a unique program at the Resnick Academic Support Center designed to provide in-depth learning strategies for student-athletes who want to reach their fullest academic potential. All incoming student-athletes complete an online needs assessment to determine educational experiences and expectations. An individualized learning profile/plan is created. Academic advisors, learning specialists, and students collaborate to implement and review their plan. LEAD also collaborates with Disability Resources and Services to ensure students receive appropriate accommodations if, and when applicable. Students who participate in LEAD are paired with a learning specialist with experience in school psychology and secondary education. The two work closely to identify the student's strengths and areas that need improvement.

Academic Advising and Priority Registration

Student-athletes are expected to meet with their on-campus school or college academic advisor each semester to ensure the student-athlete is making satisfactory progress towards their degree and meeting university benchmarks. Student-athletes at Temple University have been granted priority registration in order to best accommodate the demands of academic and athletic schedules. Student-athletes are expected to register for classes during the priority registration period to ensure they get the most accommodating schedule for the semester. Student-athletes are expected to register for 15-17 credits per semester in order to stay on track for graduation. Student-athletes should work with college advisors and athletic academic advisors to assist

with graduation and degree completion goals. Additionally, student-athletes must meet with their athletic academic advisor prior to registration to ensure the student-athlete is registering for the appropriate courses.

Tutoring

Tutoring is a service offered to student-athletes to serve as a supplement to classroom instruction. Tutorial services are available on a 1-on-1 or small group basis during scheduled study sessions. Review sessions for courses with high student-athlete enrollment are also offered throughout each semester. Tutoring provides the student-athlete with the assistance and encouragement to facilitate learning, excel academically, and develop into an active and independent learner. Tutoring is appropriate for situations in which students are having trouble with classroom material or wish to advance their knowledge of material.

Academic Coach Program

Academic coaches are an integral part of the Nancy and Donald Resnick Academic Support Center for Student-Athletes and subsequently are an extension of the academic advisor. An academic coach acts as a guide and assists a student-athlete with their transition from high school to college, guides the student-athlete through the rigors of collegiate level academic work and assists with academic skill building—all with a goal of helping the student-athlete develop autonomous academic skills.

Career Development

The Resnick Academic Support Center staff works closely with the Temple University Career Center. A Career Center career coach holds office hours in the RASC one time per week during the fall and spring semester. During these scheduled one-on-one sessions, the career coach assists the student-athlete with résumé development, cover letter creation, updating a LinkedIn profile as well as searching and applying for internship and job opportunities.

First Year Seminar

First Year Seminar / Student-Athlete Development and Professionalism is a course required for all incoming freshman student-athletes. Student-athletes have the option of taking the course during the fall or spring semester. The course is taught by the RASC academic advisors. This course introduces first-year students to the opportunities and rigors of higher education, as well as to the skills needed to use academic resources successfully in college. Topics also include Name, Image and Likeness (NIL) and personal branding. The topics covered in the seminar help first-year students reach their academic goals.

Degree Audit Reporting System (DARS)

Debbie Bennett-Kenney, DARS and Transfer Systems Coordinator

Sheila Brogden, DARS/Technical Support Specialist

Benton Wilson, Technical Support Specialist Assistant

dars@temple.edu

<https://sites.temple.edu/degreeaudit/>

DARS stands for the Degree Audit Reporting System. Students and advisors can use DARS to track and plan students' academic progress toward completion of an undergraduate degree in their declared major(s), minor(s) and concentration(s). DARS shows students how their Temple University courses, transfer courses, and courses in progress apply toward degree requirements. It gives detailed and accurate information about the student's academic record.

The information on the audit comes from the Banner Student information system. This is the same system students use to register for classes and to check their grades at the end of the term. Since DARS accesses the actual database where students' information is stored, it is current as of the moment an audit is processed.

The Degree Audit system offers students and advisors an interactive Roadmap from which students can build a semester-by-semester Plan to define a clear path to graduation. These plans work as a powerful advising and planning tool to provide a clear and individually-customized path to meet graduation goals. The Self-Service site is also used to request audits of degree requirements, view course history and review transfer credit evaluations.

A new feature in the DARS is the What-If audit. Students and their advisors can run a What-If audit to see how courses will apply toward a different major. This gives students who are considering changing degree programs a powerful tool that provides information on how close a student would be to graduation in the new major, letting students make more-informed decisions about their academic futures.

Students can request a degree audit by clicking on the Student Tools tab in TUportal and then, in the Records channel, clicking on Degree Audit. The direct link is dars.temple.edu.

Students can learn more about DARS on the DARS web site, including information about how to interpret the degree audit, documentation about the Self-Service site, general resources available in the DARS office and information about the system.

Fly in 4

Fly in 4 is Temple University's innovative plan to fast-track students' futures and limit student loan debt by ensuring students complete their degrees on time. Under the Fly in 4 partnership, eligible students are encouraged to satisfy checkpoints each year, keeping them on track to complete their degrees

on time. If students meet all of the agreement's checkpoints and still cannot graduate in four years due to the unavailability of necessary courses, they may be able to complete the courses required for their degree, free of any tuition and comprehensive fee charges. To limit students' obligation to work for pay while in school, Temple will award a limited number of Fly in 4 grants per entering class to students with high financial need. Eligibility is based on the Free Application for Federal Student Aid (FAFSA). Learn more about Fly in 4.

Information Technology Services

Computer Labs

Students can take advantage of a number of first-class technology resources available at Temple University, including the TECH (Teaching, Education, Collaboration, Help) Center, a state-of-the-art facility with resources that cater to current learning styles. The TECH Center is located on Main Campus in the Bell Building at 12th Street and Montgomery Avenue. It is designed with a variety of workspaces to enable students to work collaboratively or individually. This dynamic facility allows students to meet, study, collaborate, relax, and take advantage of the following resources:

- a student computer center containing PC and Mac workstations, wireless loaner laptops and scanners;
- high-speed duplex, color laser, inkjet, poster and 3D printers;
- Breakout rooms and MediaScape tables for collaboration and group study;
- two GamrPods for remote classes, video/audio calls, and gaming;
- specialized labs, including specialty printing, video editing, recording booths, multimedia studio, graphic design, music composition, advanced technology lab, and "quiet" zones;
- social space for students with lounge areas; and
- a Help Desk for students, faculty, and staff with extensive hours throughout the year.

In addition, for the convenience of students, with the exception of holidays, the TECH Center is open seven days a week. For more information, see the TECH Center web site.

In addition to the TECH Center, Temple offers school and college computer labs on Main Campus, as well as at Temple's other campuses, such as the Health Sciences Center (HSC) TECH Center and the Ambler Learning Center. Most labs feature workstations with general and specialized software and wireless printing for lab workstations, laptops and other wireless devices.

Technical Support

At the Help Desk, professional consultants and technical student workers offer assistance on a wide range of technical topics. To contact the Help Desk, students can call 215-204-8000, submit a help request (<https://tuhelp.temple.edu/>), connect with live Help Chat, or send an e-mail to help@temple.edu.

Course Materials Online

Canvas enables faculty and students to share coursework materials and discuss topics online.

Resource Hub

In order to use the computer resources at the TECH Center as well as Temple's numerous applications and systems available online, you will need your AccessNet username and password. With this login information, you can gain entry to TUportal (<https://tuportal.temple.edu/>), a single gateway to the university's most popular services, including TUmail, Canvas, Self Service Banner, Diamond Dollars and My Housing.

In TUportal, Self Service Banner allows students to view course prerequisites and register for classes, view rosters, check grades, view account balances and financial aid information, and pay bills, all on the web.

For more resources and up-to-date information on the rapidly-changing nature of technology at Temple, including Print on the Go, wireless access and security awareness initiatives, visit the Information Technology Services web site.

Pre-Professional Health Advising: Advising & Programs

Mitten Hall, Suite 110

215-204-2513

healthadvising@temple.edu

<https://undergradstudies.temple.edu/healthadvising>

Pre-Professional Health Advising at Temple University provides advising and application support for students interested in preparing for specific careers in health care. Advising offered by the office supplements the academic advising (course registration, major requirements and graduation review) provided by the academic advisors in the student's primary college which is based on their major program of study.

Specifically, Pre-Professional Health Advising advises students preparing for the following health professions or graduate programs:

Health Professional schools for:

- Dentistry
- Medicine
- Occupational Therapy
- Optometry
- Pharmacy
- Physical Therapy
- Physician Assistant
- Podiatry
- Veterinary Medicine

Pre-Professional Health Advising provides advising support to help students identify their academic strengths and interests and the paths that will best prepare them to fulfill their career aspirations within the health professions. Specifically, the office provides:

- individual, group, and electronic (ePortfolio) advising to help students stay organized as they identify tracks / programs best suited to their interests in the health care professions;
- seminars, colloquia, and speakers on issues and concerns central to understanding the complexities of the health care profession in the twenty-first century;
- information on student organizations focused on health care issues and concerns that students can get involved in early and stay involved in throughout their undergraduate career;
- information on opportunities for internships, service learning, and other experiential learning activities key to the professional development of the individual interested in a career in the health-care professions; and
- Pre-Health Evaluation Committee Process for letters of recommendation in support of applications.

Special Admissions Programs

Pre-Med Health Scholar Program

The Pre-Med Health Scholar Program is offered to highly talented high school seniors interested in pursuing a career as a physician. It is designed to recruit exceptional students to Temple University by offering a Linkage Agreement with Lewis Katz School of Medicine at Temple University. Students entering Temple University as Pre-Med Health Scholars have the option to consider an **Accelerated BA/MD (3+4) Degree**.

Accelerated Programs for Dentistry, Pharmacy, Podiatry, or Physical Therapy

Accelerated Programs allow Pre: Dentistry, Pharmacy, and Podiatry (3+4 Tracks) as well as Physical Therapy (3+3 Track) students the option of earning both their Bachelor of Arts and Graduate degrees in a shorter period of time. After successfully passing all courses in their first three years as undergraduates, accelerated students are eligible for a Linkage Agreement with the corresponding Temple University professional school or graduate program. Once accelerated students pass all courses in their first year of professional school, a Bachelor's degree is conferred. The Accelerated BA/ DMD, BA/PharmD, BA/DPM, or DPT Programs are designed for high-achieving students who have distinguished themselves with impressive academic records and a demonstrated interest in their respective field.

Scholar Development and Fellowships Advising

Tuttleman Learning Center, Suite 201

215-204-0708

<https://undergradstudies.temple.edu/fellowships>

Scholar Development and Fellowships Advising offers assistance to Temple students in all stages of the application process for merit-based fellowships and other funded opportunities. We provide information on available programs, advice, opportunities for strategic planning and reflection, and guidance for completing a competitive application.

Student Success Center (SSC)

Lori Salem, Director

<https://studentsuccess.temple.edu/>

Main Campus Locations:

Student Success Center

Charles Library, Rooms 230 and 340

1900 N. 13th Street

Philadelphia, PA 19122

215-204-0702

Fall/Spring Hours:

Monday - Thursday, 8:30 a.m. to 8:30 p.m.

Friday, 8:30 a.m. to 4:30 p.m.
Saturday, 10:00 a.m. to 4:00 p.m.

The Student Success Center (SSC) is a comprehensive, "one-stop-shop" academic support center serving graduate and undergraduate students at Temple University.

The Center provides the following services and programs:

- **Academic Coaching:** The Academic Coaching program is an appointment-based service that helps students develop effective learning habits and strategies, including skills related to studying, test taking, time-management and more. Academic coaches meet one-on-one with students to help them hone specific skills related to the students' individual academic goals.
- **Language Tutoring:** The Language Tutoring program gives students who are learning English, Spanish, Arabic, Italian, Russian, French, Chinese and/or Japanese the opportunity to meet one-on-one with a proficient speaker of the target language who can help them practice listening, speaking and reading comprehension, and who serves as a mentor related to issues of intercultural communication. The program also sponsors workshops for guided language practice, and social events and off-campus cultural excursions for English language learners. Upcoming events and workshops can be found on the events page of our web site.
- **Peer Assisted Study Sessions (PASS):** PASS sessions are weekly study meetings that provide students in select challenging courses with an opportunity to learn and explore course content in an interactive, small-group setting. The groups meet twice per week, and they are guided by trained peer leaders. A complete list of the PASS sessions offered each semester can be found on the SSC web site.
- **STEM Learning Lab:** The main service of the STEM Learning Lab is STEM Tutoring which provides support for students enrolled in Math, Chemistry, Physics, Biology, Engineering, Economics and Statistics courses. Tutors meet one-on-one with students in these courses, and help them review and practice course content. In addition to tutoring, the STEM Learning Lab offers study studios for students who are preparing for high-stakes exams in foundational math and science courses. Course-specific study studios give students an opportunity to practice solving problems, to ask questions, and to work collaboratively with peers and trained SSC tutors on the topics covered in their exams. A list of study studios by course is available on our web site along with materials to help students prepare for exams.
- **The Writing Center:** Writing Center tutoring services help students develop as writers. Writing tutors work collaboratively with students on many aspects of their writing, including organization, argument, editing sentences for clarity and grammar, incorporating outside sources, and citation. The Writing Center is also the administrative home of the university's writing-intensive course program, described on the Writing Intensive Courses page (p. 102) and on the SSC web site.

Online Services:

All SSC services are available online as well as in person. Students can use the SSC's interactive web site to access online tutoring, to make appointments for services, and to access academic support resources, including videos and downloadable handouts.

The University Libraries

<https://library.temple.edu/>

The Temple University Libraries form an extensive network of services and resources to support the educational and research needs of the university's students, faculty and staff.

The combined collections comprise more than 4 million volumes, including 2 million e-books, 150,000+ streaming film and music titles, over 600 research databases, and thousands of journal subscriptions. The Libraries also have robust collection sharing partnerships with other institutions allowing for even greater access to needed research materials.

Charles Library is a state-of-the-art facility that supports student learning and intellectual engagement. Upon entering Charles Library, you will find specialized spaces including the Loretta C. Duckworth Scholars Studio, the Special Collections Research Center, and the Student Success Center. You can also visit the One Stop Assistance desk or watch the BookBot in action. Explore the hundreds of seats for study and abundance of study and gathering spaces, including the 24/7 study area, large and small group study rooms, the 3rd floor open reading area, the 4th floor quiet reading room, the 1st floor event space, and Stella's Café. Pick up laptops and battery packs for loan from conveniently-located kiosks throughout the building.

The Special Collections Research Center includes the Urban Archives and the Philadelphia Jewish Archives collections, which document the social, economic, and physical development of the greater Philadelphia region since the mid-19th century; rare books, artists books, and manuscripts collections; the Contemporary Culture Collection; the Science Fiction and Fantasy collections; the Philadelphia Dance Collection; and the University Archives. The Charles L. Blockson Afro-American Collection documents the history and culture of people of African descent. The Libraries serve as a depository for both Pennsylvania and federal documents.

Information Retrieval

Research databases, full-text resources, the Library Search, electronic references, and other information and services are at library.temple.edu. The Library Search is the gateway to discover books, journal articles, newspapers, archival material, images, library research guides, and much more. The Library Search lists library holdings and their circulation status, and links directly to electronic books and streaming movies and music. Students have access to course-specific library material and research guides through integrated modules in the Canvas course system.

Expert assistance in using the library resources is provided by subject specialists. Students are introduced to basic information literacy skills through the University General Education (p. 83) program. Librarians support faculty to help students build the research skills in demand by employers. General education courses, such as the freshman *Analytical Reading and Writing* course, are where many students learn these skills. Librarians also provide instruction tailored to individual courses. Individual questions are answered in person, as well as by phone, e-mail, text message, and online chat. The Libraries' Contact Page is the starting point for submitting questions and retrieving information.

When local resources do not supply needed material, Temple students and faculty may directly request books from other universities and colleges through the E-Z Borrow Program, or request article copies and books through the Temple Libraries' interlibrary loan service.

Locations

The resources of the University Libraries are housed in Charles Library (the main library) and in a number of separate facilities serving specific disciplines and campus locations. Hours and information for the following are on the libraries' web site:

- Ambler Campus Library, 580 Meetinghouse Road, Ambler, PA 19002, 267-468-8648
- Charles L. Blockson Afro-American Collection, Sullivan Hall, Main Campus, 215-204-6632
- Harrisburg Library, 234 Strawberry Square, Harrisburg, PA 17101, 717-231-3646
- Ginsburg Health Sciences Library, 3500 N. Broad Street, Health Science Campus, 215-707-2665
- Charles E. Krausz Library of Podiatric Medicine, School of Podiatric Medicine, 8th and Race Streets, Philadelphia, PA 19107, 215-625-5205
- Law Library, Charles Klein Law Building, Main Campus, 215-204-7891
- Charles Library, 1900 N. 13th St., Main Campus, 215-204-0744

Reading rooms and libraries are also maintained by several academic programs. The following facilities are located on the Main Campus:

- College of Liberal Arts Educational Technology Center, AL-21 Mazur Hall, 215-204-3213
- Esther Boyer College of Music Listening Library, 100 Presser Hall, 215-204-8338

Tutoring Services

The following is a list of tutoring services available in various schools, colleges, and departments. This list is subject to change, so students should consult with their academic advisors or contact the Student Success Center for assistance in finding a tutor.

Main Campus

Accounting
403 Alter Hall
215-204-8110

Actuarial Science
215-204-6183

Alliance for Minority Participation (AMP) Bridges to Baccalaureate Program
215-204-4073 or 215-204-6390

Business Communications
Business Communications Center, 1810 Liacouras Walk, Room 290
215-204-5959

Engineering (Statics, Dynamics, & Mechanics of Solids)
Engineering Building, Room 349
215-204-7800

Finance
401 Alter Hall
215-204-8451

FGIS (French, German, Italian, Slavic), Middle Eastern Languages, Asian Studies, and Greek and Roman Classics
Mazur Hall, Room 539
215-204-1261

Intellectual Heritage
IH Lounge, 215 Mazur Hall
215-204-5625

Marketing

501 Alter Hall
215-204-8111

Praxis Tests (Basic Skills Assessment Exams)
College of Education and Human Development, Shimada Resource Center, Ritter Annex 150
215-204-8011, edadvising@temple.edu

Risk Management and Insurance (RMI)
215-204-2046

Statistics
215-204-3505

Student Success Center
Charles Library 230
215-204-0702
<https://studentsuccess.temple.edu/>

Ambler Campus

Academic Advising and Student Success
Learning Center
267-468-8200
<https://ambler.temple.edu/campus-resources/advising-and-student-success>

Temple Ambler students have access to a wide variety of virtual tutoring services for writing, math and science through the Student Success Center at Main Campus. Learn more about the services, workshops and programs offered.

Other Tutoring Sources

- Instructors may be able to recommend tutors, often graduate students working toward master's or doctoral degrees in the department.
- Departmental offices generally have lists of qualified tutors available to work with undergraduates.
- The Student Assistance Center, first floor, Student Center, Main Campus, maintains a list of students available to tutor in a variety of subjects. These tutoring services often are available for a nominal hourly fee, arranged with the tutor.

Student Services

Temple University Career Center

220 Mitten Hall
1913 N. Broad Street
215-204-7981
careercenter@temple.edu
careercenter.temple.edu

The Temple University Career Center serves all Temple students. We build collaborative relationships among the Temple community and empower students and alumni through comprehensive career development services, ultimately driving them towards successful careers.

Every Temple student can own their future with our services. Students can meet with our career coaches virtually and in person to receive the tools and guidance to explore their career options, build their professional brand, gain experience, and make their path for life-long career success. The Career Center also provides popular in-person services such as professional headshots and opportunities to reserve space for interviews. Additionally, the Career Center hosts a variety of events virtually and in person, including career fairs and professional development and networking events which allow students to connect with employers and industry experts. Students can apply to thousands of job and internship opportunities on Handshake, and access a variety of free online professional development resources to develop their skills and explore a diverse array of career paths.

Meet with a Career Coach for a 30-minute appointment, which can be booked by visiting temple.joinhandshake.com/appointments. Appointments are available virtually and in person. Temple students should also be aware of the career services resources within their school or college. For a complete list of the university's career services offerings, visit careercenter.temple.edu/about/careernetwork. Contact the Career Center at 215-204-7981 or careercenter@temple.edu.

Disability Resources and Services

Howard Gittis Student Center South
4th Floor, Room 420
215-204-1280
267-314-8670 (VP)
215-204-6794 (Fax)
drs@temple.edu
disabilityresources.temple.edu

Temple University is committed to the full inclusion of students with a disability in all programs and services. Disability Resources and Services (DRS) facilitates access and accommodations on an individualized basis and provides opportunities for students with a disability to grow and develop. We work to build a learning community where people with diverse abilities are valued and included in all facets of life at the university.

Our dedicated, knowledgeable staff meets with students to determine eligibility for accommodations and discuss strategies for college success. DRS develops programs and workshops to support student retention and provides training and awareness about access and inclusion to the entire university community.

Students who connect with DRS include those with physical, visual, hearing, and speech disabilities, health, mental health, and autism spectrum conditions, attention deficits, brain injuries, and learning disabilities. We value students of all backgrounds. Many student veterans, student-athletes, honors students, and international students who have a disability connect with DRS. DRS is a free, confidential service.

Services are available at all Temple University campuses. All students, regardless of their home campus, should contact DRS on Main Campus to register. Each campus has an identified DRS liaison.

Disability Resources and Services provides the following services:

- Pre-College Information
- Intake Assessment
- Accessible housing
- Orientation and placement test accommodations
- Classroom and testing accommodations, including:
 - Note-taking support
 - Testing accommodations
 - Alternate format materials
 - Sign language interpreters and CART services
- Assistive Technology
 - Assessment, training, and short-term equipment loans

- Scholarships
- Career Development
- Mentoring and leadership development opportunities

Visit disabilityresources.temple.edu to explore our programs and services.

Military and Veteran Services Center

601 Conwell Hall
Philadelphia, PA 19122
215-204-8387
mvsc@temple.edu
Web: veterans.temple.edu

A *covered individual* is any individual who is entitled to educational assistance under chapter 31, Vocational Rehabilitation and Employment, or chapter 33, Post-9/11 GI Bill[®] benefits.

Newly admitted or currently enrolled students seeking to use their veteran education benefits towards tuition and fees for the first time should begin by contacting the VA at 1-888-442-4551 or visit VA.GOV for eligibility information.

Prior to enrolling at Temple University, students using Tuition Assistance should discuss the educational plan with their Educational Services Officer (ESO) or the counselor within the military service.

The Military and Veteran Services Center (MVSC) serves as a centralized resource for prospective and currently enrolled military-affiliated students seeking guidance and assistance regarding admissions to Temple, GI Bill[®] benefits, Temple's certification process, access to support services, and event coordination. Additionally, the shared physical space serves as a dedicated space for student-veterans.

The primary mission of the Military and Veterans Services Center is to provide, facilitate, or coordinate programs, events, and services for military-affiliated students. Military-affiliated students are defined as student veterans, military service members, and their family members (spouse and/or child).

See Registration (p. 40) for additional information.

Note: GI Bill[®] is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government web site at <https://www.benefits.va.gov/gibill/>.

Campus Recreation

Pearson and McGonigle Halls 048-02
Suite 303, 1800 N. Broad Street
215-204-1267
215-204-3800 (Fax)
campusrec@temple.edu
www.temple.edu/campus-recreation
twitter.com/TempleCampusRec
www.facebook.com/templecrec

Temple University Campus Recreation is the coordinating office for recreational sports programs at Main Campus. More than 4,000 students, faculty, and staff participate daily in one or more of the various activities offered by our office. These activities include intramurals (men's, women's, co-rec), sports clubs, informal recreation, special events and programs, group fitness, adapted recreation, aquatics, and student staff development.

Facilities

Independence Blue Cross Student Center (IBC) - 1701 N. 15th Street

The 59,000 square foot Independence Blue Cross Student Center (IBC) provides participants with a first-class environment for fitness conditioning, group fitness, and racquetball. The IBC also has an indoor jogging track and an outdoor multi-purpose court.

Pearson and McGonigle Halls - 1800 N. Broad Street, 3rd Floor Rec Court Area

This space provides opportunities for activities such as basketball, volleyball, badminton, table tennis, as well as an indoor golf driving range. The courts are divided by three and a half mechanical curtains that can section off specific court areas or be raised to allow for full area events.

Pearson and McGonigle Halls Pool (30) - 1800 N. Broad Street, Ground Level

Aquatics programs are held in Pearson Hall Pool 30. Pool 30 is available for scheduled recreational swimming hours with some specific hours identified for lap swimming. Other aquatics events throughout the semester include: *Swim into Shape*, *Water Aerobics*, and *Learn to Swim/Guard Classes*.

Aramark Student Training and Recreation Complex (STAR) - 1800 N. 15th Street at Montgomery Avenue, Weight Room

This space provides opportunities for a variety of fitness activities, and is the primary weight room facility on Main Campus. This location provides 8,000 sq. ft. of weight room space with state of the art equipment.

Aramark Student Training and Recreation Complex (STAR) - 1800 N. 15th Street at Montgomery Avenue, Climbing Wall

Recreational climbing is available in the Aramark Student Training and Recreation (STAR) Complex Atrium, featuring a 31 foot climbing wall and a 14 foot bouldering wall. Hours of operation will be listed on the Campus Recreation web site each semester. Equipment available for recreational use will include harnesses, carabiners, and climbing shoes. Orientations, belay certifications and climbing clinics will be offered at specified times throughout the semester. ID with valid recreation access is required to enter the climbing wall area. Limited space is available in the climbing wall area for patron access. Please Note: Due to the nature of climbing wall activities and the safety orientations required to use the wall, guest pass holders are not permitted entry into the climbing wall area. Special event activities are offered throughout the semester as well. Alterations to the normal schedule will be posted in the facilities and on the web site in advance.

Informal Recreation

Informal Recreation provides the opportunity to pursue recreational activities on an unstructured and voluntary basis. Run, swim, lift weights, or participate in other recreational activities at designated times. With fitness as the overriding theme, informal recreation is a very popular amenity available to the campus community.

Group Fitness

Group Fitness programs provide participants with a variety of choices ranging from aerobics and yoga to body toning and spinning. More than 55 sessions per week are offered by certified leaders. Campus Recreation provides participants with a dynamic array of sessions in a first-class aerobic facility.

Adapted Recreation

Extracurricular opportunities exist for students with physical disabilities. The goals of the Adapted Recreation program are to introduce students to lifelong leisure skills and to promote total participation in college life. The main focus of the program is a workout buddy program that matches students with disabilities with an able-bodied assistant to help them in their selected workout. Tennis, hand cycling, rowing and fitness conditioning are some of the available activities. If you seek advisement on recreational concerns in this area, contact our office to make an appointment.

Intramural Sports

The Intramural Program provides students with a flexible, yet structured, environment in which to participate in sport activities. Sport activities include basketball, dodgeball, flag football, field hockey, floor hockey, handball, indoor and outdoor soccer, softball, and volleyball. The sports are administered in league format with various divisions servicing men's, women's, and co-recreational teams. Teams and individuals must formally register for activities.

Sport Clubs

Sport Clubs are groups of individuals who share a common interest in a sport activity and have gained university recognition via registration procedures governed by Campus Recreation. Sport Clubs differ in scope and purpose and are classified as highly-competitive, instructional, and/or recreational. The key element to the program is that it is student-initiated and organized with an emphasis placed on participation and interest in the same activity. There are currently 31 active clubs: Badminton, Baseball, Bowling, Climbing, Cycling, Equestrian, Fencing, Field Hockey, Co-ed Gymnastics, Men's Gymnastics, Karate, Ice Hockey, Lacrosse (Men's & Women's), Paintball, Powerlifting, Roller Hockey, Rugby (Men's & Women's), Softball, Soccer (Men's & Women's), Swimming, Taekwondo, Tennis, Owls Track Club, Ultimate Frisbee (Men's and Women's), Volleyball (Men's & Women's) and Wrestling. Additional clubs are not being added at this present time. Sport Club Interest Forms and Club Contact Lists may be obtained by visiting the Campus Recreation web site or the main office in Suite 303 of Pearson and McGonigle Halls.

For further information, call Campus Recreation at 215-204-1267, or visit the department web site at www.temple.edu/campus-recreation.

Ambler Campus Recreation

The Recreation, Outdoor Education & Wellness (ROW) program at Temple Ambler offers a holistic approach to health and wellness through a range of programs including open recreation, intramural sports, teambuilding programs and special events. Facilities include a multi-purpose gymnasium and a fitness room with both cardiovascular and free-weight equipment. Outdoor facilities include the new 15-element challenge course lab, a swimming pool, and basketball, tennis and volleyball courts. The campus also has more than two miles of wooded trails for walking and running. Students may also participate in Main Campus recreational activities.

For information about Ambler Campus recreation programming and Red Barn Gym hours, email tua_row@temple.edu or call 267-468-8151.

International Student and Scholar Services

Joan McGinley, Director for Immigration Services
1938 Liacouras Walk, Suite 202
Philadelphia, PA 19122
215-204-7708 (Phone)
215-204-6166 (Fax)

iss@temple.edu | iss.temple.edu

International Student Affairs

Leah Hetzell, EdD, Director for International Student Affairs

1938 Liacouras Walk, Suite 202

Philadelphia, PA 19122

215-204-9573 (Phone)

215-204-9572 (Fax)

intl@temple.edu | iss.temple.edu/international-student-affairs

International Student and Scholar Services (ISSS) and International Student Affairs provide services and support to Temple University's international students, scholars and researchers. Serving the university's international community, these offices generate all legal documents required for nonimmigrant students and scholars; provide advisory and counseling services; serve as liaisons to university departments, U.S. and foreign government agencies, and the greater community; facilitate the orientation and acclimatization of international students and scholars into the larger Temple community; and contribute to the international community's cross-cultural understanding and appreciation. Detailed information on programs and services offered by ISSS is available from the office in 1938 Liacouras Walk, Suite 202, or the office's web site at iss.temple.edu.

Temple University requires all new and continuing international students in Nonimmigrant Student (both F-1 and J-1) status to carry health insurance that meets certain minimum standards determined by the United States Department of State. Students may purchase before arriving at the university or purchase health insurance upon arrival through the university. For further information, please contact the university's Benefits Office at 215-926-2270, e-mail StudentInsurance@temple.edu, or visit careers.temple.edu/hr-resources/our-functional-areas/benefits-administration/health-insurance-plans/student-health-0.

In addition, some international students may be required to demonstrate that they are free of active tuberculosis by submitting to Student Health Services a Tuberculosis Screening Record which has been certified by a licensed physician. International students may meet this requirement upon arrival at Temple University by taking a PPD test at Student Health Services.

All international students in Nonimmigrant Student (F-1 and J-1) status must maintain their nonimmigrant status insofar as regulations of the United States Citizenship and Immigration Services (USCIS) and the United States Department of State (DOS) are concerned. In general, students in this status must complete a full-time course load each academic term while they remain in the United States and must not accept unauthorized on-campus or off-campus employment. For detailed information, please see iss.temple.edu/students/current-students.

Eligibility for employment for individuals in Nonimmigrant Student (F-1 and J-1) status is based on regulations of the US Citizenship and Immigration Services and the Department of State. For detailed information, please see iss.temple.edu/students/current-students/student-employment-options.

A mandatory orientation session is held for new international students at the beginning of each academic term. For more information, please see the International Student and Scholar Services web site at iss.temple.edu/international-student-affairs/pre-arrival-new-students and the Office of New Student and Family Programs web site at <https://orientation.temple.edu/>.

For more information about maintaining Nonimmigrant Student (F-1 and J-1) status, please see iss.temple.edu/.

Center for American Language and Culture

Jacqueline McCafferty, Director

1938 Liacouras Walk, Suite 303

Philadelphia, PA 19122

215-204-7899 (Phone)

215-204-3892 (Fax)

tcalc@temple.edu | tcalc.temple.edu

The Center for American Language and Culture (TCALC) provides multiple English-language programs to individuals seeking to improve their English language skills to achieve academic, career or personal goals. Programs include Intensive English, Conditional Admission, Graduate Academic English, Short-term Programs, and more. In-person and online courses are available. Detailed information on programs offered by TCALC is available from the office in 1938 Liacouras Walk, Suite 303, or the office's web site at tcalc.temple.edu.

Department of Intercollegiate Athletics

owlsports.com

The Department of Intercollegiate Athletics is committed to pursuing excellence at the Division I Football Bowl Subdivision (FBS) level and providing opportunities for its diverse student-athletes to maximize their athletic, academic and life-skill potential. The department sponsors 19 sports and provides high-level coaches and administrators, whose goal is to instill a winning attitude on and off the field of play through core values such as teamwork, leadership and service to others. As one of the most visible messengers of the Temple story, the Department of Intercollegiate Athletics strives to be a unifying force for the University with the city of Philadelphia, The Commonwealth of Pennsylvania, as well as the nation. Temple University is a proud member of the National Collegiate Athletic Association, the American Athletic Conference, the Big East Conference and the EAGL.

Office of the Dean of Students

Howard Gittis Student Center, Room 304
215-204-7188
215-204-1663 (Fax)
deanofstudents.temple.edu

The mission of the Office of the Dean of Students is to engage, develop, and retain Temple students by providing them with holistic support, advocacy, and education, equipping students to succeed and thrive at Temple University. The Dean of Students office provides assistance to students and their parents/families in an effort to ensure co-curricular learning and overall collegiate success. The Dean's office also leads the University's CARE (Crisis Assessment Response and Education) Team and serves as a resource to faculty and staff who have concerns about a student. The areas which report through the Dean of Students are: CARE Team, Disability Resources and Services, New Student and Family Programs, Student Activities (including Greek Life and student government), and Student Conduct and Community Standards. The Cherry Pantry, Student Emergency Aid Fund, and transfer disciplinary checks are also managed through this office.

Office of Student Media

Howard Gittis Student Center
1755 N. 13th Street, Room 243
Philadelphia, PA 19122

Students on the Main Campus produce their own editorially-independent newspaper, *The Temple News*, during the academic year. *The Temple News* is published biweekly in print—every other Tuesday during the fall and spring semesters—and provides daily updated content online at temple-news.com, which also includes photo slide shows, videos and two podcasts: RePrint and The Playbook. The staff has continued to win prestigious regional and national awards for its work from professional organizations like the Pennsylvania Newsmedia Association, the Associated Collegiate Press, College Media Association, the Society of Professional Journalists and Editor & Publisher. Readers can follow *The Temple News* on Twitter @TheTempleNews.

Students also produce and publish *Templar*, Temple's undergraduate annual yearbook. *Templar* has been recognized by the American Scholastic Press Association with multiple national first place awards. Visit templaryearbook.com. Follow *Templar* on Twitter @TemplarYearbook.

The Claire Smith Center for Sports Media at Temple University's Klein College of Media and Communication is a world-class academic center focused on teaching, training and research in the areas of sports journalism, advertising, public relations and production. For more information: klein.temple.edu/sports-media-center.

The Office of Student Media also advises WHIP, Temple's student-run Internet radio station that broadcasts out of its studio in room 108 of the TECH Center. WHIP is an acronym that stands for "We Have Infinite Potential." The station broadcasts a wide array of programming, from news to sports to a diverse musical format, and is one of 34 featured college radio stations in iHeart Radio College Radio category. Listeners can follow WHIP on Twitter @WhipRadio and listen online at www.iheart.com/live/whip-radio-5254/.

Student Activities

Howard Gittis Student Center
1755 N. 13th Street, Room 219M
Philadelphia, PA 19122
215-204-7131
<https://studentactivities.temple.edu/owlconnect.temple.edu>
Follow us on social media @TUActivities

If you are looking for something to do on or off campus, you are in the right place! Student Activities enhances the student experience by developing and empowering students, creating opportunities for meaningful interpersonal relationships, supporting student organizations, and providing fun, engaging programs for the diverse campus community.

Student Organizations

One of the best ways to get involved is to become a member of one of our 400+ registered organizations! Student Activities works to support and empower student organizations as they enhance campus culture with their events, ideas, and leadership. The staff aims to serve as a resource and provide a path of development for students outside the classroom. With groups devoted to everything from culture to competitive dance to community service, chances are we have a registered organization for you. Our office provides these organizations with meeting spaces, financial management, programming assistance, and anything else they need to contribute to student life at Temple University. Take a look at our registered student organizations and their events by visiting owlconnect.temple.edu.

Fraternity and Sorority Life

Through fraternity or sorority involvement, students gain an opportunity for empowering one another, engaging with our community, exploring our identities, ensuring health and safety, and enhancing the co-curricular experience. The creeds and rituals that guide each individual organization are based

on values that foster an understanding of community and social responsibility. Each chapter falls under the umbrella of the Interfraternity Council, the Multicultural Greek Council, the National Pan-Hellenic Council, and the College Panhellenic.

Student Activities serves as a liaison between recognized fraternities and sororities and the greater Temple University community. We are dedicated to the holistic development of students throughout their fraternal experience and welcome you to explore the possibilities offered by involvement in fraternity and sorority life at Temple University. Follow us on Instagram at @TempleFSL.

Main Campus Program Board (MCPB)

MCPB is a student-led organization that plans the largest events on campus. From road trips to Broadway shows to campus concerts, you can help us plan any event you would like to see on campus. Follow us on Twitter @TempleMCPB or go to www.templemcpb.com to learn more about the events that will become the highlight of every Temple student's college experience!

Along with Student Activities, we help plan and implement the following University events:

- Weeks of Welcome (W.o.W.): The entire campus joins together to welcome all new and returning students to campus. A carnival, hypnotist and a 100-foot banana split have been highlights from past years!
- Homecoming and Family Weekend: Enjoy pep rallies, a golf cart parade, pageants, famous speakers and great sporting events.

Temple Student Government (TSG)

TSG serves the student body by advocating and representing their voice for the benefit of the university community while providing access to resources. All students are welcome to explore their interests through TSG and are asked to create a progressive environment by participating in university life. For more information, visit the TSG web site or follow TSG on Twitter @TempleTSG.

Student Activities Events

Interested in learning more about Student Activities' events? We've listed a few of our best programs right here!

Night Owl Events

Visit the second floor of the Student Center most Fridays from 9 PM to 12 AM for your dose of fun, food and entertainment. The events on tap for the evening are different each week, but you are guaranteed a chance to win prizes, listen to your favorite music, and eat a fulfilling snack!

Memorable Moments

Memorable Moments offers students the opportunity to meet others and explore a new country through a cultural exhibition and food at a Philadelphia restaurant. Visit one of three countries each semester and go on a memorable mini-tour of that country's offerings in or near Philadelphia. Check out our web site to find the upcoming dates.

Service Immersion Program

The Service Immersion Program is designed to actively engage Temple University students in meaningful experiences that foster cultural awareness and social responsibility through service, learning, and reflection. Service Immersion Programs include at least 6 weeks of learning sessions culminating in a 5-7 day immersive experience. The destination of each experience varies as does the social justice issue explored by each group. Program descriptions and application instructions are updated each fall and provided on our web site. Students interested in participating are encouraged to apply in the fall semester for our programs that take place in the spring semester.

Clifton Strengths

Our CliftonStrengths programming encourages students to reach their full potential through helping them identify, understand, and apply their Strengths. CliftonStrengths stems from a growth mindset, encouraging students to develop their strengths rather than focusing on their weaknesses. Gallup's CliftonStrengths Assessment is a 45-minute web-based assessment that measures natural patterns of thinking, feeling and behaving, which indicate an individual's Top Five talents out of a list of 34. This assessment provides the knowledge and vocabulary to describe an individual's strengths and the areas in which they excel. Our role is to help students further understand their top five strengths and how they can play out in their day-to-day life. Through this exploration, we can be intentional in investing in our strengths and using this knowledge to better ourselves and the world. For more information, reach out to studentactivities@temple.edu.

Ambler Campus - Student Activities and Student Government

Temple University Ambler campus offers a variety of student activities. Please visit <https://ambler.temple.edu/campus-resources/student-life>, or contact the Office of Student Life (osl@temple.edu, 267-468-8425) in Bright Hall, Room 101, for further information.

Temple University Ambler Student Government Association (ASGA) is an active student government association that oversees student concerns, policies, interests and activities. The officers of ASGA serve as a liaison between students at Ambler and the administration. Elections are held in the spring for various offices, giving students the opportunity to participate in election campaigns and promotions. For more information about ASGA, visit the Student Activities Office in Bright Hall Lounge, visit <https://ambler.temple.edu/campus-resources/student-life> or call 267-468-8429.

Student Center Operations and Conferences

Main Campus

Second Floor Mezzanine, Howard Gittis Student Center
215-204-7131
studentcenter.temple.edu/howard-gittis-student-center

Health Sciences Center

First Floor, Student Faculty Center
215-707-4017
studentcenter.temple.edu/sfc/student-faculty-center

Student Center Operations and Conferences is responsible for the management and operation of the Howard Gittis Student Center and a variety of other student-focused spaces on Temple's Main Campus, as well as the Student Faculty Center Activities and Operations office on the Health Sciences Center Campus. Our role is to fulfill the living, dining, meeting, event, programming and recreation needs for the greater campus community. To foster engagement, we offer flexible student-focused spaces, opportunities for student leadership through employment, and for student organizations to host events, programs, and meetings, and on the HSC Campus, recreation and activities programming.

On Main Campus, in the Howard Gittis Student Center, we manage the Game Room, the "Reel" Cinema, the Information Desk, the Graphics Media Center, and the Student Organizations Village. Additionally, just off the Atrium you will find the Book Store (Barnes & Noble), Philadelphia Federal Credit Union (PFCU), the UPS Store, the Office of Sustainability, and the Walker Food Court. Additionally, we manage the Great Court in Mitten Hall, multiple event spaces in Morgan Hall, and a variety of outdoor spaces including the Bell Tower and Liacouras Walk. Each year the Operations team manages, coordinates and supports over 12,000 bookings in 30 event spaces across campus.

On the Health Sciences Campus, just north on Broad Street, in the Student Faculty Center (SFC), you will find another comprehensive student center facility. The SFC manages both activities and operations with a primary focus on Health Science students, but all are welcome to attend events or programs and use our services in the building. Our office operates the HSC Recreation Center and manages all conference services needs for the SFC Conference Center and special events in the Lewis Katz School of Medicine. Student Center facilities are designed and managed with a specific focus on students; we provide avenues for leadership through employment, and facilities which foster both formal and informal involvement.

The Main Campus Student Center offers a three-story atrium as a grand entrance to a variety of Student Affairs offices and services within the building. The Dean of Students; Student Activities; Disability Resources and Services; Temple Student Government; Temple News (student newspaper); *Templar* (student yearbook); and the Cherry Pantry are all housed in the Student Center.

The Student Faculty Center also offers a Barnes & Noble bookstore location; study and informal lounges; conference rooms; game spaces; a television lounge; fitness studios; cardio, plyo and weight rooms; and intramural sports in the gymnasium. Your Temple Owl Card affords you access to the facility.

If you are interested in getting involved, finding a great place to meet and relax, or using space for your event, program or meeting, please visit us on the web at studentcenter.temple.edu, or stop by one of our offices.

Student Health and Wellness

Student Health Services

1700 N. Broad Street, Fourth Floor
215-204-7500
215-204-4660 (Fax)
studenthealth.temple.edu

Student Health Services strives to promote a high standard of health among Temple University students through programs in preventive medicine and health education, in addition to diagnosis and treatment of injury and illness. Care providers include doctors, nurse practitioners, and nurses. Services offered at the Main and Health Sciences Center campuses include basic medical care, an immunization/allergy injection clinic, sexual health services, nutritional consultation and a self-care center. Rapid COVID-19 Testing for those with symptoms of COVID-19 is available. All services are by appointment only. For appointments, please go to the Patient Health Portal or call 215-204-7500.

Student Health Fee

As part of the University Services Fee, students are charged each semester during the academic year to help subsidize the basic diagnostic and treatment services provided by health care providers at all campus locations. There are charges for services not covered by the Student Health Fee such as dispensed medications, orthopedic supplies, and immunizations. Office laboratory tests can be performed at Main and Health Sciences Center offices. At Ambler there will be a self-care area located in West Hall. Please check the Student Responsibilities (p. 42) section for further information on health fee and insurance.

Tuttleman Counseling Services

Andrew J. Lee, Psy.D., Director

1700 N. Broad Street, Second Floor
215-204-7276
215-204-5419 (Fax)
counseling.temple.edu

Tuttleman Counseling Services (TCS) is the comprehensive mental health service for Temple students. Our mission is to provide culturally informed mental health services that support the psychological health of the diverse community of Temple students. This is designed to improve students' academic success and retention. It is clear that students are dealing with a variety of major life issues as they pursue their education. These issues can include preexisting mental health concerns, questions surrounding their multiple identities, relationship problems, traumatic life experiences, and concerns about their career choices.

TCS provides time-limited and focused individual and group counseling services that are designed to help students be the best students that they can be. Psychoeducational drop-in and process groups, therapeutic yoga, mindfulness meditation groups, and the Resiliency Resource Center are available at TCS. Psychiatric services are also available for students that may benefit from medication. This foundation provides students with support and guidance for a wide variety of problems, from adjustment issues and transitory difficulties to more serious psychological problems and even severe mental illness. TCS may also provide referrals to community resources for students who require more specialized or intensive care.

TCS provides services in the following areas:

Psychological Services: Psychological Services is staffed by licensed clinicians (psychologists, social workers, and counselors) who provide brief individual, couple, and group counseling, as well as referral, consultation, and educational workshops. Some common issues that are addressed, either individually or in groups, include:

- relationship problems
- stress, depression, anxiety
- eating disorders
- loss and/or grief
- procrastination
- shyness
- academic performance
- career decisions
- family problems
- sexuality and sexually transmitted diseases
- gay, lesbian, bisexual, and transgender issues
- racism, sexism, and other forms of prejudice

The Psychological Services staff will also assist students in locating resources and other services available on campus or locally that are specific to their needs.

Psychiatric Services: Psychiatric Services is committed to caring for the mental health needs of Temple University students by providing psychiatric evaluations, medication consultations, and short-term individual psychotherapy. TCS psychiatrists will also respond to referrals from other TCS units and serve as a liaison to the Health Sciences Center. Students are seen by appointment, except in emergency situations when immediate care is required.

CASA (Campus Alcohol and Substance Awareness): The Campus Alcohol and Substance Awareness (CASA) program is a comprehensive program focusing on all aspects of alcohol and other drug use and abuse. The CASA program is staffed by counselors who work with students individually and in groups.

SACE (Sexual Assault Counseling and Education): The SACE staff provides crisis intervention, survivor advocacy, individual counseling, and groups for survivors of assault, child sexual abuse, domestic violence, and sexual harassment.

TCS is open Monday - Friday, 8:00 a.m. to 5:00 p.m. and students are able to register for services daily through our web site at counseling.temple.edu. After registering through our web portal, students will be contacted regarding next steps. TCS also offers evening hours to accommodate students who are unable to attend appointments during normal business hours. Students are generally seen by appointment, except in emergency situations when immediate care is required. Services are free and confidential for all registered Temple students. Please call 215-204-7276 for more information.

Wellness Resource Center

Alison McKee, M.Ed., Director
Student Center, Suite 201
1755 N. 13th Street
215-204-8436
tuwellness@temple.edu

wellness.temple.edu

The Wellness Resource Center (WRC) is Temple University's health promotion office, focused on helping the campus community understand wellness and ways to flourish. We do this by offering intentional learning opportunities around four areas: alcohol and other drug prevention, interpersonal violence prevention, mental well-being promotion, and sexual health promotion.

We are a team of experienced and dedicated professionals and Certified Peer Educators who work to promote wellness and create connectedness through a variety of programming and services. The Wellness Resource Center is a part of Temple University's Division of Student Affairs and strives to help students become their best selves and positively transform society.

Our Vision

Temple University students are empowered to make decisions that enable them to thrive.

Our Mission

The Wellness Resource Center offers intentional learning opportunities to promote student well-being and cultivate community.

The Wellness Resource Center team is committed to offering creative and innovative programs that give students an opportunity to learn and grow. Our services include:

- Educational workshops facilitated by HEART Certified Peer Educators.
- Organizing campus events such as WalkTU, Self-Care Fair, LoveTU, and the Clothesline Project.
- Offering free safer sex products (such as condoms and latex dams).
- Teaching a 3-credit Public Health class as training for students to become HEART Certified Peer Educators.
- Providing individual wellness consultations with our professional staff.
- Coordinating with other Temple departments to promote a healthier campus environment.
- Working with Student Conduct and Community Standards to support students assigned to CHOICES, an alcohol education workshop and BASICS, a research-based educational intervention.
- Partnering with University Housing & Residential Life to provide THRIVE: Wellness Living Learning Community.

The Wellness Resource Center also offers students opportunities to get involved as HEART peer educators. Peer education promotes well-being, cultivates community, and elevates student voices to help create change on our campus. Temple students receive influential messages from peer educators who facilitate wellness programs, participate in campus outreach, and support Wellness Resource Center initiatives. HEART Peers are nationally certified after taking SBS 2304, a 3-credit course held at the WRC each semester.

Hours are 8:30 a.m. to 5:00 p.m., Monday - Friday. Please call 215-204-8436 for more information or visit wellness.temple.edu.

Student Identification Cards

OWL Cards (student IDs) are produced on the Main Campus by the Office of New Student and Family Programs during New Student Orientation. At other times throughout the semester, ID cards are produced by the Diamond Dollars Office, located in the Howard Gittis Student Center, Suite 101. The cost of a replacement ID card is \$20.00.

An OWL Card is needed for entry into buildings, library privileges, and many university services.

ID cards also are issued on the Ambler Campus, Health Sciences Center, and on scheduled days and times at the Center City Campus.

University Services

Temple University Alumni Association

Sullivan Hall, Garden Level
Main Campus
215-204-7521
alumni@temple.edu
alumni.temple.edu

As a current Temple student, embrace your role as an alumnus/a-in-residence and plug into the Temple University Alumni Association's (TUAA) global network of more than 340,000 living alumni now—before you don a cap and gown!

Here's what it means for you:

- Opportunities to connect with alumni at upcoming events including Homecoming & Family Weekend and Temple Made Days.
- Access to the Student Alumni Association, Regional Alumni Chapters, Alumni Groups and Societies, Temple University Young Alumni Association (TUYAA) and meaningful alumni volunteer opportunities.
- Exclusive Owls-only benefits, including special offers on auto and home insurance, Temple License Plates (currently available to individuals living in Delaware, Maryland, New Jersey, or Pennsylvania), discounts on entertainment travel and access to campus recreation and the library.

Learn more about how the Student Alumni Association and TUAA provides student resources to enhance your on-campus experience. Call 215-204-7521, e-mail alumni@temple.edu, or visit alumni.temple.edu.

Bookstore

There are three Temple University Bookstore locations. Each store stocks the required books and supplies for the campus it serves. Course materials may be purchased through the bookstore's web site for home delivery or pick-up in store. A student's booklist is accessible via a link on the Student Roster in Self-Service Banner. The majority of textbooks may also be rented instead of purchased. Price Matching to various on-line retailers is also available. Please contact the store for more details. In order to maximize the number of used books available to students, the bookstore buys back from students books at the highest possible prices throughout the year. In addition to housing required course materials, all stores feature clothing, souvenirs, and giftware imprinted with the Temple name. Graduation rings can be ordered at any time. Academic regalia are available in the months preceding graduation.

You will also find a large selection of snacks, soft drinks, greeting cards, gift-wrap, posters, and health and beauty items.

During the first weeks of classes, store hours are extended at all locations. See signs posted at each location for specific hours during rush periods and semester breaks.

During the summer and semester breaks, store hours may vary. Visit the bookstore web site for more details.

Regular hours of operation are:

Main Campus

13th St. and Montgomery Ave.
The Gittis Student Center, lower level; 215-204-5578
Monday – Friday: 9:00 a.m. – 5:00 p.m.
Saturday: 11:00 a.m. – 3:00 p.m.

Law School

Barnes & Noble @ Temple University Law School Bookstore
1700 N. Broad St., Ground Floor; 215-204-0514
Monday – Thursday: 8:00 a.m. – 4:00 p.m.
Friday: 8:00 a.m. – 3:00 p.m.

Health Sciences Center

Broad and Ontario Streets
Student Faculty Center, First Floor; 215-707-3157
Monday – Friday: 9:00 a.m. – 4:00 p.m.

Department of Public Safety

Jennifer D. Griffin, Ph.D.
Vice President of Public Safety at Temple University

Temple Police Locations

Temple Police Administration, 1101 W. Montgomery Avenue, Philadelphia, PA

Temple Police Patrol/Police Headquarters, 1801 N. 11th Street, Philadelphia, PA

Temple Police Center Station, Corner of Beasley and Polett Walks, Philadelphia, PA

Temple Public Safety Station, 1513 Cecil B. Moore Avenue, Philadelphia, PA

Temple Police Mini Station, 1600 N. Park Avenue, Philadelphia, PA

Temple Police at Health Sciences Center Campus, Parkinson Pavilion, Broad and Tioga Streets, Philadelphia, PA

Temple Police at Ambler Campus, Bright Hall, Upper Dublin, PA

Emergency Phone Number for all Campuses

On Campus: 1-1234

Off Campus: 215-204-1234

The Department of Public Safety provides support to the Temple community 24 hours a day, 365 days a year. Public Safety is a multi-faceted team consisting of law enforcement officers, security personnel and certified dispatchers. Police officers are visible patrolling the campus and surrounding vicinity on foot, on bike and in vehicles. Security officers work closely with police officers to monitor the patrol area and are on bicycles, as well as stationed in all university buildings to monitor access and provide assistance to staff, students, and guests. In our communication center, dispatchers coordinate operations in responding to service requests and emergency calls using state-of-the-art technology and a directly integrated system with the Philadelphia Police 911 system.

The Department of Public Safety also offers a variety of programs and services to support you, including the Flight shuttle service and Walking Escort Program. Visit Campus Safety Services for further information.

We encourage you to sign up for emergency notifications and become familiar with emergency preparedness and evacuation procedures. The Annual Security and Fire Safety Report contains information about policies, procedures, safety awareness planning and Clery compliance.

e-mail: police@temple.edu

University Housing & Residential Life

1910 Liacouras Walk

(P) 215-204-7184, option #2

(F) 215-204-3261

housing.temple.edu

Residence halls on Main campus provide an opportunity to extend your learning experiences beyond the classroom, library, and laboratory.

Living on campus provides opportunities for you to intentionally explore yourself, others, and the world around you. University Housing & Residential Life works to create living environments in which each student is encouraged to develop as an individual in an atmosphere that promotes emotional, social, and intellectual growth. In addition, University Housing & Residential Life is committed to creating community-living environments that value and promote an appreciation for diversity of cultures, lifestyles, and people. Campus leaders in the residence halls want to get to know you, help connect you to Temple, and connect you to the community around you.

Please check the University Housing & Residential Life web site for additional information on residential services available. The University Housing & Residential Life web site also provides online resources to assist with locating off-campus housing.

All students are also able to purchase meal plans. All new students living in residence halls are required to purchase meal plans. For more information, visit the Dining and Meal Plan section of the housing web site. Additional information is available in the Temple Culinary Services section below and on our food service provider's web site.

Temple Culinary Services

temple.campusdish.com/

Temple Culinary Services offers a variety of meal plans and dining locations to accommodate every student's unique schedule and dining needs.

Locations

We have a variety of dining locations for students to enjoy, offering two dining halls, two food courts, coffee shops, and cafés—all conveniently located across campus. For a list of all locations and hours of operation, visit www.temple.campusdish.com/locationsandmenus.

Meal Plans

A campus meal plan will help keep you focused on the things that matter most, like your coursework. It will also make your experience easier without having to plan, shop, cook, and clean up after every meal. Signing up in the beginning of the semester through the TU Portal gives you peace of mind knowing you have a plan in place.

Meal plans offer access to J&H and Morgan dining halls; they also allow you to dine in retail locations like Chick-fil-A®, Panda Express®, Saladworks®, Starbucks®, and more!

Meal plans offer several functions to give you flexibility—no matter where you get hungry on campus: *Board Swipes* for Dining Halls, *Meal Equivalencies* for select retail locations, and *Diamond Dollars* to cover additional balances.

What kind of meal plans are available?

- **Meals per Week Plans** offer a set number of meals to be used each week during the semester.
- **Block Plans** provide a set number of meals to be used the entire semester.

For more information about our meal plans options, visit temple.campusdish.com/mealplans.

Am I required to have a meal plan?

If you are a first year student living in on-campus housing, or a transfer student residing on-campus, you are required to purchase a minimum meal plan of 10 meals per week.

Parking Services

Office of Parking Services
Montgomery Garage, First Floor (Main Campus)
1859 North 11th Street
Philadelphia, PA 19122
215-204-5301
parking@temple.edu
campusoperations.temple.edu/parking-transportation

Temple University has a variety of parking options at its Main, Health Sciences Center, and Ambler campuses. For its Center City campus, Temple has negotiated parking discounts with nearby garages.

Semester Parking is available for students who park frequently and/or need overnight parking.

Commuter Parking is best for students who need daily parking but do not need overnight access. These permits provide access to one assigned facility Monday–Friday 7:00 AM to 10:45 PM and are \$266 per semester. We also offer 7-day commuter permits, which provide weekend parking with the same time constraints and are \$306. Commuters can park in the Diamond Street Lot, Norris Street Lot, Temple Towers Lot, Bell Garage, Liacouras Garage or Montgomery Garage on Main Campus, or the Battersby Lot at the Health Sciences Center.

Overnight Parking is available for students who need 24/7 parking access. These permits are \$426 per semester and are assigned to the Tyler Lot, Temple Towers Lot, Bell Garage, Liacouras Garage, or Montgomery Garage on Main Campus, or the Carlisle West Garage at the Health Sciences Center.

Flex parking is available for students who park infrequently.

Flex Parking is our pay-per-entrance option, best for students who come to campus no more than twice a week. These parkers are assigned to either the 15th Street Lot, Norris Street Lot, the Liacouras Garage, or the Montgomery Garage. Flex parkers pay \$12 per entry, which is automatically deducted from their TU Parking Account when they swipe or tap their Temple OWLcard or use the mobile OWLcard. Funds must be added to the parking account prior to use. Attempting to park without sufficient funds on the parking account will result in the assessment of the daily rate. Funds can be managed on the TU Parking Account site.

Please note: Flex parkers must renew their parking semiannually in July and January. Parking Services will notify students prior to expiration.

Ambler Campus parkers must purchase a permit.

Ambler students have the option to pay \$95 for the entire academic year (September through August) or \$65 per semester. Students with semester parking at Main or HSC campuses receive complimentary parking at Ambler campus. However, students with only Ambler permits will need to register for Flex parking if they need to park at Main or HSC campuses occasionally.

Parking Guidelines

Your parking permit and Temple OWLcard (or mobile OWLcard) are the mechanisms that control access to your assigned parking area. Failure to display your permit may result in a citation. Availability of areas and parking assignments are subject to change during summer, holidays, inclement weather, and some special events.

You can sign up for parking by visiting the TU Parking Account.

Visitor Parking

Visitors to Main Campus have **hourly parking** options in the Montgomery Garage or the Cecil B. Moore Lot for \$6 per hour, or the Tuttleman Lot for \$7 per hour. Additionally, **daily parking** is available in the Liacouras Garage, Diamond Street, Norris Street and Temple Towers Lots when you pull a ticket and pay upon exit. The 15th Street Lot requires you to pay upon entrance to the parking attendant.

We pride ourselves in providing affordable, convenient, and secure parking to the Temple community, and look forward to having you as a customer!

All parking rates are subject to change. Parking Services reserves the right to close facilities due to underutilization and reassign parkers as needed.

Shuttle Services

Shuttle Operations Department
215-204-7955
shuttle@temple.edu
campusoperations.temple.edu/parking-transportation/shuttle-services

Shuttles transport students, faculty and staff members within Temple University's Main Campus patrol zone (via Flight) and among Main Campus, the Health Sciences Center (HSC) Campus, and Ambler Campus.

Flight is Temple's nighttime fixed-route shuttle loop service. Flight-branded shuttles circulate throughout the areas within and surrounding the Main Campus patrol zone, and pick up and drop off students, faculty and staff members at each of its over 40 stops. The shuttles arrive approximately every 15 minutes at each stop. Shuttles operate 7 days per week from 6 p.m. to 2 a.m. from August 26, 2023 through the end of the spring semester. The service continues to operate in a modified form during university breaks. More information can be found at campusoperations.temple.edu/parking-transportation/shuttle-services/flight.

Temple University also provides daily shuttle transit services to and from Ambler Campus, Health Sciences Center and Main Campus during the fall and spring semesters, but there is no service during the fall break, winter break, spring break or during the summer. The service is offered at no charge to all students, faculty and staff of the University with a valid Temple ID. All scheduled departures, in addition to the Main and Ambler Campuses, stop at the Health Sciences Center on Broad Street. Please check the Shuttle Services web page for a schedule of shuttle services for each route. Information on these schedules may also be obtained at the Office of Parking Services or Campus Safety Services.

University Requirements: General Education

The General Education (GenEd) curriculum is the required curriculum for undergraduate students. Every Temple undergrad completes GenEd requirements in order to graduate. GenEd requirements:

- prepare students for college-level studies;
- give students an opportunity to explore new ideas, different perspectives on important topics, and possible majors, minors and certificates;
- and prepare students for career success following graduation.

In a survey of over 500 business executives and hiring managers, respondents reported that skills and knowledge that cut across disciplines are critical for career advancement. Competencies identified by employers as most important for schools and colleges to develop include oral and written communication, critical thinking, ethical judgment and applying skills and knowledge across a variety of contexts. These are the very competencies the GenEd curriculum is designed to promote.

In this section:

- Program Competencies (p. 83)
- Program Framework (p. 84)
- General Education Policies and Requirements (p. 85)
- General Education Waivers (p. 86)
- List of GenEd Courses by Area (p. 89)

Program Competencies

GenEd facilitates linkages by stressing the development of eight competencies rather than content knowledge. GenEd provides opportunities for students to engage in:

Critical Thinking

Think critically

Within GenEd, students who think critically recognize an object of investigation, frame questions about it, and interrogate assumptions—explicit or implicit. Critical thinking includes the evaluation of evidence, analysis and synthesis of multiple sources, and reflection on varied perspectives. Critical thinking generates a well-developed investigation that incorporates supporting and countering claims. A student engaged in critical thinking produces an informed account, a hypothesis for further study, or the solution to a problem.

Contextualized Learning

Understand historical and contemporary issues in context

Within GenEd, students who contextualize learning understand and integrate historical, contemporary, and cultural phenomena and their underlying principles in two broad applications. First, contextual learners recognize the interaction of complex forces that give rise to specific phenomena. Second, contextual learners understand and analyze related events, artifacts, practices and concepts across geographic, chronological and cultural boundaries.

Interdisciplinary Thinking

Understand and apply knowledge in and across disciplines

Within GenEd, students who use interdisciplinary thinking recognize the world presents problems, topics, or issues too complex to be satisfactorily addressed through a single lens. Thus, interdisciplinary thinkers apply multiple perspectives, paradigms, and frameworks to problems, topics, or issues.

Communication Skills

Communicate effectively orally and in writing

Within GenEd, students who communicate effectively use spoken and written language to construct a message that demonstrates the communicator has established clear goals and has considered their audience. Effective messages are organized and presented in a style appropriate to the context.

Scientific & Quantitative Reasoning

Identify and solve problems using scientific and quantitative reasoning

Within GenEd, students who exercise quantitative and scientific reasoning use and apply these reasoning processes to explain phenomena in the context of everyday life. Quantitative reasoning includes statistical and/or logical problem-solving, the relationships between quantities, and the use

and misuse of quantitative data. Scientific reasoning introduces students to the evolution and interdependence of science and technology and includes problem identification, hypothesis evaluation, experimentation, interpretation of results and the use and misuse of scientific data.

Civic Engagement

Function as an engaged citizen in a diverse and globalized world

Within GenEd, students open to civic engagement view themselves as connected to local and global communities where they participate in activities that address issues of public concern. Critically engaged students define issues, pose, probe, and solve problems with an awareness of and an inclusion of diverse values and interests.

Information Literacy

Identify, access and evaluate sources of information

Within GenEd, information literacy encompasses a broad spectrum of abilities, including the ability to recognize and articulate information needs; to locate, critically evaluate, and organize information for a specific purpose; and to recognize and reflect on the ethical use of information.

Lifelong Learning

Promote a lasting curiosity

GenEd cultivates these skills and abilities throughout the required undergraduate curriculum, and students will experience these ways of being through readings, discussions, activities, and classes throughout GenEd.

Program Framework

The General Education curriculum introduces students to nine areas of learning and a total of eleven courses, divided into Foundation courses and Breadth courses.

Foundation Courses

General Education Attribute	Area	Requirement
GW	Analytical Reading & Writing	1 course, 4 credit hours
GQ	Quantitative Literacy	1 course, 4 credit hours
GY	Intellectual Heritage I	1 course, 3 credit hours
GZ	Intellectual Heritage II	1 course, 3 credit hours

Course Sequencing

Students are advised to take the three-semester sequence formed by *Analytical Reading & Writing*, *Intellectual Heritage I* and *Intellectual Heritage II* as soon as possible after entering Temple. Students normally complete their *Intellectual Heritage* requirements soon after completing *Analytical Reading & Writing*. Students may take *Intellectual Heritage I* and *Intellectual Heritage II* in any order.

GenEd also considers Quantitative Literacy a foundational course. Accordingly, students are advised to take a GenEd Quantitative Literacy course as soon as possible after entering Temple and before enrolling in Science & Technology courses.

Breadth Courses

General Education Attribute	Area	Requirement
GA	Arts	1 course, 3 or 4 credit hours
GB	Human Behavior	1 course, 3 credit hours
GD	Race & Diversity	1 course, 3 credit hours
GG	World Society	1 course, 3 credit hours
GS	Science & Technology	2 courses, 3 credit hours each
GU	U.S. Society	1 course, 3 credit hours

Finding GenEd Courses

Each General Education area has a list of courses that satisfy the requirements for that area. Click on the GenEd area in this list (p. 89) to find a description of the area and the list of courses approved to fulfill that area requirement.

To find GenEd courses offered in a given semester or term, students may locate the information in two primary ways:

- Go directly to the Class Schedule Search page on the university's web site. Select a semester and click Advanced Search. Use the Attribute filter to find GenEd courses that are available in each GenEd area.

- Go to the TUportal. Students must log onto the TUportal with their username and password. Select the **Student** tab. Select **Browse Class Schedule** in the Registration channel. Select a semester and click Advanced Search. Use the Attribute filter to find GenEd courses that are available in each GenEd area.

Click here for a tutorial on searching for GenEds.

General Education Policies and Requirements

In general, students should be aware of the following:

Every Temple undergraduate fulfills the requirements of the General Education Curriculum in some way.

- Students entering Temple with fewer than 45 transfer credits complete the full General Education Curriculum.
- Students with 45 or more transferable credits satisfy the 45+ GenEd Curriculum. (See Transfer Students and the University General Education Curriculum (p. 27))
- Students with an Associate degree approved for GenEd-to-GenEd, Core-to-GenEd, or Core-to-Core Transfer meet most GenEd requirements with the general education courses taken for the Associate degree. Associate degrees are approved for GenEd-to-GenEd, Core-to-GenEd, and Core-to-Core Transfer by two university-wide faculty committees. See Transfer Students and the University General Education Curriculum (p. 27) for information on the policy and a list of approved community college Associate degrees.

A GenEd course counts in one GenEd area only.

All GenEd courses must be completed with a grade of C- or higher to satisfy a GenEd requirement.

All GenEd course numbers begin with "08XX." GenEd Honors course numbers begin with "09XX." Students may use only Temple University courses at the 0800- and 0900-levels or specified waiver courses to satisfy General Education requirements. See the Transfer Students and the University General Education Curriculum (p. 27) section of this *Bulletin* for information on completing GenEd requirements with transfer credits.

In GenEd, courses may be offered in multiple departments. These courses, regardless of the sponsoring department, are the same course and will have the same number and course title.

Repeat & Withdraw Policy

Students should be aware that opportunities are limited for repeating a course to replace a failing grade under University policy. Repeating a Course (#02.10.12) prohibits students from retaking a course more than twice unless the course is specifically designated as a course that may be taken for credit multiple times.

If in the allotted number of repeats, undergraduate students are unable to successfully complete the following university requirements (including their course equivalencies), they will be required to meet with their advisor prior to registering for any further classes:

- **GW Analytical Reading & Writing**
- **GY Intellectual Heritage I**
- **GZ Intellectual Heritage II**

If a student drops a class after the official drop/add period, a "W" will appear on the student's transcript to indicate the student withdrew from the course. A course withdrawal or a "W" is counted as an attempted repeat.

Departments, Majors, Minors and GenEd

GenEd courses may not be **required** introductions to a specific major or minor. A GenEd course may be accepted by a major or minor to fulfill elective requirements.

Departments and colleges may not single out a specific GenEd course as a requirement.

A curriculum or degree program may identify a GenEd course as part of an array for its majors or minors. (An array is defined as a set of options from which the student may choose. The array must present at least three alternate options for any one GenEd course chosen.) Courses in an approved array may satisfy both the General Education requirement and the degree, minor or certificate requirement.

A student may use no more than two courses from a single department to satisfy GenEd requirements. (Foundation and transfer courses are excluded.)

Early Progress Reports

All GenEd course instructors will submit Academic Progress Reports.

Credit/No Credit

Students may not take GenEd courses for credit/no credit.

Limited Edition GenEd Courses

Beginning spring 2019 and thereafter, students may fulfill GenEd requirements by completing Limited Edition GenEd courses. Limited Edition GenEd courses are designed to encourage innovation in teaching, and to accommodate special topics such as guest lecture series or classes involving community partnerships. They are approved to be offered no more than three times. For this reason, there is no guarantee that a student will be able to repeat a GenEd Limited Edition course. In some cases, it may be possible for a student to repeat a Limited Edition course that is in its second or final semester of offering, however, students must be registered by an advisor.

General Education Waivers

Select waivers have been adopted in recognition of repetitive and substantial exposure to key habits of mind, skills, and/or bodies of knowledge and for which programs have submitted requests.

Once a student fulfills a GenEd requirement with an approved waiver—a placement test, course or series of courses—the waiver follows the student. Advisors will need to process DARS exceptions for students who complete a waiver identified with a particular major/school/college but are not in the identified major/school/college.

If a waiver for a GenEd requirement is comprised of a series of courses, students must successfully complete all courses to receive the waiver. Courses must be completed with a C- or better to satisfy GenEd waiver requirements. Departments, schools and/or colleges may stipulate a higher grade to satisfy its own requirements.

Quantitative Literacy (GQ)

Students considering undergraduate degrees with advanced mathematical or statistical requirements may satisfy the GenEd Quantitative Literacy requirement through alternative coursework.

This requirement may be satisfied by successfully completing one of the following:

- Any General Education Quantitative Literacy (GQ) course.
- MATH 1031, MATH 1038, MATH 1041, MATH 1042, MATH 1941, MATH 1942, or MATH 2043.
- STAT 2101, STAT 2103, STAT 2901, STAT 2903 or an equivalent transfer course (primarily for FSBM and STHM majors and FSBM minors).
- Completion of a three-course sequence to include 1) MATH 1015, 2) MATH 1021 or EDUC 1016 and 3) ECED 3107 (primarily for Early Childhood Education majors). *All courses must be completed to receive waiver with a C- or better.*
- Completion of a four-course sequence to include MATH 1015, MATH 1021, MATH 1022, and MGSE 3404 (primarily for Middle Grades Education majors concentrating in Language Arts, Science, Science and Language Arts, and Social Studies). *All courses must be completed to receive waiver.*

Courses must be completed with a C- or better to satisfy GenEd waiver requirements.

Department/schools/colleges may stipulate a higher grade to satisfy department/school/college requirements. Consult an academic advisor for more information.

Arts (GA)

Students pursuing undergraduate degrees in the Boyer College of Music and Dance and the Tyler School of Art and Architecture may be exempted from the GenEd Arts requirement upon completion of collegiate requirements.

Boyer College of Music and Dance

Students may satisfy the GA requirement by completing one of the following four-course sequences:

- DANC 1811, DANC 2813, DANC 2814 and DANC 3812. *All courses must be completed to receive waiver.*
- MUST 1711, MUST 1712, MUST 2711, and MUST 2712. *All courses must be completed to receive waiver.*
- A transfer course or courses equivalent to the waivers described in the bullets above.

Courses must be completed with a C- or better to satisfy GenEd waiver requirements.

Department/schools/colleges may stipulate a higher grade to satisfy department/school/college requirements. Consult an academic advisor for more information.

Tyler School of Art and Architecture

Students in the following degree programs at Tyler School of Art and Architecture may satisfy the GA requirement by successfully completing a specified multi-course sequence:

Bachelor of Arts in Art Therapy
Bachelor of Arts in Visual Studies
Bachelor of Science in Education in Art Education
Bachelor of Fine Arts

ARTH 1156, and FDPR 1511 or VS 1151. *All courses must be completed with a C- or better to receive waiver.*

TUJ students in the BA in Art degree program may satisfy the GA requirement by successfully completing the following set of courses:

ARTU 1201, ARTU 1401, ARTU 1402 and ARTU 1501. *All courses must be completed with a C- or better to receive waiver. Note that this specific waiver is only for TUJ students in the BA in Art degree program.*

Department/schools/colleges may stipulate a higher grade to satisfy department/school/college requirements. Consult an academic advisor for details.

School of Theater, Film and Media Arts

Students may satisfy the GA requirement by successfully completing the following three-course sequence:

Theater Majors:

THTR 1003, THTR 1096, and THTR 1231. *All courses must be completed with a C- or better to receive the waiver.*

Musical Theater Majors:

THTR 1096, THTR 1202, and THTR 1231. *All courses must be completed with a C- or better to receive the waiver.*

Human Behavior (GB)

Students pursuing undergraduate and/or professional degrees in education may be exempted from the GenEd Human Behavior requirement upon completion of collegiate and/or degree requirements.

A student successfully satisfies the GenEd Human Behavior requirement upon completion of one of the following multi-course sequences:

- EDUC 2109, SPED 2231, and TESL 3631. All courses must be completed with a C- or better to receive the waiver.
- ECED 2101, SPED 2231, and TESL 3631. All courses must be completed with a C- or better to receive the waiver.
- EDUC 2179, MGSE 2189, MGSE 4189, and MGSE 3796. All courses must be completed with a C- or better to receive waiver.

Consult an academic advisor for more information.

Science & Technology (GS)

Many majors and programs of study require substantive studies of science to develop the expertise necessary in their fields. The sciences include studies of anatomy and physiology in human health, chemistry as the basis of human health, matter and motion, and natural phenomena. General Education would like to accommodate those students interested in pursuing such studies and have developed, in conjunction with the College of Science & Technology, a number of two-semester course sequences that would exempt students from the GenEd Science & Technology requirement.

Therefore, students considering undergraduate degrees with scientific, engineering or technical components may satisfy the GenEd Science & Technology requirement through alternative coursework. (See waiver information below.)

A student successfully satisfies the GenEd Science & Technology requirement upon completion with a C- or better any of the following two-course sequences:

- BOT 1111 — HORT 2114
- BIOL 1011 — BIOL 1012
- BIOL 1111 — BIOL 1112
- BIOL 1111 — BIOL 2112
- BIOL 1911 — BIOL 1912 (honors)
- BIOL 1911 — BIOL 2912 (honors)
- CHEM 1021 & CHEM 1023 — CHEM 1022 & CHEM 1024
- CHEM 1031 & CHEM 1033 — CHEM 1032 & CHEM 1034
- CHEM 1951 & CHEM 1953 — CHEM 1952 & CHEM 1954 (honors)
- EES 1001 — EES 2011
- EES 1001 — EES 2021
- EES 1001 — EES 2022
- EES 1001 — EES 2061

- EES 2001 — EES 2011
- EES 2001 — EES 2021
- EES 2001 — EES 2022
- EES 2001 — EES 2061
- KINS 1221 — KINS 1222
- KINS 1223 — KINS 1224
- PHYS 1001 — PHYS 1004
- PHYS 1021 — PHYS 1022
- PHYS 1061 — PHYS 1062
- PHYS 2021 — PHYS 2022
- PHYS 2921 — PHYS 2922

Students who change their course of study prior to completing the second course of any of the specified two-course sequences may complete their GenEd Science & Technology requirement by earning a C- or better with:

- One GenEd GS course and one course from either **List I** or **List II**, or
- One course from **List I** and one course from **List II**

List I

- BOT 1111
- BIOL 1011
- BIOL 1111
- BIOL 1911 (honors)
- CHEM 1021 & CHEM 1023
- CHEM 1031 & CHEM 1033
- CHEM 1951 & CHEM 1953 (honors)
- EES 1001
- EES 2001
- KINS 1221
- KINS 1223
- PHYS 1001
- PHYS 1021
- PHYS 1061
- PHYS 2021
- PHYS 2921

List II

- HORT 2114
- BIOL 1012
- BIOL 1112
- BIOL 1912 (honors)
- BIOL 2112
- BIOL 2912 (honors)
- CHEM 1022 & CHEM 1024
- CHEM 1032 & CHEM 1034
- CHEM 1952 & CHEM 1954 (honors)
- EES 2011
- EES 2021
- EES 2022
- EES 2061
- KINS 1222
- KINS 1224
- PHYS 1004
- PHYS 1022

- PHYS 1062
- PHYS 2022
- PHYS 2922

Consult an academic advisor for more information.

Global/World Society (GG)

The Global/World Society requirement may be waived if any of the following guidelines have been met:

- a student enrolled at any Temple campus successfully completes (with a C- or better) credit-bearing coursework worth at least three semester hours in an approved summer or semester study abroad program with a minimum stay abroad of 28 days.
- a student who has participated in a credit-bearing study abroad program with a minimum stay abroad of 28 days before matriculation to Temple provides a transcript with evidence of transferable college-level credit (with a C- or better).
- a student enrolled at Temple Japan successfully completes (with a C- or better) credit-bearing coursework worth at least three semester hours at a Temple U.S. campus with a minimum stay abroad of 28 days.
- a student enrolled at any campus provides a transcript with an international study abroad experience in which at least three semester hours of coursework (with a C- or better) transferred to Temple.
- a U.S. campus admit is a Foreign National student whose permanent residence at the point of admission is outside of U.S. boundaries.
- a Japan campus admit is a Foreign National student whose permanent residence at the point of admission is outside of Japanese boundaries.
- a Temple Rome Entry Year student enrolls at Temple Japan or a Temple U.S. campus after having successfully completed (with a C- or better) credit-bearing coursework at Temple Rome worth at least three semester hours with a minimum stay abroad of 28 days.
- a student successfully completes (with a C- or better) the Latin American Studies Semester (LASS).

Consult an academic advisor for details.

List of GenEd Courses by Area

- Analytical Reading and Writing (GW) (p. 89)
- Intellectual Heritage I and II (GY & GZ) (p. 95)
- Quantitative Literacy (GQ) (p. 95)
- Arts (GA) (p. 90)
- Global/World Society (GG) (p. 92)
- Human Behavior (GB) (p. 93)
- Race & Diversity (GD) (p. 96)
- Science & Technology (GS) (p. 98)
- U.S. Society (GU) (p. 100)

Analytical Reading & Writing (GW)

Requirement: One 4-credit hour course.

Writing Placement: Detailed information on placement into ENG 0701, ENG 0711, ENG 0802, and ENG 0812 can be found on the Placement Assessments page (p. 1859) of the *Bulletin*.

This course should be taken as soon as possible—ideally in the first semester, but certainly in the first year.

This course addresses the following competencies:

Critical Reading and Thinking

Students can read for the purposes of careful analysis and critique, evaluate both the evidence and reasoning in an academic text, and see relationships (explicit and implicit) between and among multiple texts; they can raise meaningful questions, compare ideas, and extract underlying assumptions.

Self-reflection

Students are able to reflect, seriously and critically, on their own writing processes as well as their written work.

Rhetorical Strategies

In academic writing, students can:

- Define key terms for specific purposes.
- Summarize the ideas and arguments of others.
- Make meaningful comparisons between ideas.
- Analyze and respond to the needs of a specific task/audience.

Argumentation

Students can take a position, marshal and organize relevant evidence, and respond to opposing views.

Revision

Students can substantively revise earlier written work.

Correctness

In their finished papers, students demonstrate a reasonable degree of both fluency and competence with Standard English, and ESL students should demonstrate marked improvement in these areas. All students should be able to effectively edit their own work.

Analytical Reading & Writing Courses

- Analytical Reading & Writing ENG 0802
- English as a Second Language (ESL) Analytical Reading & Writing ENG 0812
- Honors Writing About Literature ENG 0902

Find out more about Analytical Reading and Writing at <https://liberalarts.temple.edu/academics/departments-and-programs/english/undergraduate/first-year-writing-program>.

Arts (GA)

Requirement: One 3-credit or 4-credit hour course.

GenEd Arts courses develop artistic literacy. Courses may be centered on one of the arts (e.g. dance, fine arts, music), may be interdisciplinary in nature (e.g. creative writing and theater, film and dance), or may address larger themes (e.g. creativity, the arts and political statement, technology and the arts), but all Arts courses make some connection to other perspectives, disciplines, or subject areas.

GenEd Arts courses are intended to teach students how to:

- Experience and respond to a work of art or creative process;
- Recognize or interpret a work of art or creative process in its social, historical and cultural context;
- Describe or evaluate a work of art or creative process using appropriate terminology;
- Demonstrate an "appreciation" for the value of art in our lives and in society; and
- Function as a member of an audience.

Arts Courses

Below, you will find a list of GenEd courses in this area.

Please be advised that GenEd offerings vary from semester to semester and that all GenEd courses will not be offered every semester. For the most current list of GenEd offerings, please consult the Class Schedule.

In addition, a single GenEd course may be offered by more than one department. GenEd courses offered by more than one department will have the same course number and the same course title. A student may not take the same course from multiple departments and earn credit toward graduation. However, if a student wishes to replace their grade in a GenEd course, they may replace the grade with any course bearing the same course number and the same course title regardless of department.

- Art Matters: Ideas in Art and Architecture ARTH 0808
- Arts in Cultural Context ASST 0871, RUS 0871
- Creative Acts ENG 0826
- Dramatic Imagination: The Performing Arts in Society THTR 0805
- Exploring Music MUST 0812
- From Page to Stage THTR 0813
- Greek Theater & Society GRC 0811
- Philadelphia Arts & Culture AMST 0801

- Shakespeare and Music MUST 0804
- Shakespeare in the Movies ENG 0822
- Shall We Dance? Dance as Narrative in American Film DANC 0831
- The Art of Acting THTR 0825
- The Art of Listening MUST 0802
- The Art of Sacred Space ARTH 0803, GRC 0803
- The Creative Spirit: A Multidisciplinary View THTR 0807
- The Future of Your TV MSP 0821
- The History of Art in Rome (Rome Campus only) ARTH 0813
- The History of Japanese Design: Anonymity, Desire, Shadows & Sports (Japan Campus only) TUJ 0879
- The Jazz Century in America DANC 0806
- The Meaning of the Arts PHIL 0847
- World Musics & Cultures MUST 0809
- Honors Art of Acting THTR 0925
- Honors Art of Sacred Space GRC 0903
- Honors Creative Acts ENG 0926
- Honors Greek Theater & Society GRC 0911
- Honors: Philadelphia Arts & Culture AMST 0901
- Honors Shakespeare in the Movies ENG 0922
- Honors Shall We Dance? Dance as Narrative in American Film DANC 0931
- Honors: The Art of Listening MUST 0902
- Honors The Creative Spirit: A Multidisciplinary View THTR 0907
- Honors The Meaning of the Arts PHIL 0947
- Honors Transnational Cinema ENG 0975
- Honors World Musics & Cultures MUST 0909

Waiver

Students pursuing undergraduate degrees in the Boyer College of Music and Dance and the Tyler School of Art and Architecture may be exempted from the GenEd Arts requirement upon completion of collegiate requirements.

Boyer College of Music and Dance

Students may satisfy the GA requirement by successfully completing one of the following four-course sequences:

- DANC 1811, DANC 2813, DANC 2814, and DANC 3812. All courses must be completed to receive waiver.
- MUST 1711, MUST 1712, MUST 2711, and MUST 2712. All courses must be completed to receive waiver.
- A transfer course or courses equivalent to the waivers described in the bullets above.

Courses must be completed with a C- or better to satisfy GenEd waiver requirements.

Department/schools/colleges may stipulate a higher grade to satisfy department/school/college requirements.

Tyler School of Art and Architecture

Students in the following degree programs at Tyler School of Art and Architecture may satisfy the GA requirement by successfully completing a specified multi-course sequence:

Bachelor of Arts in Art Therapy

Bachelor of Arts in Visual Studies

Bachelor of Science in Education in Art Education

Bachelor of Fine Arts

ARTH 1156, and FDPR 1511 or VS 1151. All courses must be completed with a C- or better to receive waiver.

TUJ students in the BA in Art degree program may satisfy the GA requirement by successfully completing the following set of courses:

ARTU 1201, ARTU 1401, ARTU 1402 and ARTU 1501. All courses must be completed with a C- or better to receive waiver. Note that this specific waiver is only for TUJ students in the BA in Art degree program.

Department/schools/colleges may stipulate a higher grade to satisfy department/school/college requirements.

Consult an academic advisor for details.

School of Theater, Film and Media Arts

Students may satisfy the GA requirement by successfully completing the following three-course sequence:

Theater Majors:

THTR 1003, THTR 1096, and THTR 1231. All courses must be completed with a C- or better to receive the waiver.

Musical Theater Majors:

THTR 1096, THTR 1202, and THTR 1231. All courses must be completed with a C- or better to receive the waiver.

Global/World Society (GG)

Requirement: One 3-credit hour course.

GenEd Global/World Society courses explore societies and cultures outside of the United States. These courses take one of two approaches. Some concentrate on a single nation or region, examining in depth its political, social, historical, cultural, artistic, literary, geographic, and/or economic landscape. Others investigate globalization and its effects across nations and regions.

Global/World Society courses are intended to teach students how to:

- Understand the influences (e.g. political, social, historical, cultural, artistic, literary, geographic, economic) on world societies or processes (e.g. globalization) linking world societies;
- Access and analyze materials related to world societies and cultures;
- Develop observations and conclusions about selected themes in world societies and cultures;
- Construct interpretations using evidence and critical analysis; and
- Communicate and defend interpretations.

Global/World Society Courses

Below, you will find a list of GenEd courses in this area.

Please be advised that GenEd offerings vary from semester to semester and that all GenEd courses will not be offered every semester. For the most current list of GenEd offerings, please consult the Class Schedule.

In addition, a single GenEd course may be offered by more than one department. GenEd courses offered by more than one department will have the same course number and the same course title. A student may not take the same course from multiple departments and earn credit toward graduation. However, if a student wishes to replace their grade in a GenEd course, they may replace the grade with any course bearing the same course number and the same course title regardless of department.

- Advertising and Globalization ADV 0853
- Border Crossings: Gendered Dimensions of Globalization GSWS 0801
- Confronting Empire: Voices of Resistance HIST 0874
- Development and Globalization ASST 0862, GUS 0862, HIST 0862, POLS 0862, SOC 0862
- Education for Liberation Here and Abroad URBE 0855
- Evolution of Culture ANTH 0856
- Gender and World Societies GSWS 0824, HIST 0824
- Global Cities GUS 0831
- Global Slavery HIST 0861
- Latin American Media MSP 0823
- Latino Immigration LAS 0854, SPAN 0854
- Law Beyond Borders LAWU 0875
- Philadelphia Dance Experience DANC 0827
- Religion in the World ASST 0863, PHIL 0863, REL 0863
- The Cinematic City FMA 0869
- The Detective Novel ASST 0857, ENG 0857
- The Global Crisis: Power, Politics and the Making of Our Times HIST 0865

- The World of Sign Languages CSCD 0816
- Turning Points in Human History: The Modern World HIST 0872
- Using Cultural Intelligence in a Globalized World THM 0877
- War and Peace HIST 0864, POLS 0864
- World Affairs POLS 0866
- World Performances THTR 0852
- World Regions and Cultures: Diversity and Interconnections ANTH 0867, GUS 0867
- World Society in Literature & Film ARBC 0868, ASST 0868, CHI 0868, ENG 0868, FREN 0868, GER 0868, ITAL 0868, JPNS 0868, JST 0868, LAS 0868, POLS 0868, RUS 0868, SPAN 0868
- Honors Advertising and Globalization ADV 0953
- Honors Fate, Hope, and Action: Globalization Today POLS 0962, SOC 0962
- Honors Global Slavery HIST 0961
- Honors Religion in the World REL 0963
- Honors: The Cinematic City FMA 0969
- Honors War and Peace HIST 0964
- Honors Women in Modern Bengali Film ENG 0973
- Honors World Affairs POLS 0966
- Honors World Performances THTR 0952
- Honors World Society in Literature & Film ARBC 0968, ENG 0968, GER 0968, ITAL 0968, LAS 0968, RUS 0968, SPAN 0968

Waiver:

The Global/World Society requirement may be waived if any of the following guidelines have been met:

- a student enrolled at any Temple campus successfully completes (with a C- or better) credit-bearing coursework worth at least three semester hours in an approved summer or semester study abroad program with a minimum stay abroad of 28 days.
- a student who has participated in a credit-bearing study abroad program with a minimum stay abroad of 28 days before matriculation to Temple provides a transcript with evidence of transferrable college-level credit (with a C- or better).
- a student enrolled at Temple Japan successfully completes (with a C- or better) credit-bearing coursework worth at least three semester hours at a Temple U.S. campus with a minimum stay abroad of 28 days.
- a student enrolled at any campus provides a transcript with an international study abroad experience in which at least three semester hours of coursework (with a C- or better) transferred to Temple.
- a U.S. campus admit is a Foreign National student whose permanent residence at the point of admission is outside of U.S. boundaries.
- a Japan campus admit is a Foreign National student whose permanent residence at the point of admission is outside of Japanese boundaries.
- a Temple Rome Entry Year student enrolls at Temple Japan or a Temple U.S. campus after having successfully completed (with a C- or better) credit-bearing coursework at Temple Rome worth at least three semester hours with a minimum stay abroad of 28 days.
- a student successfully completes (with a C- or better) the Latin American Studies Semester (LASS).

Consult an academic advisor for details.

Human Behavior (GB)

Requirement: One 3-credit hour course.

GenEd Human Behavior courses address the relationships between individuals and communities. Courses may focus on the relationship between individuals and communities in general or may engage those relationships from specific perspectives (such as art, music, education, religion, economics, politics or education), or look at them within specific themes (such as food & eating, crime, crisis, sexuality, or adolescence).

Human Behavior courses are intended to teach students how to:

- Understand relationships between individuals and communities;
- Understand theories or explanations of human behavior used to describe social phenomena;
- Examine the development of individuals' beliefs, behaviors, and assumptions and how these affect individuals and communities;
- Apply one disciplinary method to understand human behavior or explain social phenomena;
- Access and analyze materials related to individuals, communities or social phenomena; and
- Compare and contrast similar social phenomena across individuals or communities.

Human Behavior Courses

Below, you will find a list of GenEd courses in this area.

Please be advised that GenEd offerings vary from semester to semester and that all GenEd courses will not be offered every semester. For the most current list of GenEd offerings, please consult the Class Schedule.

In addition, a single GenEd course may be offered by more than one department. GenEd courses offered by more than one department will have the same course number and the same course title. A student may not take the same course from multiple departments and earn credit toward graduation. However, if a student wishes to replace their grade in a GenEd course, they may replace the grade with any course bearing the same course number and the same course title regardless of department.

- Ancient War Games: Sport and Spectacle in Greece and Rome GRC 0829
- Asian Behavior & Thought ASST 0811, REL 0811
- Bilingual Communities SPAN 0826
- Creativity and Organizational Innovation SGM 0827
- Criminal Behavior CJ 0812
- Cyberpsychology and Behavior PSY 0846
- Deadly Contagions: Past, Present, and Future Pandemics SOC 0845
- Disability Identity in Contemporary Society RCTH 0813
- Eating Cultures ENG 0837, SPAN 0837
- Guerrilla Altruism: A Mini-Manual of Subversive Activism ARCH 0835
- Human Behavior and the Photographic Image ART 0822, GAD 0822, SSWU 0822
- Human Ecology ANTH 0814
- Human Sexuality PSY 0818, SOC 0818
- Interpersonal Communication: Critical Competencies for Professional and Personal Success AOD 0836, CSI 0836
- Language in Society ANTH 0815, CSCD 0815, EDUC 0815, ENG 0815, ITAL 0815, RUS 0815, SPAN 0815
- Law and Literature, Law in Fact LAWU 0833
- Media in a Hyper-Mediated World KLN 0873
- Philosophy of the Human PHIL 0839
- Sexual Orientation, Gender Identity and the Law LGLS 0805
- The Attentive Mind CSCD 0841
- The Meaning of Madness SPSY 0828
- The Quest for Utopia ENG 0824
- Tweens and Teens EDUC 0819
- Understanding Justice LAWU 0834
- Workings of the Mind PSY 0816
- Youth Cultures ANTH 0817, EDUC 0817, SOC 0817
- Honors Ancient War Games: Sport and Spectacle in Greece and Rome GRC 0929
- Honors Asian Behavior & Thought REL 0911
- Honors Bilingual Communities SPAN 0926
- Honors Criminal Behavior CJ 0912
- Honors Eating Cultures SPAN 0937
- Honors Guerrilla Altruism: A Mini-Manual of Subversive Activism ARCH 0935
- Honors Human Sexuality PSY 0918, SOC 0918
- Honors Language in Society ANTH 0915, EDUC 0915
- Honors The Meaning of Madness SPSY 0928
- Honors Philosophy of the Human PHIL 0939
- Honors Sexual Orientation, Gender Identity and the Law LGLS 0905
- Honors: The Quest for Utopia ENG 0924
- Honors Tweens and Teens EDUC 0919
- Honors Workings of the Mind PSY 0916
- Honors Youth Cultures EDUC 0917

Waiver

Students pursuing undergraduate degrees in education, including art, middle or secondary certifications, may be exempted from the GenEd Human Behavior requirement upon completion of collegiate requirements.

A student will be waived from the GenEd Human Behavior requirement upon completion of one of the following multi-course sequences:

- EDUC 2109, SPED 2231, and TESL 3631. All courses must be completed with a C- or better to receive waiver.
- ECED 2101, SPED 2231, and TESL 3631. All courses must be completed with a C- or better to receive waiver.
- EDUC 2179, MGSE 2189, MGSE 4189, and MGSE 3796. All courses must be completed with a C- or better to receive waiver.

Consult an academic advisor for more information.

Intellectual Heritage (GY & GZ)

Requirement: *Intellectual Heritage I: The Good Life* (3 credits) and *Intellectual Heritage II: The Common Good* (3 credits). Students normally complete their Intellectual Heritage requirements soon after completing Analytical Reading & Writing. Students may take Intellectual Heritage I and Intellectual Heritage II in any order.

The Intellectual Heritage (IH) curriculum introduces students to intellectually and artistically influential works, both ancient and modern, from cultures around the world. In small seminars, students read and discuss books that have shaped the ways people think and act, working together to interpret their historical significance, their relation to one another, and their relevance today. IH asks students to discover and debate timeless questions of human experience, to face different values and viewpoints fairly, and to examine the present in relation to the past. The attitudes cultivated in IH — thoroughness, open-mindedness, intellectual courage, and vision — prepare today's students, tomorrow's citizens, for lasting learning and engaged lives.

Intellectual Heritage courses are defined by the following area competencies:

- The seminar experience: Students will share ideas, ask questions, and actively listen to peers in a free and honest exchange of multiple viewpoints.
- Communication and critical thinking: Students will sharpen analysis and argumentation skills through a variety of expressive modes.
- Ethical reasoning: Students will evaluate the historical, social, and cultural bases of prevailing beliefs.
- Diversity & Universality: Students will investigate fundamental questions of human experience from a variety of perspectives.
- Connecting texts to world: Students will make connections between historical texts about human existence and current moral, social, and political issues.

Intellectual Heritage Courses

- Intellectual Heritage I: The Good Life IH 0851
- Intellectual Heritage II: The Common Good IH 0852
- Honors Intellectual Heritage I: The Good Life IH 0951
- Honors Intellectual Heritage II: The Common Good IH 0952

Find out more about Intellectual Heritage at <https://liberalarts.temple.edu/academics/departments-and-programs/intellectual-heritage>.

Quantitative Literacy (GQ)

Requirement: One 4-credit hour course.

Math Placement: Detailed information on placement into MATH 0701/MATH 0702, and GenEd Quantitative Literacy (GQ) can be found on the *Bulletin's* Placement Assessments page (p. 1859).

A student placed in MATH 0701/MATH 0702 is required to complete successfully MATH 0701 or MATH 0702 (for students who need to take a higher course in the MATH sequence) before enrolling in a GenEd Quantitative Literacy course or GenEd Science & Technology courses, as these courses require students to understand and perform basic computational skills.

GenEd Quantitative Literacy courses present mathematical thinking as a tool for solving everyday problems and as a way of understanding how to represent aspects of a complex world. They are designed to prepare students as citizens and voters to have the ability to think critically about quantitative statements, to recognize when they are misleading or false, and to appreciate how they relate to significant social or political issues. While computation may be part of a Quantitative Literacy course, the primary focus is not computational skills.

Quantitative Literacy courses are intended to teach students how to:

- Understand quantitative models that describe real world phenomena and recognize limitations of those models;
- Perform simple mathematical computations associated with a quantitative model and make conclusions based on the results;

- Recognize, use, and appreciate mathematical thinking for solving problems that are part of everyday life;
- Understand the various sources of uncertainty and error in empirical data;
- Retrieve, organize, and analyze data associated with a quantitative model; and
- Communicate logical arguments and their conclusions.

Quantitative Literacy Courses

Below, you will find a list of GenEd courses in this area.

Please be advised that GenEd offerings vary from semester to semester and that all GenEd courses will not be offered every semester. For the most current list of GenEd offerings, please consult the Class Schedule.

In addition, a single GenEd course may be offered by more than one department. GenEd courses offered by more than one department will have the same course number and the same course title. A student may not take the same course from multiple departments and earn credit toward graduation. However, if a student wishes to replace their grade in a GenEd course, they may replace the grade with any course bearing the same course number and the same course title regardless of department.

- Albums and Algorithms EDUC 0865
- Critical Reasoning and Problem Solving MATH 0828
- Digital Mapping: From Mercator to Mashups CTRP 0821, GUS 0821
- Environmental Life Cycle Analysis: Does Buying "Green" Matter? EES 0874
- Evil Plots EES 0873
- Investing for the Future ECE 0822, FIN 0822
- Math for a Digital World CIS 0823, MATH 0823
- Mathematical Patterns MATH 0824
- Quantitative Methods in the Social Sciences ANTH 0825, POLS 0825, PSY 0825, SOC 0825
- Statistical Reasoning & Games of Chance STAT 0827
- Statistics in the News STAT 0826
- Honors Critical Reasoning and Problem Solving MATH 0928
- Honors Digital Mapping: From Mercator to Mashups GUS 0921
- Honors Evil Plots EES 0973
- Honors Investing for the Future FIN 0922
- Honors Math for a Digital World CIS 0923, MATH 0923
- Honors Mathematical Patterns MATH 0924
- Honors Quantitative Methods in the Social Sciences POLS 0925, SOC 0925

Waivers

Students considering undergraduate degrees with advanced mathematical or statistical requirements may satisfy the GenEd Quantitative Literacy requirement through alternative coursework.

A student will be waived from the GenEd Quantitative Literacy requirement upon completion of any of the following:

- MATH 1031, MATH 1038, MATH 1041, MATH 1042, MATH 1941, MATH 1942, or MATH 2043.
- STAT 2101, STAT 2103, STAT 2901, STAT 2903 or an equivalent transfer course (primarily for FSBM and STHM majors and FSBM minors).
- Completion of a three-course sequence to include 1) MATH 1015, 2) MATH 1021 or EDUC 1016, and 3) ECED 3107 (primarily for Early Childhood Education majors). *All courses must be completed with a C- or better to receive waiver.*
- Completion of a four-course sequence to include MATH 1015, MATH 1021, MATH 1022, and MGSE 3404 (primarily for Middle Grades Education majors concentrating in Language Arts, Science, Science and Language Arts, and Social Studies). *All courses must be completed to receive waiver.*

Courses must be completed with a C- or better to satisfy GenEd waiver requirements.

Department/schools/colleges may stipulate a higher grade to satisfy department/school/college requirements.

Consult an academic advisor for details.

Race & Diversity (GD)

Requirement: One 3-credit hour course.

Race & Diversity courses develop a sophisticated understanding of race and racism as dynamic concepts, pointing to the ways in which race intersects with other group identifications such as gender, class, ethnicity, religion, age, sexual orientation or disability.

Race & Diversity courses are intended to teach students how to:

- Recognize the ways in which race intersects with other group identifications or ascriptions, including gender, class, ethnicity, sexual orientation, religion, disability, age;
- Understand the relationships among diversity, justice and power;
- Explore what it means for individuals and institutions to exist in a multi-racial, multi-cultural world;
- Investigate the various forms race and racism has taken in different places and times; and
- Discuss race matters with diverse others in relation to personal experience.

Race & Diversity Courses

Below, you will find a list of GenEd courses in this area.

Please be advised that GenEd offerings vary from semester to semester and that all GenEd courses will not be offered every semester. For the most current list of GenEd offerings, please consult the Class Schedule.

In addition, a single GenEd course may be offered by more than one department. GenEd courses offered by more than one department will have the same course number and the same course title. A student may not take the same course from multiple departments and earn credit toward graduation. However, if a student wishes to replace their grade in a GenEd course, they may replace the grade with any course bearing the same course number and the same course title regardless of department.

- African Americans, Equality and the Law: Weapon or Tool? LGLS 0803
- Asians, Asian-Americans, and Pacific Islanders in the United States: Race, Diversity, and Identity PHIL 0878, POLS 0878
- Classics of African American Theater THTR 0841
- Climate Change and Climate Justice PHIL 0877
- Dimensions of Diversity: What's Brewing in the Melting Pot? STHM 0827
- Embodying Pluralism DANC 0828
- Ethnicity and the Immigrant Experience in the U.S. SOC 0835
- Hidden Figures to Gamergate: Race and Gender in Science and Technology EES 0827
- Immigration and the American Dream ANTH 0831, HIST 0831, ITAL 0831, RUS 0831, SOC 0831, SPAN 0831
- It's Bigger Than Hip-hop: Exploring the Evolution of Race and Identity through Hip-hop EDUC 0806
- Kids in Crisis: When Schools Don't Work EDUC 0823
- Politics of Identity in America GSWS 0832, HIST 0832, POLS 0832, SOC 0832
- Race & Diversity in Children's and Young Adult Books: Reading Between the Lines EDUC 0809
- Race & Ethnicity in the Cinematic Arts FMA 0843
- Race & Identity in Judaism JST 0802, REL 0802
- Race & Poverty in the Americas ANTH 0833, LAS 0833, REL 0833, SOC 0833
- Race, Identity and Experience in American Art TYLE 0805
- Race in the Ancient Mediterranean GRC 0804
- Race on the Stage THTR 0842
- Representing Race AAAS 0834, ANTH 0834, ENG 0834, HIST 0834
- The History & Significance of Race in America AAAS 0829, ANTH 0829, GUS 0829, HIST 0829, POLS 0829, SOC 0829
- The Sounds of Philadelphia MUST 0808
- Honors African Americans, Equality and the Law: Weapon or Tool? LGLS 0903
- Honors Climate Change and Climate Justice PHIL 0977
- Honors Ethnicity and the Immigrant Experience in the U.S. SOC 0935
- Honors Immigration and the American Dream ITAL 0931, SPAN 0931
- Honors Politics of Identity POLS 0932
- Honors Race & Ethnicity in the Cinematic Arts FMA 0943
- Honors Race & Identity in Judaism JST 0902, REL 0902
- Honors Race & Poverty in the Americas REL 0933
- Honors Race, Identity and Experience in American Art TYLE 0905
- Honors Race in the Ancient Mediterranean GRC 0904

- Honors Representing Race ANTH 0934, ENG 0934
- Honors: The History & Significance of Race in America HIST 0929, POLS 0929, SOC 0929

Science & Technology (GS)

Requirement: Two 3-credit hour courses.

GenEd Science & Technology courses present scientific process in context, helping students understand how scientific phenomena and/or technological change affects human life and the planet.

Science & Technology courses are intended to teach students how to:

- Understand and describe the scientific process;
- Understand the sequential nature of science and technology;
- Recognize, use and appreciate scientific or technological thinking for solving problems that are part of everyday life;
- Understand and communicate how technology encourages the process of discovery in science and related disciplines; and
- Retrieve, organize, and analyze data associated with a scientific or technological model.

Science & Technology Courses

Below, you will find a list of GenEd courses in this area.

Please be advised that GenEd offerings vary from semester to semester and that all GenEd courses will not be offered every semester. For the most current list of GenEd offerings, please consult the Class Schedule.

In addition, a single GenEd course may be offered by more than one department. GenEd courses offered by more than one department will have the same course number and the same course title. A student may not take the same course from multiple departments and earn credit toward graduation. However, if a student wishes to replace their grade in a GenEd course, they may replace the grade with any course bearing the same course number and the same course title regardless of department.

- Brain Matters NSCI 0817, PSY 0817
- Chemistry of Wine CHEM 0821
- Cyberspace & Society CIS 0835
- Data Science MIS 0855
- Digital World and Everyday Life ECE 0832
- Disasters: Geology vs. Hollywood EES 0836
- DNA: Friend or Foe BIOL 0848
- Ethical Issues in Biomedical Science, Engineering and Technology BIOE 0856
- Evolution of Earth and Its Life EES 0837
- Exploring the Cosmos PHYS 0834
- Geology of the National Parks EES 0854
- Green vs. Gray: Improving and Sustaining Urban Ecosystems LARC 0852
- How Things Work: The Physics of Everyday Life PHYS 0847
- Nature Has No Reverse (Temple Japan campus only) CHEM 0838
- Powering the Future PHYS 0839
- Sustainable Design LARC 0841
- Sustainable Environments EES 0842, ENST 0842, GUS 0842
- Technological Horizons: Information Technology in the 21st Century CIS 0822
- Technology Transformations MEE 0843
- The Bionic Human BIOE 0844
- The Chemistry of Global Environmental Issues CHEM 0877
- The Environment CEE 0845, ENVT 0845
- The Science of Sound PHYS 0872
- Honors Bionic Human BIOE 0944
- Honors DNA: Friend or Foe BIOL 0948
- Honors Cyberspace & Society CIS 0935
- Honors Data Science MIS 0955
- Honors Ethical Issues in Biomedical Science, Engineering and Technology BIOE 0956

- Honors Geology of the National Parks EES 0954
- Honors Sustainable Environments ENST 0942, GUS 0942
- Honors: The Environment CEE 0945, ENVT 0945
- Honors Powering the Future PHYS 0939

Waiver

Students considering undergraduate degrees with scientific, engineering or technical components may satisfy the GenEd Science & Technology requirement through alternative coursework identified below.

A student will be waived from the GenEd Science & Technology requirement upon completion of any of the following two-course sequences:

- BOT 1111 — HORT 2114
- BIOL 1011 — BIOL 1012
- BIOL 1111 — BIOL 1112
- BIOL 1111 — BIOL 2112
- BIOL 1911 — BIOL 1912 (honors)
- BIOL 1911 — BIOL 2912 (honors)
- CHEM 1021 & CHEM 1023 — CHEM 1022 & CHEM 1024
- CHEM 1031 & CHEM 1033 — CHEM 1032 & CHEM 1034
- CHEM 1951 & CHEM 1953 — CHEM 1952 & CHEM 1954 (honors)
- EES 1001 — EES 2011
- EES 1001 — EES 2021
- EES 1001 — EES 2022
- EES 1001 — EES 2061
- EES 2001 — EES 2011
- EES 2001 — EES 2021
- EES 2001 — EES 2022
- EES 2001 — EES 2061
- KINS 1221 — KINS 1222
- KINS 1223 — KINS 1224
- PHYS 1001 — PHYS 1004
- PHYS 1021 — PHYS 1022
- PHYS 1061 — PHYS 1062
- PHYS 2021 — PHYS 2022
- PHYS 2921 — PHYS 2922

Students who change their course of study prior to completing the second course of any of the specified two-course sequence may complete their GenEd Science & Technology requirement in two ways:

- One GenEd GS course and one course from either **List I** or **List II**
- One course from **List I** and one course from **List II**

List I

- BOT 1111
- BIOL 1011
- BIOL 1111
- BIOL 1911 (honors)
- CHEM 1021 & CHEM 1023
- CHEM 1031 & CHEM 1033
- CHEM 1951 & CHEM 1953 (honors)
- EES 1001
- EES 2001
- KINS 1221
- KINS 1223
- PHYS 1001

- PHYS 1021
- PHYS 1061
- PHYS 2021
- PHYS 2921

List II

- HORT 2114
- BIOL 1012
- BIOL 1112
- BIOL 1912 (honors)
- BIOL 2112
- BIOL 2912 (honors)
- CHEM 1022 & CHEM 1024
- CHEM 1032 & CHEM 1034
- CHEM 1952 & CHEM 1954 (honors)
- EES 2011
- EES 2021
- EES 2022
- EES 2061
- KINS 1222
- KINS 1224
- PHYS 1004
- PHYS 1022
- PHYS 1062
- PHYS 2022
- PHYS 2922

Consult an academic advisor for more information.

U.S. Society (GU)

Requirement: One 3-credit hour course.

GenEd U.S. Society courses strengthen students' understanding of the history, society, culture and political systems of the United States.

They are intended to teach students how to:

- Access and analyze historical, analytical, and cultural materials;
- Develop observations and conclusions about selected themes in U.S. society and culture;
- Construct interpretations using evidence and critical analysis;
- Communicate and defend interpretations; and
- Analyze the ways difference and heterogeneity have shaped the culture and society of the U.S.

U.S. Society Courses

Below, you will find a list of GenEd courses in this area.

Please be advised that GenEd offerings vary from semester to semester and that all GenEd courses will not be offered every semester. For the most current list of GenEd offerings, please consult the Class Schedule.

In addition, a single GenEd course may be offered by more than one department. GenEd courses offered by more than one department will have the same course number and the same course title. A student may not take the same course from multiple departments and earn credit toward graduation. However, if a student wishes to replace their grade in a GenEd course, they may replace the grade with any course bearing the same course number and the same course title regardless of department.

- American Military Culture AMST 0847, HIST 0847
- American Revolutions AMST 0848, HIST 0848
- Architecture and the American Cultural Landscape ARCH 0875

- Contemporary American Social Movements CSI 0801
- Dissent in America ENG 0849, HIST 0849
- Doing Justice CJ 0853
- Education in the Global City LAWU 0854
- First Person America AMST 0862
- Founding Philadelphia HIST 0867
- Gender in America GSWS 0851, SOC 0851
- Justice in America CJ 0852
- Landscape of American Thought PHIL 0824
- Law and American Society LGLS 0856
- Living for Change: Autobiographies of Women in Radical Social Movements GSWS 0863
- People, Places, and Environment CTRP 0807
- Religion in Philadelphia HIST 0876, REL 0876
- Sport & Leisure in American Society AAAS 0857, SOC 0857, STHM 0857
- The American Economy ECON 0858
- The Making of American Society: Melting Pot or Culture Wars? AMST 0859, HIST 0859, PHIL 0859, POLS 0859
- The United States Constitution and Popular Culture LAWU 0825
- Urban Dynamics: Global, Regional, and Local Connections GUS 0861, SOC 0861
- Why care about College: Higher Education in American Life AMST 0855, EDAD 0855, ENG 0855
- Honors Architecture & the American Cultural Landscape: Physical Dimensions of Cultural Settings ARCH 0975
- Honors Contemporary American Social Movements CSI 0901
- Honors Dissent in America ENG 0949, HIST 0949
- Honors: Doing Justice CJ 0953
- Honors: First Person America AMST 0962
- Honors: Justice in America CJ 0952
- Honors Law and American Society LGLS 0956
- Honors Living for Change: Autobiographies of Women in Radical Social Movements GSWS 0963
- Honors Religion in Philadelphia HIST 0976, REL 0976
- Honors Sport & Leisure in American Society REL 0957
- Honors Why care about College: Higher Education in American Life EDAD 0955

University Requirements: Writing-intensive Courses

For most professionals—doctors, accountants, social workers, educators, policy-makers, performers, etc.—writing is an important part of work-life, and writing well often paves the way to professional success. But the kinds of writing that are valued in the professions are typically different from the kinds of writing that students use in school. The writing-intensive course program at Temple University is designed to provide students with a window into the types of writing they may be expected to produce after graduation. To this end, departments and programs have designated specific writing-intensive courses that are part of the major; in these writing courses, students study, write and revise texts that are similar to what they will encounter in their post-Temple careers.

All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits. Students must complete the writing-intensive courses that are specified by their major. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits.

The specific courses that are required for particular majors can be found within this *Undergraduate Bulletin*. Writing-intensive courses are identified by the last two digits of the course number: courses numbered xx96, xx97, and xx98 are writing-intensive. These courses can also be identified by the Course Attribute of "WI" (Writing Intensive).

The writing-intensive courses must be completed at Temple University. Students may not transfer in credits to satisfy this requirement. Students who have problems completing their writing-intensive course requirements should contact their advisors.

Since not all writing-intensive courses are offered every semester, students are advised to search the Class Schedule for course availability each semester.

More information about the writing-intensive course program is available at the Student Success Center.

Schools, Colleges and Divisions

Temple University consists of the following schools and colleges:

- Tyler School of Art and Architecture (p. 104)
- Center for the Performing and Cinematic Arts (p. 313)
 - Boyer College of Music and Dance (p. 314)
 - School of Theater, Film and Media Arts (p. 485)
- College of Education and Human Development (p. 552)
- College of Engineering (p. 648)
- Fox School of Business and Management (p. 789)
- College of Liberal Arts (p. 932)
- Low Klein College of Media and Communication (p. 1180)
- College of Public Health (p. 1350)
- School of Social Work (p. 1404)
- College of Science and Technology (p. 1412)
- School of Sport, Tourism and Hospitality Management (p. 1751)

The following are academic units within the university:

- University College (p. 1779)
- Division of University Studies (p. 1788)
- Temple University, Japan Campus (p. 1827)

How to find Academic Plans

To find academic plans for a specific program, go to the Academic Programs List (p. 2908) and select the hyperlinked degree next to the program name.

An alternate route to academic plans is to select one of the schools or colleges listed above. Once on the selected school or college, navigate to its Programs tab and select the program from the list.

Tyler School of Art and Architecture

Overview

Mission

The Tyler School of Art and Architecture educates, motivates and inspires individuals who will enter society as artists, architects, art historians, designers and educators with the highest aspirations for achievement, producing innovative work that is publicly presented and critically considered. Founded upon the ideals of progressive education emphasizing exposure to a variety of experiences before selecting a major, attention to each student's mastery of technique, and the shaping of a personal artistic vision within the framework of a research university, the objective of the Tyler School of Art and Architecture is to create an engaging and critical environment that

- Promotes cutting edge curriculum initiatives through a broad spectrum of philosophical and aesthetic approaches;
- Through its relationship with Temple University, provides access to students who otherwise would not consider art and design as a career path;
- Fosters interdisciplinary insights and collaborations promoting artistic and intellectual freedom, creativity and experimentation in a diverse and heterogeneous environment;
- Demonstrates to students, through the faculty's own practice and scholarship, that the study of art and design is process-oriented and research-based;
- Interacts with a broad spectrum of local, national and international artists, scholars and communities in the exploration of art and its role in society; and
- Builds upon our outreach to the Temple University community, to the local neighborhoods and to cultural organizations.

History

Artist and arts patron Stella Elkins Tyler donated her estate to Temple University in the early 1930s. With an interest in progressive education and a deep appreciation of her mentor, the sculptor Boris Blai, Mrs. Tyler offered her estate with the expressed wish that, through Boris Blai, it would become an environment for the advancement of the fine arts, scholarly study in the arts, and individual creativity.

As founding Dean of what was then known as the Stella Elkins Tyler School of Fine Arts, Blai was committed to art as a socially engaged practice. "It is the principle of the school that students in the fields of art are not to be set apart," he wrote in Tyler's 1945 catalogue, "but that they are individuals who must contribute to the life and developments of society at large."

Blai instilled within the school a commitment to progressive education, emphasizing personal expression and technical expertise within the framework of a liberal arts curriculum. He insisted upon individual attention to each student's needs as the basis of successful teaching, and established the tenet that every student entering the school must be acquainted with all media of artistic expression. During his 25-year tenure as dean, Blai shaped the school into one of the finest visual arts centers in the country, and his founding ideals still remain paramount to Tyler's educational philosophy.

In 1960, Dean Charles Le Clair succeeded Blai. Under Le Clair, the school was first accredited by the National Association of Schools of Art, and in 1965, the school's name was changed to the Tyler School of Art. Dean Le Clair founded the Tyler Study Abroad program in Rome, Italy. Today, Temple University Rome remains among the most respected fine arts study abroad programs in Europe, now fully integrated into Temple University with expanded course offerings in a range of liberal arts and science disciplines.

Over the decades, Tyler advanced its programs in response to new definitions of art-making and the role of art in society. Programs have been developed in Art History, Community Arts Practices, Visual Studies and Art Therapy. Today, the curriculum at Tyler continues to evolve by incorporating digital technology, video, installation and performance.

In 1998, Tyler welcomed Temple's Department of Architecture. The Department had been founded in 1969, initiated by the Philadelphia Chapter of the American Institute of Architects as a means of expanding architectural education in the city of Philadelphia. Temple's Department of Landscape Architecture & Horticulture joined the school in 2016. This department traces its origins to the Pennsylvania School of Horticulture for Women, founded in 1911 at the Ambler Campus. Also in 2016, the Department of Planning & Community Development, founded in 2002 in affiliation with the Temple Center for Sustainable Communities, became part of Tyler. Currently, and for the first time in Temple's history, all of the built-environment disciplines at the University are unified in one academic unit.

In January 2009, Tyler moved from the Elkins estate to a new facility on Main Campus designed by award-winning architect Carlos Jimenez. A new Tyler Architecture building, which adjoins the Art building, opened in 2012. This physical unification of the arts-related disciplines with architecture and environmental design fields facilitates the cross-disciplinary approaches to education that are increasingly viewed as key to the development of critical thinking skills, deep learning, and teamwork, and are consistent with the founding vision of Tyler.

In 2019, the Tyler School of Art expanded its name to the Tyler School of Art and Architecture to capture the breadth of its programs and its evolving vision in which the strengths of its individual disciplines are complemented by enhanced interaction between them. From its modest enrollment of 12 students in the first freshman class in 1935, Tyler now enrolls more than 1,500 students who learn to be well-versed, nimble thinkers prepared to face complexity and forge original ideas within and across a range of fields.

Departments

Tyler School of Art and Architecture consists of the following departments:

- Architecture and Environmental Design
- Art
- Art Education and Community Arts Practices
- Art History
- Foundations
- Graphic and Interactive Design

Accreditation

The Tyler School of Art and Architecture at Temple University has degree programs accredited by the International Facility Management Association (IFMA), Landscape Architectural Accreditation Board of the American Society of Landscape Architects (LAAB), Middle States Association of Colleges and Schools, National Architectural Accrediting Board (NAAB), National Association of Schools of Art and Design (NASAD) and the Planning Accreditation Board (PAB). Please refer to specific degree programs for more information.

Admissions Information

Tyler Admissions Office
Tyler Art Building, Suite 100
2001 N. 13th Street
Philadelphia, PA 19122
215-777-9090
tyleradmissions@temple.edu

The Tyler Admissions Offices provides comprehensive admissions information and deadlines.

General Information for Intra-University Transfer Students

Temple students who wish to transfer into a Tyler program or Tyler students who wish to transfer into a different Tyler program should contact the Tyler Admissions Office for policies and procedures.

Financial Aid and Scholarships

Student Financial Services
Carnell Hall, Ground Floor
1803 N. Broad Street
215-204-2244

Financial Aid

Please see the Student Financial Aid (p. 1809) section of the *Bulletin*. Detailed information can also be found at Student Financial Services. Applications for financial aid (Free Application for Federal Student Aid) are available through the Student Financial Services office, 215-204-2244.

Scholarships

Tyler offers merit-based and merit/financial need-based scholarships for incoming students dependent upon available funding. A limited number of portfolio scholarships, ranging from \$1000 to \$10,000, are awarded to undergraduate students entering in the fall semester. Some of these scholarships may continue dependent upon available funds, cumulative grade point average, and/or demonstrated financial need. Learn more about scholarships and guidelines for consideration.

Students who wish to compete for portfolio scholarships must follow the deadlines and application procedures indicated on the Tyler Admissions site.

In addition to portfolio-based scholarships, a number of scholarships for entering students based on academic achievement are awarded through Temple University to Tyler School of Art and Architecture. For more information about these awards, please contact the Temple University Office of Undergraduate Admissions or Student Financial Services.

Matriculated students also have the opportunity to compete for Tyler-specific scholarships. Information about merit scholarships for continuing students are posted annually.

Facilities

The Tyler School of Art and Architecture experience is defined in part by access to unparalleled facilities. Students have the space, the technology and the tools they need to go wherever their creative vision takes them.

Tyler's 255,000-square-foot, state-of-the-art facility on Temple University's Main Campus in Philadelphia is home to maker spaces of all shapes and sizes. Spaces include classrooms, lecture halls, collaboration spaces, an expansive green courtyard, an academic advising center, a cafe, exhibition spaces, and Temple Contemporary—Tyler's visionary center for public programming. Tyler's 50,000-square-foot Architecture Building features three floors of studios and digital and analog and research fabrication. Tyler's Landscape Architecture and Horticulture programs are based at Temple's expansive, suburban Ambler Campus, where students have access to greenhouses, a 187-acre arboretum, an innovation center and more.

Learn more about Tyler's discipline-specific facilities.

Study Away Programs

Education Abroad and Overseas Campuses
200 Tuttleman Learning Center
1809 N. 13th Street
215-204-0720

Many Tyler students take advantage of the opportunity to study abroad. To determine the best time to go and to make sure that studying away from Main Campus will not impede time to graduation, students need to meet with an academic advisor, and are strongly advised to do so prior to their sophomore year. BFA students who plan to study abroad or away should ensure that all sophomore prerequisites for their major are met in the fall semester of their sophomore year.

Rome

Housed in the Villa Caproni, facing the Tiber River just north of the Piazza del Popolo, the school offers courses in painting, drawing, photography, printmaking, sculpture, architecture, and art history. Facilities include a library, an art gallery, private work areas, a computer lab and full equipment in studio disciplines. Art history is taught through direct observation of original works and historic sites. The student also may elect to take courses in the liberal arts including Italian and limited GenEd options. For more information about Study Abroad options, see Education Abroad (p. 55). Depending on their major, students may elect to enroll in a summer program, spend a semester, or full academic year in Rome.

Japan

Temple Japan offers the BA in Art, exclusively taught in Tokyo. Current Tyler students seeking to study in Japan should consult their Tyler academic advisor to select appropriate coursework.

Special Programs in the USA

Special summer residency and program opportunities in the USA are advertised in the weekly Tyler e-newsletter, *The WHAT (Week Here at Tyler)*, as well as posted in the studio areas in the Tyler building.

Career Center

Temple University Career Center
220 Mitten Hall, 1913 N. Broad Street
215-204-7981

The Career Center provides students and alumni with up-to-date material on career planning, résumé preparation, interviewing skills, and job search techniques. Students are encouraged to schedule appointments for career conversation and advisement. For more information, see the Career Center (p. 70) section of the *Bulletin*, go to their web site at <https://careercenter.temple.edu/> or telephone the office at 215-204-7981.

The Tyler Student Life Blog posts networking and career events and advertises career events and employment and internship opportunities through the weekly e-newsletter, *The WHAT (Week Here At Tyler)*. Review *The WHAT* archives on the Tyler web site: <https://tyler.temple.edu>.

Résumé development and internship search support is also available through appointment with Evan Hertzog, Professional Programs Administrator (evan.hertzog@temple.edu).

Student Organizations

Temple Student Government

Two elected Tyler representatives participate in the Temple Student Government. This organization provides an integral link between students on all campuses and assures an ongoing dialogue with the administration.

Dean's Student Advisory Committee (DSAC)

Students who seek leadership opportunities may join the Tyler School of Art and Architecture Dean's Student Advisory Committee. Recent DSAC projects include the Philadelphia Art School Mixer reception for the Annual Student Exhibition, an all Philadelphia art school exhibition at the Comcast Center, and "Craft and Create," a community service event. The DSAC also serves as Tyler's GAF advisory committee to help determine how activity funds Tyler receives from the University are used for arts and cultural enrichment for the University.

In addition, all students may participate in other student organizations. Students in Landscape Architecture and Horticulture are encouraged to participate in other Ambler Campus student organizations. Further information about these opportunities may be found in the Ambler Campus (p. 1816) section of this *Bulletin*.

School Address

Tyler School of Art and Architecture
2001 N. 13th St.
Philadelphia, PA 19122

Contact Information

Susan Cahan, Dean
Tyler Art Building, Suite 210
215-777-9000
tyler@temple.edu

Kate Wingert-Playdon, Senior Associate Dean and Director of Architecture
Tyler Architecture Building, Room 306
215-204-7903
mwingert@temple.edu

Nichola Kinch, Associate Dean of Academic Affairs
Tyler Architecture Building, Suite 210
nichola.kinch@temple.edu

Grace Ahn Klensin, Director of Admissions and Enrollment Management
Tyler Art Building, Suite 100
215-777-9090
tyleradmissions@temple.edu

David Logan, Assistant Dean, Academic Advising
Tyler Art Building, Room 212
215-777-9229
david.logan@temple.edu

Kati Gegenheimer, Associate Director of Academic Enrichment Programs
Tyler Art Building, Suite 210
215-777-9102
kathryn.gegenheimer@temple.edu

For a complete list of the Tyler Administration, please consult the Tyler Contact Us list.

On the department or academic program pages within this *Bulletin*, students will find contact information for departmental representatives (department chairs, program heads, undergraduate advisors, etc.). Other faculty contact information is available in the Tyler Faculty Directory or by utilizing the Cherry and White directory.

Undergraduate Programs

- Architecture BSArch (p. 117)
- Art BA (TUJ) (p. 122)
- Art Education BSEd (p. 125)
- Art History BA (p. 130)
- Art History Minor (p. 135)
- Art Minor (p. 136)
- Art Therapy BA (p. 137)
- BFA Foundation (p. 141)
- Ceramics BFA (p. 144)
- Ceramics with Entrepreneurial Studies BFA (p. 151)
- City and Regional Planning Minor (p. 156)
- Community Arts Practices Certificate (p. 157)
- Community Development BS (p. 157)
- Community Development Minor (p. 162)

- Creative Entrepreneurship Certificate (p. 164)
- Ecological Planning and Design Minor (p. 165)
- Environmental Horticulture Minor (p. 166)
- Environmental Sustainability Certificate (p. 167)
- Facilities Management BS (p. 169)
- Fibers and Material Studies with Entrepreneurial Studies BFA (p. 174)
- Fibers and Materials Studies BFA (p. 179)
- Glass BFA (p. 186)
- Glass with Entrepreneurial Studies BFA (p. 194)
- Graphic and Interactive Design BFA (p. 198)
- Graphic and Interactive Design with Entrepreneurial Studies BFA (p. 208)
- Historic Preservation BS (p. 214)
- Historic Preservation Certificate (p. 219)
- Horticultural Therapy Certificate (p. 220)
- Horticulture AS (p. 221)
- Horticulture BS (p. 226)
- Landscape Architecture BS (p. 229)
- Landscape Architecture BS with Horticulture Concentration (p. 233)
- Landscape Plants Certificate (p. 237)
- Landscape Studies Minor (p. 238)
- Metals/Jewelry/CAD-CAM BFA (p. 239)
- Metals/Jewelry/CAD-CAM with Entrepreneurial Studies BFA (p. 247)
- Native Perennial Garden Design Certificate (p. 252)
- Painting BFA (p. 253)
- Painting with Entrepreneurial Studies BFA (p. 262)
- Photography BFA (p. 268)
- Photography with Entrepreneurial Studies BFA (p. 275)
- Printmaking BFA (p. 280)
- Printmaking with Entrepreneurial Studies BFA (p. 287)
- Sculpture BFA (p. 292)
- Sculpture with Entrepreneurial Studies BFA (p. 300)
- Sustainable Food Systems Certificate (p. 305)
- Sustainable Food Systems Minor (p. 307)
- Visual Studies BA (p. 308)

Academic Policies and Regulations

Temple University's policies and regulations (p. 1835) generally apply to all undergraduate students and provide a framework within which schools and colleges may specify further conditions or variations appropriate to students in their courses or programs. Policies specific to Tyler School of Art and Architecture are as follows:

Academic Credit

A credit hour is a measure of the amount of work represented in intended learning outcomes and verified by evidence of student achievement. A credit hour is an institutionally established equivalency that reasonably approximates:

1. not less than one hour of classroom instruction or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester of credit or the equivalent amount of work over a different amount of time; or
2. at least an equivalent amount of work for other academic activities such as studio work. For example, a three-credit studio course allows for not less than nine hours of work which can include five hours of in-class studio and at least four hours of out-of-class student work.

Additional academic credit hour (p. 1847) information may be found in the Academic Policies section of this *Bulletin*.

Academic Residency Requirements

All undergraduates must take at least 45 of their last 60 semester hours at Temple University. While candidates for a degree at Temple, students wishing to take academic work at another institution, either classroom or online courses offered during the regular year or in summer sessions, must

have an advisor's prior approval before enrolling at the other institution. Refer to the policy on Permission to Complete a Course at another Institution after Matriculation (p. 1858).

Courses Inapplicable to Graduation

Credits earned in Mathematics 0015 and lower-level courses in Military Science are not included in the minimum number of credits required for graduation. A maximum of 4 courses or up to 12 semester hours for upper-level Military Science (Army ROTC), Naval Science (Navy ROTC), or Aerospace Studies (Air Force ROTC) courses will be applicable toward graduation credits.

Courses transferred from other institutions or taken at Temple University that do not satisfy studio, art history, College or General Education requirements are elective. Tyler programs vary in the number of elective credits applicable toward the degree. If the elective credits are in excess of the amount needed for the degree, a student will need additional credits to graduate beyond the minimum number stated for the curriculum. Students should check with their advisor when selecting courses.

Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List (p. 1849) policy for specific GPA and credit-hour requirements.

Double Major within Tyler

Some undergraduate students may be interested in pursuing a double major within Tyler. Students within Tyler need to fulfill all the major requirements for each major including the required Capstone courses. In majors where the same course is required in both curricula, the course applies towards both majors. Please check with an academic advisor to discuss the course requirements for each major to see if double majoring works with your academic plan. See the Double Major (p. 1850) policy for more information regarding second majors outside of Tyler.

Grievances

Please refer to the University grievance policy (p. 47), located in the Student Rights section of this *Bulletin*.

Student Academic Grievance Policy and Procedure

Title IX of the Education Amendments Act of 1972 requires that each college or university establish due process for the resolution of academic grievances. Students enrolled at Temple University have the right to appeal academic decisions that they dispute. Each school and college at Temple University has established and adheres to its own grievance procedure. The following procedures are specifically applicable to all degree programs of Tyler School of Art and Architecture.

The Tyler School of Art and Architecture attempts to provide students with the best learning experience possible. We understand that on occasion, a disagreement may arise between instructors and students over academic issues. These written procedures are meant to provide both faculty and students the proper course of action to resolve an academic grievance arising from a course offered at Tyler. At any time, a student may withdraw their grievance, halting the grievance process. Once the grievance has been halted, it cannot be reinstated on the same basis. The following procedure is based on the Temple University Grievance Guidelines.

1. The student must first attempt resolution of the grievance by a discussion with the instructor of the course. Should the parties reach an agreement about the dispute, they will write and sign a document showing the steps each party will take to resolve the dispute. If the instructor is no longer in the employ of Temple University or is for any reason unavailable, the student will meet with the department or program chair. Students wishing to grieve regarding a fall semester course must do so by February 15 of the calendar year following the end of the given fall semester. Students wishing to grieve a summer or spring course must do so by October 1 of the same calendar year in which the courses were taken. Students cannot appeal grades after they have graduated. Note that students are discouraged from moving beyond this step during the summer unless the grade being grieved will affect the student's warning or probation status; participation in a study abroad program in the fall semester immediately following; or their August graduation. All aspects of the grievance are to remain confidential, except to the student making the grievance.
2. If the grievance is not resolved to the student's satisfaction, the student will contact the chair of the department in writing within 7 calendar days from the date of the last meeting with the instructor; the student will provide documentation of the grievance. The chair will make a decision on the grievance within 14 calendar days (note: if the grievance is occurring in the summer, the decision must be made expeditiously, if possible, within 14 calendar days).
3. If the grievance is still not resolved to the student's satisfaction, the student will contact the Tyler Ombudsperson, who will be listed on the Tyler web site, within 7 calendar days of the chair's decision, providing all documentation of the dispute. The Ombudsperson will make a decision on the grievance within 14 calendar days (note: if the grievance is occurring in the summer, the decision must be made expeditiously, if possible, within 14 calendar days) and notify the student, chair of the department and instructor being grieved.
4. If the grievance is not resolved to the student's satisfaction, the Ombudsperson will then act as a mediator for the student and call together a Student Appeals and Grievance Committee. This committee shall consist of one full-time faculty member from the grieved instructor's department (although not the instructor) and two full-time faculty members, at least one of whom must be from outside the grieved instructor's department, with one faculty member acting as administrator. The Ombudsperson should form this committee within 14 calendar days of the step 3 decision to the student (note: if the grievance is occurring in the summer, the decision must be made expeditiously, if possible, within 14 calendar days). The Committee will meet within 7 calendar days of the referral from the Ombudsperson. If greater flexibility in time is required, all parties must be notified by the administrator

of the Committee. The written decision of the committee will be provided to the student, the instructor being grieved, the chair of the department, the Ombudsperson and the Dean. This decision should be made expeditiously, no more than 14 calendar days after the committee was called.

5. If the grievance is still not resolved to the student's satisfaction, the student may appeal in writing to the Dean. The Dean will communicate the decision about the grievance to the student, members of the Student Appeals and Grievance Committee, Ombudsperson, chair of the department and instructor being grieved.
6. This decision of the Dean may be appealed to the Vice Provost for Undergraduate Studies.

Fall and Spring Semester Time Limit For Academic Appeals

The time limit within which a grade grievance can be entered is one (1) semester after the grade has been made a part of the student's transcript.

Summer Session Time Limit For Academic Appeals

Due to the condensed schedule of the summer sessions, the limit within which summer grade grievances can be entered is two (2) weeks after the grade has been made a part of the student's transcript.

For further information on academic grievance procedures, please inquire in the Assistant Dean's Office.

Grievances Other Than Academic Appeals

- Students who believe they have been discriminated against because of gender, race, national origin, age or disability, should consult the Office of Equal Opportunity Compliance, Sandra A. Foehl, Director, Equal Opportunity Compliance 215-204-8890 or sandra.foehl@temple.edu. You may also contact one of the University Ombudspersons; Tyler's designated Ombudsperson is Wanda Odom (215-777-3721 or wanda.odom@temple.edu). You may contact any Temple Ombudsperson regardless of department.
- Students who have other non-academic complaints about a faculty member's conduct (without regard to grading) should refer those concerns in writing to the Chair of the Department or, if the faculty member is also the chair, to the Dean.

Students are welcome to contact David Logan, Advising Director, at david.logan@temple.edu or 215-777-9229 to discuss grievance policies and procedures.

Incomplete Coursework Policy

An instructor will file an "I" (Incomplete) only if the student has completed the majority (51% or more) of the work of the course at a passing level, and only for reasons beyond the student's control. This may include severe illness, broken limbs, family situation, etc. An incomplete may not be used to give students extra time to improve their grades. There must be a compelling reason behind each incomplete grade assigned. An instructor may file an "I" when a student has not completed the work of a course by the time grades must be submitted but has completed the majority of the work at a passing level and has a written agreement with the instructor and the department regarding completion of the work, including the nature of the work to be completed. The completion date may be no later than one year from the end of the semester in which the student took the course. The agreement shall also specify a default grade to be received if the work is not completed by the date indicated. Four copies of the agreement must be made: One copy shall be retained by the instructor, one shall be given to the student, one shall be filed with the department office and one shall be filed in the Tyler Academic Advising office in the student's record file (note that the University form states that one copy goes to the Dean's office - Tyler holds those copies in the student's file in Advising).

When reporting the grade of "I" for a student, the instructor shall also file a report of the default grade. If the instructor does not change the grade of "I", pursuant to the agreement with the student, by the end of one year from the time the grade of "I" was awarded, the appropriate University official shall automatically change the grade of "I" to the reported default grade and the default grade shall appear on the transcript and be used for all other grading purposes as the actual grade received in the course.

Faculty advisors and staff advisors have the option of not permitting a student to register for an "overload" if the student is carrying one or more active incomplete courses, or for a "full load" if the student is carrying two or more active incompletes.

Independent Study Policy

The following are the guidelines and standards for "Independent Study" Undergraduate credit in Studio, Art History and Art Education for students and faculty at Tyler School of Art and Architecture:

- There will be a maximum of 1 student in Independent Study per full-time faculty per fall and spring semester.
- The intended area of study must supplement, not supplant, existing studio, art history and art education courses, and curriculum.
- An Independent Study course shall count for 1–3 credits, with a maximum of 6 credits applicable toward the degree. You may not take more than two Independent Study courses in your career.
- Independent Study courses shall carry upper level numbers. Students must be classified as Juniors or Seniors. Students should have prior experience with the faculty member teaching the Independent Study course.
- A written proposal must be developed and agreed upon in advance of the beginning of the semester, describing the intended area of the investigation. At the end of the Independent Study, a paper must be submitted describing the outcome of the learning experience.
- Only after the student receives written permission from the faculty member and the department chair may they register for the class.

Display and Installation Policy

Students or faculty who wish to have work or performances installed outside the studio must complete an Installation form, and have it approved by the appropriate University personnel. Students or faculty must also have an approved installation form to place work outside the building, anywhere on campus. Tyler Exhibitions requires a minimum of 7 business days to ensure enough time to get the appropriate approvals. In many cases extra time is needed to revise a proposal due to safety issues or otherwise unavailable space. Forms filed less than seven (7) days will risk being denied. The Associate Director of Academic Enrichment Programs will work with the student and faculty and University personnel to locate appropriate space for student installations. Please note that approvals are not automatic and can be denied on the basis of non-compliance with University policies.

Students who place projects without approval, or who abandon or incompletely de-install projects, or who do not properly restore sites, buildings, or other university property will be subject to fine and, potentially, disciplinary action. Please refer any questions or concerns to Kati Gegenheimer via e-mail (kati@temple.edu).

Leave of Absence/Re-Enrollment Policy

Tyler School of Art and Architecture students who wish to voluntarily withdraw from the university for one or two semesters (fall and/or spring) are strongly encouraged to apply for a Leave of Absence (LOA). If approved, these students remain eligible for the same requirements as when they declared their major and will have access to Temple e-mail, university library systems, and priority and self registration for the approved semester of return.

If a student leaves the university without notice or does not return the semester following an approved Leave of Absence (LOA), the student must apply for re-enrollment to the university. All students who wish to be considered for readmission (re-enrollment) to Tyler must fill out the request to re-enroll form. Students should contact the Tyler Admissions Office for more information at 215-777-9090.

For those students who have left Tyler in academic good standing and apply for re-enrollment into a semester within three years of the last completed semester, no portfolio review or interview is required. A portfolio uploaded to temple.slideroom.com is required for those BFA (see additional information for BFA in Graphic & Interactive Design majors below), BA in Art, BA in Visual Studies, or BSEd in Art Education students who have not attended Tyler for more than three years from the semester in which they intend to apply for re-enrollment. SlideRoom charges a fee for this service. *Please note: We are no longer accepting students for re-enrollment into the BA in Art on the Main campus; the BA in Art will only be available at the Japan campus.* Students previously enrolled in that program may seek admission into the BA in Visual Studies. Students who seek re-enrollment will be considered for matriculation into the current catalog year.

Students who are dismissed from Tyler or who left on academic probation must review the academic standing policy (p. 1840) located in the Academic Policies section of this *Bulletin*.

A portfolio uploaded to temple.slideroom.com is also required of all BFA, BA in Art, BA in Visual Studies, or BSEd in Art Education students who were dismissed or who left Tyler on academic probation. It must include twenty (20) images of your studio work, ten (10) completed at Tyler, and ten (10) after leaving Tyler that demonstrate studio progress.

Any student who attends another college or university and has taken studio art credits must submit a portfolio uploaded to temple.slideroom.com to represent completed studio coursework in order to have those credits considered for transfer credit into the Tyler BFA, BA in Visual Studies, or BSEd in Art Education programs or one of the Architecture programs. Academic credits will be accepted into the Tyler degree programs as determined by Temple University policy for the semester in which the student is applying for readmission.

The final decision regarding readmission will depend both on the recommendation of the transfer committee as well as the review of academic credentials by the Tyler Admissions Office. Please note well: Any student applying for readmission must be aware that Tyler may not accept studio credits that are more than 10 years old into any Tyler curriculum from transfer or readmission applicants regardless of where those credits were completed.

Graphic and Interactive Design (GAID) Re-Enrollment Policy

Leave of Absence Policy

Graphic & Interactive Design (GAID) students can apply to take a Leave of Absence (LOA) from Temple University/Tyler School of Art and Architecture for up to 2 consecutive semesters. At the end of the LOA, a GAID major can return to school and resume their progress through the design program.

- Although every effort will be made to get GAID majors into courses they need when they return to Temple/Tyler, seats in required Graphic and Interactive Design courses cannot be guaranteed to students who return after a LOA or an extended period when they are not enrolled at Temple/Tyler. Returning students will not be added to sections that have filled which may mean additional time at Tyler will be required in order to complete the BFA in Graphic & Interactive Design.
- GAID majors who remain out of school longer than 2 consecutive semesters are required to re-enroll in the school and the program. The re-enrollment process includes a portfolio requirement to determine if the student will be readmitted to the GAID major. **Re-enrollment into the GAID major is not guaranteed.**

Portfolio Review

- Students re-applying to the GAID program must show a portfolio consisting of the work they originally submitted to get into the major through the **Sophomore Portfolio Review** as well as work from any additional GAID classes they took. Students who were admitted into the major prior to the implementation of the GAID portfolio review in fall 2014 will need to submit a portfolio of work representing work completed in GAD 2001 and GAD 2021. Students who are out of school for more than 3 years also need to include 10 design pieces that they produced during the time they were not enrolled at Temple/Tyler.
- Students who are not re-enrolled on the basis of the portfolio have the option to re-take the prerequisites for the major (GAD 2001 and GAD 2021) to develop a new portfolio for submission to the **Sophomore Portfolio Review**. These students will be reviewed as second-time applicants to the GAID program. Students who have completed sophomore prerequisites for other majors may also consider re-enrollment into those majors (after discussion with an academic advisor) or seek re-enrollment into the University into a different Tyler or Temple program.

Loss or Damage

Temple University is not responsible for loss of property of any student or other individual due to fire, theft, or other cause. The university may require residence hall students to present proof of insurance against loss by fire, theft, or other cause before assignment to any university housing.

Permission to Take Courses at Another Institution

Consistent with University policy, students will not receive transfer credit for courses taken at another institution while they are matriculated (Degree Seeking) at Temple University unless prior permission has been obtained from Tyler Advising. The required Permission to Take Courses Elsewhere form is available under the University Forms Channel on TUPortal. Full instructions regarding the permission process are available at: <https://undergradstudies.temple.edu/sites/undergradstudies/files/StudentPermissionTakeCoursesElsewhereDirections.pdf>.

Program Performance

Matriculating (Degree-seeking) Tyler School of Art and Architecture students (with the exception of those seeking the Art Education concentration) must maintain a minimum grade point average (GPA) of 2.0 or may be subject to academic action including academic warning, probation, and dismissal from the university. Please consult the academic standing (p. 1840) policy within this *Bulletin* for further information.

Students pursuing the BFA with Art Education Concentration and the BSEd in Art Education program must maintain a minimum grade point average (GPA) of 3.0 to be eligible to take required Education and Art Education coursework.

Second Degrees

Tyler School of Art and Architecture does award second bachelor's degrees if the first degree is unrelated to the field of study. Students with limited studio experience often do not have a portfolio of work and required studio credits to enter a Master's degree program so a second Bachelor's degree provides time and space to develop skills and build a body of artwork. The BFA degree prepares students to be practicing artists and thus a graduate degree may not be required for many vocational aspirations. Students interested in Art History should consider the MA in Art History degree program instead of a second bachelor's degree. Students who do not meet the minimum admissions criteria for the MA in Art History should discuss their interest in the program with Tyler Admissions, the Art History MA Program Director or the Art History Department Chair to explore their options.

See Second Degrees (p. 1862) in the Academic Policies section. For information on graduate programs, refer to the Graduate and Professional Bulletin.

Student Work

The school reserves the right to keep work submitted for course credit. In practice, this privilege is exercised sparingly.

Tyler School of Art and Architecture records images of student work for use in Tyler publications and web sites. Tyler reserves the right to reproduce without notification such images of any artwork produced by students while attending Tyler for promotional or other purposes, including in print publications, institutional web sites, e-communications, multimedia presentations, and documents about Tyler or Temple University for admission recruitment, fundraising, or institutional informational purposes.

When the student art work is reproduced in Tyler publications, either in print form or electronic form, every effort will be made to give credit to the student artist. No compensation is provided to students for such uses of images of student work.

Please see the Installation Policy (p. 111) above regarding placing student art work in the public spaces at Tyler and in any Temple building or on Temple grounds. Please note that any work installed without permission is subject to removal and disposal.

General College Graduation Requirements

Students in the Tyler School of Art and Architecture must meet all degree requirements mandated by Temple University, as well as requirements from individual departments and programs.

All students complete the General Education (GenEd (p. 83)) program requirements.

Students are responsible for following the course requirements and department policies as listed in the *Undergraduate Bulletin* and in departmental handbooks, curriculum and advising publications. Please note that Tyler has minimum grade requirements for required courses for the majors. Current students should refer to their DARS and advising check sheets to review progress towards the degree.

Program Requirements

Planning a Program of Study

The information in the following requirements sections is designed to provide students with guidance in planning their program of study. The requirements and sequences are detailed. If students do not follow their program as designed, they may face conflicts or not have required prerequisites that will necessitate enrolling for additional semesters to complete their requirements.

Transfer students should meet with an academic advisor to review progress after their initial orientation session to create an academic plan for subsequent semesters and to determine length of time to earn their degree.

Second Major Rules

Some undergraduate students may be interested in pursuing a double major within Tyler. Students within Tyler need to fulfill all the major requirements for each major including the required Capstone courses. In majors where the same course is required in both curricula, the course applies towards both majors. Please check with an academic advisor to discuss the course requirements for each major to see if double majoring works with your academic plan. See the Double Major (p. 1850) policy for more information regarding second majors outside of Tyler

Additional Notes

The total number of credit hours at graduation may be greater for some students based on initial placement exams, transfer evaluations, individual curricular choices, and academic progress.

Students must fulfill the necessary prerequisites for any given course or course sequence. See the Prerequisites and Co-requisites Policy (p. 1860) in the university-wide Academic Policies section of this *Bulletin*.

Academic Advising Information

Tyler Advising provides holistic support for the constantly evolving needs of a unique student body, faculty, and staff of artists, designers, innovators, historians, educators and agents for change. Our approach focuses on efficient, collaborative problem solving tailored to the individual. We aspire to build upon the spirit of empowerment within our community.

The Tyler Advising team is made up of a team of professional advisors that assist students by helping them navigate their academic curriculum and provide them with awareness of university resources that can support them on their way to graduation. In addition to academic planning, our team assists students with study abroad planning, adding minors and certificates, referrals to campus resources, understanding the breadth of courses and experiences that are available to them.

Academic Advising Office
Tyler Art Building, Suite 212
215-777-9229
tyler.advising@temple.edu

Ambler Campus Advising

The Office of Academic Advising and Career Development at the Ambler Campus may advise Tyler students majoring in Landscape Architecture and Horticulture. Students pursuing these majors take a substantial amount of their coursework at the Ambler campus. Having professional advisors available for appointments at Ambler allows a student to take advantage of their time on campus.

Academic Advising and Career Development - Ambler Campus
West Hall, Room 109
267-468-8200
tuaadvis@temple.edu

Art Education Advising

Renee Jackson
Tyler Art Building, Room B090C
215-777-9258
renee.jackson@temple.edu

The Art Education staff provides additional advising for students in the BSEd in Art Education and BFA with Art Education Concentration. Students should routinely meet with an Art Education faculty advisor to discuss field placement, clearances, and requirements, as the state of Pennsylvania may change requirements after the *Bulletin* information has been posted.

Faculty Advising

In collaboration with the professional advising team, faculty often assist students with major information, opportunities in the field, and career planning. Students are encouraged to meet and discuss curriculum selection with their faculty members, so that electives relative to the student's research can be identified.

Faculty

Learn more about Tyler School of Art and Architecture's faculty.

Mariola Alvarez, Assistant Professor, Department of Art History, Tyler School of Art and Architecture; PhD, University of California.

Stephen M. Anderson, Associate Professor of Instruction, Department of Architecture and Environmental Design, Tyler School of Art and Architecture; MArch, University of Pennsylvania.

Kate E. Benisek, Assistant Professor of Instruction, Department of Architecture and Environmental Design, Tyler School of Art and Architecture; MLA, Cornell University.

Philip P. Betancourt, Professor Emeritus, Department of Art History, Tyler School of Art and Architecture; PhD, University of Pennsylvania.

Sonja Bijelic, Associate Professor of Instruction, Department of Architecture and Environmental Design, Tyler School of Art and Architecture; MArch, New Jersey Institute of Technology.

Gerard F. Brown, Associate Professor, Department of Art, Tyler School of Art and Architecture; MA, School of the Art Institute of Chicago.

Douglas J. Bucci, Assistant Professor, Department of Art, Tyler School of Art and Architecture; MFA, Temple University.

Susan E. Cahan, Professor, Department of Art History, Tyler School of Art and Architecture; PhD, Graduate Center, City University of New York.

Joshua S. Caplan, Research Associate Professor, Department of Architecture and Environmental Design, Tyler School of Art and Architecture.

William J. Cohen, Associate Professor of Practice, Department of Architecture and Environmental Design, Tyler School of Art and Architecture; PhD, University of Pennsylvania.

Tracy E. Cooper, Professor, Department of Art History, Tyler School of Art and Architecture; PhD, Princeton University.

Chad D. Curtis, Associate Professor, Department of Art, Tyler School of Art and Architecture; MFA, Alfred University, New York State College of Ceramics.

Delaney K. DeMott, Assistant Professor of Instruction, Department of Art, Tyler School of Art and Architecture; MFA, School of the Art Institute of Chicago.

Ryan Devlin, Assistant Professor of Instruction, Department of Architecture and Environmental Design, Tyler School of Art and Architecture; PhD, University of California Berkeley.

Therese A. Dolan, Professor Emerita, Department of Art History, Tyler School of Art and Architecture; PhD, Bryn Mawr College.

Jeffrey Doshna, Associate Professor of Instruction, Department of Architecture and Environmental Design, Tyler School of Art and Architecture; PhD, Rutgers University.

Müge Durusu-Tanrıöver, Assistant Professor, Department of Art History, Tyler School of Art and Architecture; PhD, Brown University.

Linda Earle, Professor of Practice, Department of Art History, Tyler School of Art and Architecture; MFA, Columbia University.

Sasha Eisenman, Associate Professor, Department of Architecture and Environmental Design, Tyler School of Art and Architecture; PhD, Rutgers University.

Amze J. Emmons, Associate Professor, Department of Art, Tyler School of Art and Architecture; MFA, University of Washington.

Jane DeRose Evans, Professor, Department of Art History, Tyler School of Art and Architecture; PhD, University of Pennsylvania.

Clifton R. Fordham, Associate Professor, Department of Architecture and Environmental Design, Tyler School of Art and Architecture; MArch, Yale University.

Samuel C. Fritch, Assistant Professor of Instruction, Department of Foundations, Tyler School of Art and Architecture; MFA, Temple University.

Mark T. Gibson, Assistant Professor, Department of Art, Tyler School of Art and Architecture; MFA, Yale University.

Philip Glahn, Associate Professor, Department of Art, Tyler School of Art and Architecture; PhD, City University of New York.

Abby Ryan Guido, Assistant Professor, Department of Graphic and Interactive Design, Tyler School of Art and Architecture; MBA, Temple University.

Marcia B. Hall, Laura H. Carnell Professor, Department of Art History, Tyler School of Art and Architecture; PhD, Harvard University.

Sally W. Harrison, Professor, Department of Architecture and Environmental Design, Tyler School of Art and Architecture; MArch, Massachusetts Institute of Technology.

Jesse Harrod, Associate Professor, Department of Art, Tyler School of Art and Architecture; MFA, School of the Art Institute of Chicago.

Nathan Heavers, Associate Professor, Department of Architecture and Environmental Design, Tyler School of Art and Architecture; MLA, University of Pennsylvania.

David Herman Jr., Assistant Professor, Department of Art Education and Community Arts Practices, Tyler School of Art and Architecture; PhD, University of North Texas.

Kelly A. Holohan, Professor, Department of Graphic and Interactive Design, Tyler School of Art and Architecture; MFA, Temple University.

Richard D. Hricko, Professor Emeritus, Department of Art, Tyler School of Art and Architecture; MFA, University of Iowa.

Pauline Hurley-Kurtz, Associate Professor, Department of Architecture and Environmental Design, Tyler School of Art and Architecture; MLA, University of Pennsylvania.

Renee E. Jackson, Assistant Professor, Department of Art Education and Community Arts Practices, Tyler School of Art and Architecture; PhD, Concordia University.

Simona M. Josan-Barkley, Associate Professor of Instruction, Department of Foundations, Tyler School of Art and Architecture; MFA, Pennsylvania Academy of the Fine Arts.

Jessica Jane Julius, Associate Professor of Instruction, Department of Art, Tyler School of Art and Architecture; MFA, Rochester Institute of Technology.

Gabriel Kaprielian, Assistant Professor, Department of Architecture and Environmental Design, Tyler School of Art and Architecture; MArch, University of California Berkeley.

Lisa Kay, Associate Professor, Department of Art Education and Community Arts Practices, Tyler School of Art and Architecture; EdD, Northern Illinois University.

Nichola Kinch, Associate Professor, Department of Foundations, Tyler School of Art and Architecture; MFA, Temple University.

Joseph R. Kopta, Assistant Professor of Instruction, Department of Art History, Tyler School of Art and Architecture; PhD, Temple University.

Jenny Kowalski, Assistant Professor of Instruction, Department of Graphic and Interactive Design, Tyler School of Art and Architecture; MFA, Temple University.

Robert T. Kuper, Associate Professor, Department of Architecture and Environmental Design, Tyler School of Art and Architecture; MLA, Auburn University.

Baldev S. Lamba, Associate Professor, Department of Architecture and Environmental Design, Tyler School of Art and Architecture; MLA, University of Pennsylvania.

Scott R. Laserow, Professor, Department of Graphic and Interactive Design, Tyler School of Art and Architecture; BFA, Temple University.

Roberto Lugo, Assistant Professor, Department of Art, Tyler School of Art and Architecture; MFA, The Pennsylvania State University.

Dermot MacCormack, Professor, Department of Graphic and Interactive Design, Tyler School of Art and Architecture; BFA, National College of Art and Design, Dublin.

Martha Madigan, Professor Emerita, Department of Art, Tyler School of Art and Architecture; MFA, School of the Art Institute of Chicago.

Lynn A. Mandarano, Associate Professor, Department of Architecture and Environmental Design, Tyler School of Art and Architecture; PhD, University of Pennsylvania.

Christopher McAdams, Assistant Professor of Instruction, Department of Architecture and Environmental Design, Tyler School of Art and Architecture; MArch, University of Pennsylvania.

Pablo Meninato, Associate Professor, Department of Architecture and Environmental Design, Tyler School of Art and Architecture; PhD, Universidade Federal do Rio Grande do Sul.

Rebecca Michaels, Associate Professor of Instruction, Department of Art, Tyler School of Art and Architecture; MFA, Temple University.

Leah Modigliani, Associate Professor, Department of Art History, Tyler School of Art and Architecture; PhD, State University of New York at Stony Brook.

Dona R. Nelson, Professor, Department of Art, Tyler School of Art and Architecture; BFA, The Ohio State University.

Jeffrey Nesbit, Assistant Professor, Department of Architecture and Environmental Design, Tyler School of Art and Architecture; DDes, Harvard University, Graduate School of Design.

Emily Neumeier, Assistant Professor, Department of Art History, Tyler School of Art and Architecture; PhD, University of Pennsylvania.

Rachel Grace Newman, Assistant Professor, Department of Art History, Tyler School of Art and Architecture; PhD, Stanford University.

Sharyn A. O'Mara, Associate Professor, Department of Art, Tyler School of Art and Architecture; MFA, Rhode Island School of Design.

Odili Donald Odita, Professor, Department of Art, Tyler School of Art and Architecture; MFA, Bennington College.

Karyn Olivier, Professor, Department of Art, Tyler School of Art and Architecture; MFA, Cranbrook Academy of Art.

Michael Olszewski, Associate Professor, Department of Architecture and Environmental Design, Tyler School of Art and Architecture; PhD, University of Delaware.

Eric Oskey, Associate Professor of Practice, Department of Architecture and Environmental Design, Tyler School of Art and Architecture; MArch, Cornell University.

Pepón Osorio, Laura H. Carnell Professor, Department of Art Education and Community Arts Practices, Tyler School of Art and Architecture; MA, Columbia University.

Alpesh Patel, Associate Professor, Department of Art History, Tyler School of Art and Architecture; PhD, University of Manchester.

Erin Pauwels, Assistant Professor, Department of Art History, Tyler School of Art and Architecture; PhD, Indiana University, Bloomington.

Andrea Ray, Associate Professor of Instruction, Department of Art, Tyler School of Art and Architecture; PhD, Lund University.

Jeffrey Richards, Assistant Professor of Instruction, Department of Architecture and Environmental Design, Tyler School of Art and Architecture; MArch, Yale University.

Fauzia Sadiq Garcia, Assistant Professor of Instruction, Department of Architecture and Environmental Design, Tyler School of Art and Architecture; MArch, Harvard University, Graduate School of Design.

Lauren Sandler, Associate Professor of Instruction, Department of Art, Tyler School of Art and Architecture; MFA, The Pennsylvania State University.

Bryan Martin Satalino, Associate Professor of Instruction, Department of Graphic and Interactive Design, Tyler School of Art and Architecture; MFA, Temple University.

Mark Shaver, Associate Professor of Instruction, Department of Foundations, Tyler School of Art and Architecture; MFA, University of Georgia.

Paul E. Sheriff, Professor, Department of Graphic and Interactive Design, Tyler School of Art and Architecture; BFA, Temple University.

Mark Shetabi, Associate Professor, Department of Art, Tyler School of Art and Architecture; MFA, Pennsylvania Academy of the Fine Arts.

Robert Z. Shuman Jr., Associate Professor, Department of Architecture and Environmental Design, Tyler School of Art and Architecture; BArch, Temple University.

Gerald D. Silk, Professor Emeritus, Department of Art History, Tyler School of Art and Architecture; PhD, University of Virginia.

Samantha Simpson, Associate Professor, Department of Foundations, Tyler School of Art and Architecture; MFA, San Francisco Art Institute.

Hester Stinnett, Professor, Department of Art, Tyler School of Art and Architecture; MFA, Temple University.

Alexandra Strada, Assistant Professor, Department of Art, Tyler School of Art and Architecture; MFA, Columbia University.

Kim D. Strommen, Professor, Department of Foundations, Tyler School of Art and Architecture; MFA, Washington University.

Lolly Tai, Professor Emerita, Department of Architecture and Environmental Design, Tyler School of Art and Architecture; PhD, Heriot-Watt University, Edinburgh College of Art.

Christian Tomaszewski, Assistant Professor, Department of Art, Tyler School of Art and Architecture; MFA, Academy of Fine Arts in Poznan, Poland.

Ulysses Sean Vance III, Associate Professor, Department of Architecture and Environmental Design, Tyler School of Art and Architecture; MArch, North Carolina State University.

Jessica Vaughn, Associate Professor, Department of Art, Tyler School of Art and Architecture; MFA, University of Pennsylvania.

Ashley West, Associate Professor, Department of Art History, Tyler School of Art and Architecture; PhD, University of Pennsylvania.

Mallory Weston, Associate Professor of Instruction, Department of Art, Tyler School of Art and Architecture; MFA, Rhode Island School of Design.

M. Katherine Wingert-Playdon, Professor, Department of Architecture and Environmental Design, Tyler School of Art and Architecture; MS, The Pennsylvania State University.

Andrew Wit, Associate Professor, Department of Architecture and Environmental Design, Tyler School of Art and Architecture; MArch, Massachusetts Institute of Technology.

Byron Wolfe, Professor, Department of Art, Tyler School of Art and Architecture; MFA, Arizona State University.

William Yalowitz, Associate Professor, Department of Art Education and Community Arts Practices, Tyler School of Art and Architecture; EdD, Temple University.

Nathan W. Young, Assistant Professor of Instruction, Department of Graphic and Interactive Design, Tyler School of Art and Architecture; MFA, Rhode Island School of Design.

Jennifer Zarro, Assistant Professor of Instruction, Department of Foundations, Tyler School of Art and Architecture; PhD, Rutgers University.

Architecture BSArch

Overview

The **Bachelor of Science in Architecture**, offered by the Department of Architecture and Environmental Design (AED), is a 4-year pre-professional program. Architectural design studios that focus on the integration of thinking and making through design are central to the curriculum. Students take courses in the architecture foundation program for the first two years of study then focus on architectural design in the third and fourth year. Sequential studio courses provide the means for integration and synthesis of academic and professional knowledge that is learned in courses in building technology, architectural history and theory, and representation. Dedicated studio, woodshop, digital fabrication, and digital lab spaces allow for in-house drawing, modeling, and digital visualization.

Campus Location: Main

Program Code: TA-ARCH-BSAR

Admissions

For more information on how to apply, please visit Tyler's Architecture and Environmental Design admissions page.

Accelerated Program

Students in the Bachelor of Science in Architecture program are eligible to apply for the +1 accelerated undergraduate-graduate program. The program enables qualified and eligible students to complete the 60-credit Master of Architecture (MArch) degree within a year after graduation with the Bachelor of Science in Architecture pre-professional degree. Eligible undergraduate students use up to 12 specified graduate credits to fulfill requirements for their undergraduate degree. Upon graduation from their undergraduate program, students move seamlessly into their graduate program. At the end of the contiguous fifth year (including two summer semesters), students will receive a Master of Architecture degree. To be eligible for the program, students must be declared Architecture majors; have a minimum 3.25 cumulative GPA in at least 45 credits of coursework taken at Temple; be able to complete their undergraduate degree in four full-time semesters (beginning with their first semester taking a graduate course as an undergraduate); and be able to complete the graduate degree in one additional year including two summer semesters of graduate coursework.

Study Abroad

All AED Department students have the opportunity to study abroad for a semester at Temple Rome or Temple Japan. Admission to these programs is competitive. Applications are made through the Temple Education Abroad and Overseas Campuses office.

Students who plan to study abroad should arrange to meet with an academic advisor as early as possible, preferably during the freshman year, in order to plan the sequence of courses that would be most appropriate. While students majoring in Architecture may study in Rome in the fall or spring semester, Japan is only an option for the spring.

Career Opportunities

Graduates are qualified for a variety of positions in architecture and related fields for which a professional degree and registration are not requirements for advancement. Graduates are prepared to apply for a professional degree in architecture at the graduate level or a related discipline.

Continuing Studies

All of Tyler's undergraduate architecture programs prepare students for continued study in the National Architectural Accrediting Board (NAAB) accredited Master of Architecture (MArch) professional program which the following tracks to accommodate students from different undergraduate majors:

- A 2-year track for students with a 4-year pre-professional bachelor's degree program in architecture.
- A 3-year track for students with a bachelor's degree in other disciplines or in a non-pre-professional architecture program.
- An accelerated track for eligible Temple pre-professional students.

For more information on NAAB accreditation, please visit our NAAB Professional Program Information page.

Accreditation

Students in Tyler's +1 and +2 programs can continue on to the professional degree, the MArch. The BSArch and MArch degrees in a sequence meets the National Architectural Accrediting Board's standards for an accredited professional education.

Architecture Laptop Policy

Laptops are required for all students entering Architecture, Facilities Management, and Historic Preservation programs. The computer and its corresponding digital tools, such as laser cutters, 3D printers, and digital fabrication machines, have become an integral part of architectural pedagogy and the design studio environment. All architecture, facilities management, and historic preservation students begin working digitally in their freshman representation courses within the Architecture Foundations program. This Laptop Policy has been implemented to provide advantageous learning environments that guide students towards the acquisition of tools and skillsets that are most appropriate for the furthering of both their academic and professional journeys. Students should purchase a Windows-compatible laptop.

For full device and software requirements and recommendations, please see the Architecture Program Laptop Policy.

Contact Information

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Learn more about the Bachelor of Science in Architecture.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Science in Architecture degree in Architecture may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 123 semester hours of credit with a minimum cumulative 2.00 GPA.

University Requirements

All students are required to complete the General Education (GenEd) requirements. Go to the General Education (p. 83) section for more information.

Summer or semester study abroad will satisfy the GenEd Global/World Society (GG) requirement.

All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses required for this major are ARCH 3296 and ARCH 4596.

Program Requirements

All required Architecture courses, MATH 1031, and PHYS 1021 or ECE 2142 must be completed with a C- or better to fulfill major requirements.

Code	Title	Credit Hours
MATH 1031	Differential and Integral Calculus	4
Select one of the following:		4
PHYS 1021	Introduction to General Physics I	
ECE 2142	Engineering Principles for Building Science ¹	
Freshman Requirements		
ARCH 1011	Visual Literacy for Architects 1	3
ARCH 1001	Introduction to Design and the Environment	3
ARCH 1012	Visual Literacy for Architects 2	3
Sophomore Requirements		
ARCH 2121	Foundation Architectural Design 1	4
ARCH 2141	Architectural History: Ancient through Renaissance	3
ARCH 2151	Architecture, Technology, and the Environment	3
ARCH 2122	Foundation Architectural Design 2	4
ARCH 2142	Architectural History: 17th Century through 20th Century	3
Junior Requirements		
ARCH 3231	Architectural Design III	6
ARCH 3152	Materials and Methods	4
ARCH 3296	Movements in Modern Architecture	3
ARCH 3232	Architectural Design IV	6
ARCH 3354	Sustainability and Architecture	3
Senior Requirements		
ARCH 4331	Architectural Design V	6
ARCH 3251	Structural Analysis for Architects	3
ARCH 4332	Architectural Design VI	6
ARCH 4596	Seminar in Architectural Theory	3
ARCH Electives		9

1

If ECE 2142 is selected, students will need another GenEd Science and Technology (GS) course to satisfy the GenEd requirement.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Architecture

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Architecture Foundation Studies Courses (Year 1 & 2)

Year 1		Credit Hours
Fall		
ARCH 1011	Visual Literacy for Architects 1 ¹	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
MATH 1031	Differential and Integral Calculus	4
GenEd Breadth Course		3
Credit Hours		14
Spring		
ARCH 1001	Introduction to Design and the Environment	3
ARCH 1012	Visual Literacy for Architects 2 (spring only)	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Select one of the following:		4
PHYS 1021	Introduction to General Physics I	
ECE 2142	Engineering Principles for Building Science ²	
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
ARCH 2121	Foundation Architectural Design 1 (fall only) ³	4
ARCH 2141	Architectural History: Ancient through Renaissance (fall only)	3
ARCH 2151	Architecture, Technology, and the Environment	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Credit Hours		16
Spring		
ARCH 2122	Foundation Architectural Design 2 ((spring only)) ⁴	4
ARCH 2142	Architectural History: 17th Century through 20th Century	3
GenEd Breadth Course		3
Free Elective ⁵		3
Free Elective ⁵		3
Credit Hours		16
Total Credit Hours		62

¹ Although not required, freshman students registered for ARCH 1011 should also take ARCH 1502.

² If ECE 2142 is selected, students will need another GenEd Science and Technology (GS) course to satisfy the GenEd requirement.

³ Option to take ARCH 2123 / ARCH 2153 instead of ARCH 2121 for BS in Facilities Management.

⁴ Option to take ARCH 2124 / ARCH 2154 instead of ARCH 2122 for BS in Facilities Management.

⁵ Students planning to study abroad should substitute the Free Elective for a required course available only on main campus. For more information, please see your advisor.

Note: The Architecture Foundation is common to all three undergraduate degrees. In the spring of the sophomore year, students declare a major in one of the degrees offered. A place in the BS in Facilities Management or the BS in Historic Preservation is guaranteed for all students in good standing with the University. Admission to the Bachelor of Science in Architecture is competitive. Typically, students have a cumulative GPA of 3.0 or higher and an excellent portfolio. Students in all three programs can apply to the Master of Architecture program. Bachelor of Science in Architecture students are eligible for the 2-year, 60 credit track. BS in Historic Preservation and BS in Facilities Management students may be required to take additional coursework (between 60-90 credits) at the graduate level. Students can meet with an advisor to plan ahead and can refer to the Temple University Graduate Bulletin.

Note: Students who plan on applying to the +1 Bachelor of Science in Architecture + Master of Architecture Accelerated Program should plan on taking ARCH 3251 and ARCH 3354 in the second or third year of study and should consult with an academic advisor.

Bachelor of Science in Architecture (Year 3 & 4)

Year 3		
Fall		Credit Hours
ARCH 3231	Architectural Design III	6
ARCH 3152	Materials and Methods	4
ARCH 3296	Movements in Modern Architecture	3
GenEd Breadth Course		3
Credit Hours		16
Spring		
ARCH 3232	Architectural Design IV	6
ARCH 3354	Sustainability and Architecture	3
GenEd Breadth Course		3
Free Elective		3
Credit Hours		15
Year 4		
Fall		
ARCH 4331	Architectural Design V	6
ARCH 3251	Structural Analysis for Architects	3
Architecture Elective		3
Free Elective		3
Credit Hours		15
Spring		
ARCH 4332	Architectural Design VI	6
ARCH 4596	Seminar in Architectural Theory	3
Architecture Elective		3
Architecture Elective		3
Credit Hours		15
Total Credit Hours		61
Code	Title	Credit Hours
Total Credits for the BSArch in Architecture:		123

Rome Option

Bachelor of Science in Architecture students who plan to study abroad are encouraged to meet with an advisor as early as the freshman year. While the grid below suggests appropriate coursework, a semester abroad would require using free electives that ordinarily would be taken in other semesters. It will take careful planning with an advisor to ensure that the degree is completed as efficiently as possible, and that courses normally taken in the spring of junior year or the fall of senior year on Main campus are completed before the semester abroad. ARCH 3234 can substitute for ARCH 4331; ARCH 3241 counts as an Architecture elective.

Code	Title	Credit Hours
ARCH 3234	Architectural Design Studio in Rome	6
ARCH 3241	Seminar Analysis of Urban Structure in Rome	3
Free Elective		3

Free Elective	3
Total Credit Hours	15

Japan Option

Bachelor of Science in Architecture students who plan to study abroad are encouraged to meet with an advisor as early as the freshman year. While the grid below suggests appropriate coursework, a semester abroad would require using free electives that ordinarily would be taken in other semesters. It will take careful planning with an advisor to ensure that the degree is completed as efficiently as possible, and that courses normally taken in the spring of junior year or fall of senior year on Main campus are completed before the semester abroad.

GenEd courses are offered at the Japan campus and can be substituted where appropriate for Free electives. ARCH 3233 can substitute for ARCH 4331; ARCH 3242 counts as an Architecture elective.

Code	Title	Credit Hours
ARCH 3233	Architecture Design Studio in Tokyo (Undergraduate)	6
ARCH 3242	Urban Seminar in Tokyo (Undergraduate)	3
Free Elective		3
Free Elective		3
Total Credit Hours		15

Art BA (TUJ)

Overview

The **Bachelor of Arts in Art** is awarded by the Tyler School of Art and Architecture and is available only at Temple University, Japan Campus. The BA in Art is the only degree-conferring U.S.-style art program in Tokyo, offering a curriculum that situates visual practice in a liberal arts context with art historical reference, critical perspectives and theoretical insight. With an emphasis on traditional fine art media, photography and digital technology, the coursework prepares students for a variety of practices in visual art. Tokyo's unique urban environment and its numerous art galleries and museums offer context, inspiration and stimuli for student learning.

The Art major focuses on visual art practice within a liberal arts context. Courses include design, drawing, painting, three-dimensional design, printmaking, digital photography, digital imaging, Internet imaging, moving images, motion graphics, media arts and art history. The faculty teaches studio art from the viewpoint of its connection to such disciplines as psychology, literature, philosophy, mathematics, biology and physics.

Campus Location: Japan

Program Code: TA-ARTU-BA

An Art minor (p. 136) and an Art History minor (p. 135) are also offered at both Main Campus and Japan Campus.

Contact Information

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These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Arts degree may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 123 semester hours of credit with a minimum 2.0 cumulative GPA.

There may be minimum grade requirements of C- or better in required courses - students should refer to the DARS and their advisor.

Students who are seeking admission into the BA in Art degree program must review the requirements and procedures outlined on the TUJ web site: www.tuj.ac.jp/admissions/index.html.

University Requirements

All Temple students are required to complete the General Education (GenEd (p. 83)) curriculum.

- Study abroad for a summer or semester will satisfy the Global/World Society requirement.
- The GenEd Arts requirement is waived if all of the following courses are completed with a C- or better: ARTU 1201, ARTU 1401, ARTU 1402 and ARTU 1501. If the student changes majors before completing all four courses, they must complete a GenEd Arts course to satisfy the requirement for General Education.

Major Requirements for BA in Art

- Students must complete successfully the second semester of a foreign language.
- Students must complete at least 15 semester hours in upper-level Liberal Arts courses.

Code	Title	Credit Hours
Foundation Requirements		
ARTU 1201	3-D Design	3
ARTU 1401	Drawing I	3
ARTU 1402	Drawing II	3
ARTU 1501	2D Design	3
Sophomore Studio Electives		
Select four from the following:		12
ARTU 2102	Painting	
ARTU 2202	Intermediate 3-D	
ARTU 2301	Relief Printmaking	
ARTU 2601	Computer Imaging	
ARTU 2811	Art Photography: Digital	
Junior Studio Electives		
Choose three ARTU 2000+ Elective		9
Choose one ARTU 3000+ Elective		3
Senior Studio Electives		
Choose one ARTU 3000+ Elective		3
Choose one ARTU 4000+ Elective		3
Capstone		
ARTU 4796	Art Seminar	3
Art History Requirements		
ARTH 1103	Introduction to Methods and Theories	3
Select one of the following:		3-4
ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 Honors Arts of the World I: Prehistoric to 1300	
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century Honors Arts of the World II: 1300 to the 21st Century	
ARTH 1801	Arts of Asia	
Art History 2000-4999 Elective		
One Art History 2000-4999 Elective		4
One Writing Intensive (WI) Art History course ¹		4
Academic Requirements		
Five upper-level CLA courses ^{2,3}		15
Total Credit Hours		74-75

1

This course does not apply towards the upper-level CLA requirements.

2

One Upper-level CLA course must be taken in Social Science unless completing Art History minor.

3

Upper-level Art History courses can be counted here except as noted above.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Art in Art

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
ARTU 1401	Drawing I ¹	3
ARTU 1501	2D Design ¹	3
ARTH 1103	Introduction to Methods and Theories	3
Credit Hours		16
Spring		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Quantitative Literacy Course ^{GQ}		4
ARTU 1402	Drawing II ¹	3
ARTU 1201	3-D Design ¹	3
Select one of the following:		3
ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 or Honors Arts of the World I: Prehistoric to 1300	
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century or Honors Arts of the World II: 1300 to the 21st Century	
ARTH 1801	Arts of Asia	
Art History 2000+ Course		
Credit Hours		16
Year 2		
Fall		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Foreign Language 1001 - first level		4
Select two of the following:		6
ARTU 2102	Painting	
ARTU 2202	Intermediate 3-D	
ARTU 2301	Relief Printmaking	
ARTU 2601	Computer Imaging	
ARTU 2811	Art Photography: Digital	
Credit Hours		16
Spring		
GenEd Breadth Course		3
GenEd Breadth Course		3
Foreign Language 1002 - second level		4
Select two of the following:		6
ARTU 2102	Painting	
ARTU 2202	Intermediate 3-D	
ARTU 2301	Relief Printmaking	
ARTU 2601	Computer Imaging	

ARTU 2811	Art Photography: Digital	
Credit Hours		16
Year 3		
Fall		
GenEd Breadth Course		3
ARTU 2000+ Studio Elective		3
ARTU 2000+ Studio Elective		3
Upper-Level Art History course ²		4
Upper-Level CLA course - Social Science ³		3
Credit Hours		16
Spring		
GenEd Breadth Course		3
ARTU 2000+ Studio Elective		3
ARTU 3000+ Studio Elective		3
Upper-Level Art History course ^{WI 4}		4
Free Elective		3
Credit Hours		16
Year 4		
Fall		
ARTU 3000+ Studio Elective		3
ARTU 4796	Art Seminar	3
Upper-Level CLA course		3
Upper-Level CLA course		3
Free Elective		3
Credit Hours		15
Spring		
ARTU 4000+ Studio Elective		3
Upper-Level CLA course		3
Upper-Level CLA course		3
Free Elective		3
Credit Hours		12
Total Credit Hours		123

¹
GenEd Arts (GA) Waiver: Completion of ARTU 1201, ARTU 1401, ARTU 1402 and ARTU 1501.

²
Can substitute PHIL 1061 or CART 3011.

³
Social Science not required if pursuing a minor in Art History.

⁴
Choose between ARTH 2096, ARTH 2097 (3 s.h.), ARTH 2098, ARTH 2197, ARTH 2696, ARTH 2896, ARTH 2897, ARTH 2898.

Art Education BSEd

Overview

The **Bachelor of Science in Education in Art Education**, offered by the Department of Art Education and Community Arts Practices, is one of two pathways at the Tyler School of Art and Architecture to earning art teaching certification in Pennsylvania and becoming a teaching artist. Students may also become certified teachers through the Bachelor of Fine Arts in any studio arts major with an optional Concentration in Art Education.

The BSEd in Art Education—a NASAD-accredited program leading to Pennsylvania Certification in Art, K-12—offers Tyler students the rigorous, well-rounded, personal and community-based training needed to prepare for careers in art teaching and becoming a teaching artist, all with an urban focus.

Offering students access to the resources of both a world-class art school and a large, public research university, Tyler's undergraduate Art Education programs prepare students to become thoughtful art teachers with the extensive knowledge and skills to teach art to children of all ages.

Tyler students take full advantage of the school's location in Philadelphia and the city's rich array of schools, communities, museums, galleries and artists, opening up opportunities for artistic growth, research, networking and jobs.

The Tyler faculty is committed to urban art education and the power of collaborating with communities. Tyler students don't just learn how to teach art and grow as artists—they learn how to affect positive change in the communities where they work.

The Art Education program ensures a fully-rounded preparation for the elementary and secondary school teacher. This program provides content study for art teacher preparation and teacher certification to teach art in kindergarten through twelfth grade. The requirements for the degree total 122 credits.

The Art Education program requires students to maintain a minimum cumulative GPA of 3.0 to enroll in Art Education courses and to graduate with the Bachelor of Science in Education degree in Art Education.

BSEd in Art Education students should routinely meet with an Art Education faculty advisor to discuss field placement, clearances, and requirements, as the state of Pennsylvania may change requirements after the *Bulletin* information has been posted. Application for ARTE 3096 and ARTE 4003/ARTE 4088 must be submitted by the deadline communicated to students by the Art Education department.

Campus Location: Main

Program Code: TA-ARTE-BSED

Admissions

A portfolio is required for admission into the BSEd in Art Education program. If you have completed college-level studio courses and are seeking studio equivalency credit, you must complete a transfer portfolio review. The department will only accept up to 24 transfer credits of studio work toward the major. Students who are seeking admission into the BSEd in Art Education program must contact the Tyler Admissions Office (215-777-9090) for portfolio requirements.

For more information on how to apply, please visit Tyler's Art Education admissions page.

Study Abroad

Students who plan to study abroad should arrange to meet with their academic advisor and the Education Abroad and Oversees Campuses office as early as possible, preferably during the freshman year, in order to explore options and plan the sequence of courses that would be most appropriate.

Licensure/Certification

Teacher certification is the process used in the U.S. to ensure that prospective K-12 teachers are qualified and prepared to teach at the levels and in the subjects that they intend to teach. Certification in Art Education prepares graduates to teach art to students from K-12. Certification is not always required by private institutions, but some may prefer to hire certified teachers.

In order to become certified in Art Education, students must complete a bachelor's degree from a regionally accredited institution of higher education, pass the Praxis exams required in their state of employment, and satisfy other state-licensing examinations, as applicable.

Temple University is a Pennsylvania state-approved teacher preparation program for K-12 Art. Completion of Temple University's Bachelor of Science in Education in Art Education or Master of Education in Art Education with Teaching Certification satisfies the necessary requirements for graduates to sit for the Praxis Core Academic Skills for Educators, Praxis Subject Assessments, and Praxis Fundamentals.

For certification in some states, students may need to take the Praxis Principles of Learning and Teaching (PLT) exam for their desired grade levels, which they are prepared for through their field placements, classroom observations, and study of human development and pedagogy.

<https://www.education.pa.gov/Educators/Certification/BecomeAnEducator/Pages/ACPSpecialty.aspx>

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational, and other art/design-related endeavors.

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Learn more about the Bachelor of Science in Education in Art Education.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Science in Education degree in Art Education may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 122 semester hours of credit with a minimum cumulative GPA of 3.0.

University Requirements

Completion of the university's General Education (GenEd (p. 83)) curriculum.

- Successful completion (minimum grade of C-) in both FDPR 1511 and ARTH 1156 will waive the GenEd Arts (GA) requirement.
- Successful completion (minimum grade of C-) in EDUC 2109, SPED 2231, and TESL 3631 will waive the GenEd Human Behavior (GB) requirement.
- Summer or semester study abroad will satisfy the GenEd Global/World Society requirement.

Major Requirements

- A minimum 3.0 cumulative GPA is required for registration in all Art Education courses.
- ARTE 1001, ARTE 2001, ARTE 3096, ARTE 4003, and ARTE 4088 must be completed with a C or better to fulfill major requirements.
- Students must earn minimum grade of C- in required Studio courses, College of Education coursework and additional mathematics requirement.

Code	Title	Credit Hours
Studio Requirements in Visual Studies, Foundation and Crafts		
FDPR 1503	Woodshop Fundamentals	1
ART 2011	Socially Engaged Arts Practices in Communities	3
FDPR 1511	Foundation Drawing	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3
or FDPR 1532	3D Foundation Principles/C	
VS 1651	Visual Studies 1 Foundation: Digital Imaging	3
ARTE 3202	Teaching Artists	3
Select one of the following:		3
ART 2502	Intermediate Drawing	
ART 2504	Intermediate Drawing	
ART 2507	Intermediate Figure Drawing	
ART 2509	Drawing Workshop	
Select one of the following:		3
ART 2501	Painting	
ART 2503	Painting	
ART 2506	Painting Workshop	
ART 2702	Survey of Etching and Relief	3
Select one of the following:		3
ART 2505	Painting Materials and Techniques	
ART 3503	Landscape	
Ceramics course - select one of the following:		3
ART 1101	Introduction to Beginning Ceramics for Non-Tyler BFA Majors	
ART 2101	Beginning Ceramics	
Fibers and Materials Studies course - select one of the following:		3

ART 1201	Introduction to Fibers for Non-Tyler BFA Majors	
ART 2201	Introduction to Fibers and Material Studies	
Art History		
ARTH 1155	Arts of the World I: Prehistoric to 1300	3
or ARTH 1955	Honors Arts of the World I: Prehistoric to 1300	
ARTH 1156	Arts of the World II: 1300 to the 21st Century	3
or ARTH 1956	Honors Arts of the World II: 1300 to the 21st Century	
Additional Art History writing intensive elective course (2000+ level) (WI)		4
Art Education		
ARTE 1001	Professional Practices in Art Education and Art Therapy	1
ARTE 2001	Science and Art of Teaching	4
ARTE 3096	Art in Elementary and Secondary School (WI)	4
ARTE 4003	Inclusive Art Education K-12 Students in the Art Room	3
ARTE 4088	Student Teaching	9
Education		
EDUC 2103	Socio-cultural Foundations of Education in the United States	3
EDUC 2109	Adolescent Development for Educators	3
Special Education		
SPED 2231	Introduction to Special Education	3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
Teaching English to Speakers of Other Languages		
TESL 3631	Principles and Practice for Teaching English Learners	3
Electives		
Studio Art Electives ¹		6
Academic Elective		1
Mathematics Requirement - one Mathematics course (in addition to GenEd Math)		3
Total Credit Hours		93

1

Select from the following areas: Community Arts (not CART 3011/CART 3911), 2000 level ART (not ART 2011), and 2000 level GAD.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Education in Art Education

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
ARTH 1155	Arts of the World I: Prehistoric to 1300	3
or ARTH 1955	or Honors Arts of the World I: Prehistoric to 1300	
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Breadth Course		3
Credit Hours		16
Spring		
ARTE 1001	Professional Practices in Art Education and Art Therapy	1
FDPR 1503	Woodshop Fundamentals	1
ART 2011	Socially Engaged Arts Practices in Communities	3
Select one of the following:		3
FDPR 1531	3D Foundation Principles/W	

FDPR 1532	3D Foundation Principles/C	
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Credit Hours		17
Year 2		
Fall		
VS 1651	Visual Studies 1 Foundation: Digital Imaging	3
Select one of the following:		3
ART 2501	Painting	
ART 2503	Painting	
ART 2506	Painting Workshop	
EDUC 2103	Socio-cultural Foundations of Education in the United States	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Mathematics elective (1000+ or higher)		3
Credit Hours		15
Spring		
ART 2702	Survey of Etching and Relief	3
Fibers and Materials Studies course - select one of the following:		3
ART 1201	Introduction to Fibers for Non-Tyler BFA Majors	
ART 2201	Introduction to Fibers and Material Studies	
EDUC 2109	Adolescent Development for Educators ²	3
SPED 2231	Introduction to Special Education (field experience) ²	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Year 3		
Fall		
Select one of the following:		3
ART 2502	Intermediate Drawing	
ART 2504	Intermediate Drawing	
ART 2507	Intermediate Figure Drawing	
ART 2509	Drawing Workshop	
ARTE 2001	Science and Art of Teaching (field experience)	4
Ceramics course - select one of the following:		3
ART 1101	Introduction to Beginning Ceramics for Non-Tyler BFA Majors	
ART 2101	Beginning Ceramics	
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Spring		
Select one of the following:		3
ART 2505	Painting Materials and Techniques	
ART 3503	Landscape	
ARTE 3202	Teaching Artists	3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
TESL 3631	Principles and Practice for Teaching English Learners ²	3
Art History Writing Intensive Elective ^{WI}		4
Credit Hours		16

Year 4**Fall**

ARTE 3096	Art in Elementary and Secondary School (field experience)	4
Studio Art Elective		3
Studio Art Elective		3
GenEd Breadth Course		3
Academic Elective		1

Credit Hours**14****Spring**

ARTE 4088	Student Teaching	9
ARTE 4003	Inclusive Art Education K-12 Students in the Art Room	3

Credit Hours**12****Total Credit Hours****122**

1

GenEd Arts (GA) Waiver: Completion of ARTH 1156 and FDPR 1511 with a C- or better.
See academic advisor for information on the GenEd Arts waiver.

2

GenEd Human Behavior (GB) Waiver: Completion of EDUC 2109, SPED 2231 and TESL 3631 with a C- or better.

Art History BA

Overview

The **Bachelor of Arts in Art History**, offered by the Department of Art History, teaches students how to think critically and conduct research about the history of culture—all with a visual, interdisciplinary and global perspective—preparing students for a wide range of careers or further study at the graduate level.

The program is designed to foster a lifelong interest in and sensitivity to the arts as a fundamental form of human expression and communication, equipping students with strong skills in a world in which visual literacy is vitally important. Based at one of the nation's top art schools, Tyler's Art History major offers access to dynamic faculty members with a diverse range of interests; the resources of a large research university; study abroad programs in Rome and Tokyo; and opportunities for field trips, research, internships and enrichment in Philadelphia, a vibrant center of art, culture and history located near both New York and Washington, D.C.

Campus Location: Main

Program Code: TA-ARTH-BA

Admissions

For information on how to apply, please visit Tyler's Art History admissions page.

Study Abroad

Students who plan to study abroad should arrange to meet with their academic advisor and the Education Abroad and Overseas Campuses office as early as possible, preferably during the freshman year, in order to explore options and plan the sequence of courses that would be most appropriate.

Career Opportunities

Tyler Art History students find jobs in the non-profit and for-profit sectors, including museums, galleries, libraries, auction houses, publishers and more, and earn placements in the most competitive graduate programs. To prepare for careers in the arts, students are encouraged to participate in internships at museums and galleries.

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational, and other art/design-related endeavors.

Contact Information

Jane Evans, Art History Department Chair
Tyler School of Art and Architecture

Tyler Building Administrative Suite, Room 210P
215-777-9738
jevans@temple.edu

Erin Pauwels, Undergraduate Advisor
Tyler Building Art History Suite, Room 210A
erin.pauwels@temple.edu

Learn more about the Bachelor of Art in Art History.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The degree of Bachelor of Arts in Art History may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 123 semester hours of credit with a minimum cumulative GPA of 2.0 overall and in the major.

Grades below a C- in Art History and General Education courses do not fulfill requirements for the degree.

University Requirements

Students must complete the requirements of the General Education (GenEd (p. 83)) program.

- Summer or semester study abroad will satisfy the GenEd Global/World Society (GG) requirement.

Program Requirements

- A minimum of 66 credits must be taken outside of Tyler departments to earn the degree
- A minimum of 45 semester hours in upper level courses (CLA 2000 to 4999; CST 2000 to 4999) must be completed with a passing grade.
 - Two 2000+ courses (minimum 6 credits) must be taken from Social or Natural Sciences.
 - Upper-level Art History courses are categorized as upper-level Liberal Arts (CLA) courses.
- Students must complete the second level of a foreign language:

Code	Title	Credit Hours
Foreign Language (Second Level)		
Select one of the following:		4
ARBC 1002	Arabic Elements II	
CHI 1002	Chinese Elements II	
FREN 1002	Introduction to French II	
GER 1002	Introduction to German II	
GRKA 1002	Ancient Greek 2	
HEBR 1002	Elements II	
HIN 1002	Hindi Elements II	
ITAL 1002	Italian Language II	
or ITAL 1902	Honors Italian Language II	
JPNS 1002	Japanese Elements II	
KRN 1002	Korean Elements II	
LAT 1002	Latin 2	
PORT 1002	Basic II	
RUS 1002	First-Year Russian II	
SPAN 1002	Basic II	
or SPAN 1902	Honors Basic II	

Art History Major Requirements (minimum of 41 s.h.)

Code	Title	Credit Hours
Introductory Level Courses		
ARTH 1155	Arts of the World I: Prehistoric to 1300	3

or ARTH 1955	Honors Arts of the World I: Prehistoric to 1300	
ARTH 1156	Arts of the World II: 1300 to the 21st Century	3
or ARTH 1956	Honors Arts of the World II: 1300 to the 21st Century	

Upper Level Lecture Course

Select one course from 4 of the 5 groups below: 16

Earliest times to 600

ARTH 2101	Art of Ancient Egypt and the Aegean	
ARTH 2105	Roman Art and Archaeology	
ARTH 2110	Topics in Ancient Art	
ARTH 2117	Archaeological Excavation	
ARTH 2129	Greek and Roman Sculpture	
ARTH 2135	Art and Culture in Ancient Rome	
ARTH 2196	Greek and Roman Sculpture (WI)	
ARTH 2218	From Constantine to Mohammed: Art & Architecture of the Mediterranean from the 4th to 8th Century AD	

600-1400

ARTH 2043	Islamic Art and Architecture, 650-1250: From Mohammad to the Mongols	
ARTH 2200	Topics in Medieval Art	
ARTH 2215	Holy Image, Glittering Mosaic: The Art of the Byzantine Empire	
ARTH 2216	Early Medieval Visual Culture	
ARTH 2217	Art of the Global Middle Ages 1000-1400	

1400-1800

ARTH 2310	Topics in Renaissance Art	
ARTH 2321	Masters of Renaissance Art	
ARTH 2323	Early Renaissance Art in Italy	
ARTH 2325	Art in the Age of Exploration: 1400-1600	
ARTH 2329	Italian Architecture 1400-1700	
ARTH 2350	Topics in Early Modern Art, 1400-1750	
ARTH 2400	Topics in Global Baroque Art	
ARTH 2431	Early Modern Italy and Spain in the 17th Century	
ARTH 2432	Northern and Global Baroque Art: Art in the Age of Rubens, Rembrandt, Vermeer	
ARTH 2450	Topics in Eighteenth Century Art	
ARTH 3301	Michelangelo	
ARTH 3324	High Renaissance Art in Italy	

1800-Present

ARTH 2003	History of Modern Crafts and Design: Design Movements from the Crystal Palace until Today	
ARTH 2005	Cultural Heritage Preservation	
ARTH 2006	Curatorial Methodologies	
ARTH 2007	World Photography	
ARTH 2008	History of Photography	
ARTH 2090	Topics in Arts Administration Practice	
ARTH 2500	Topics in 19th Century Art	
ARTH 2535	Art in the Age of Revolution	
ARTH 2543	Transnational Impressionisms	
ARTH 2600	Topics in 20th Century Art	
ARTH 2601	History of Modern Graphic Design	
ARTH 2610	Topics in Modern and Contemporary Art	
ARTH 2622	Galleries and Studios of Rome	
ARTH 2642	Modern Art, 1900-1945	
ARTH 2644	Post-War Art, 1945-1989	
ARTH 2646	Contemporary Art, 1989 to Present	
ARTH 2660	Topics in International Cinema	
ARTH 2670	Topics in Contemporary Art	

ARTH 2696	Graphic Design Theory	
ARTH 2701	Modern Art in the United States	
ARTH 2704	Art in the United States to 1900	
ARTH 2765	Revolution and Beyond: Modern & Contemporary Art in Latin America	
Transhistorical		
ARTH 2004	History of Printmaking	
ARTH 2044	Islamic Art and Architecture, 1250-1750: From the Mongols to the Mughals	
ARTH 2428	Wonders of Rome: Art and Culture of the Baroque Era	
ARTH 2611	Introduction to African Art	
ARTH 2612	Introduction to Caribbean Art	
ARTH 2700	Topics in American Art	
ARTH 2753	Art and Environment in American Culture	
ARTH 2760	Topics in the Art of Latin America	
ARTH 2819	Southeast Asian Art	
ARTH 2871	Chinese Art	
ARTH 2904	Honors Counterfeiting, Looting and the Ethics of Collecting Ancient Art	
Capstone		
ARTH 3097	Art History Capstone (WI)	4
Electives		
Three additional upper-level Art History electives numbered 2000-4999		12
Writing Intensive Course		
Note: In addition to the Capstone requirement, one other Upper-Level Art History course (either as part of the 4 "categories" or electives) must be Writing Intensive (WI).		
Select one of the following:		
ARTH 2096	Art History Writing Intensive	
ARTH 2097	Art History Writing Intensive	
ARTH 2098	Art History Writing Intensive	
ARTH 2196	Greek and Roman Sculpture	
ARTH 2897	Writing for Art History: Art History Writing Intensive Seminar	
Studio Art		
One Studio Art Course		3
Total Credit Hours		41

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Art History

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 or Honors Arts of the World I: Prehistoric to 1300	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
GenEd Breadth Course		3
Free Elective		3
Credit Hours		16
Spring		
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century or Honors Arts of the World II: 1300 to the 21st Century	3

IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
GenEd Quantitative Literacy Course ^{GQ}		4
Free Elective		3
Credit Hours		16
Year 2		
Fall		
Upper-Level 2000+ WI Art History Course ¹		4
Foreign Language 1001 - first level		4
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		17
Spring		
Upper-Level 2000+ Art History Course		4
Foreign Language 1002 - second level		4
GenEd Breadth Course		3
GenEd Breadth Course		3
Free Elective		3
Credit Hours		17
Year 3		
Fall		
Upper-Level 2000+ Art History Course		4
Upper-Level 2000+ Art History Course		4
Upper-Level 2000+ Liberal Arts Elective		3
Studio Art		3
Credit Hours		14
Spring		
ARTH 3097	Art History Capstone ²	4
Upper-Level 2000+ Art History Course		4
Upper-Level 2000+ CLA Social Science Elective		3
Free Elective		3
Credit Hours		14
Year 4		
Fall		
Upper-Level 2000+ Art History Course		4
Upper-Level 2000+ CLA Social Science Elective		3
Upper-Level 2000+ Liberal Arts Elective		3
Free Elective		3
Free Elective		3
Credit Hours		16
Spring		
Upper-Level 2000+ Art History Course		4
Upper-Level 2000+ Liberal Arts Elective		3
Free Elective		3
Free Elective		3
Credit Hours		13
Total Credit Hours		123

All upper-level Art History courses are categorized as upper-level Liberal Arts courses.

1

ARTH 2897 is strongly recommended.

2

ARTH 3097 Art History Capstone is a senior-level course in historiography and research methods, offered only during Spring semesters. Students may take Capstone in either the third or fourth year, but should not enroll until after they have completed at least four upper-level art history courses.

Art History Minor

Overview

Temple University students majoring in other subjects—including Tyler students pursuing Bachelor of Fine Arts degrees—may pursue a **Minor in Art History**. Students may complete much of the minor at the Rome campus or all of the minor at the Temple University Main or Japan Campus.

A minor in Art History is intended to provide the student with a deepened understanding of critical theory and the history of art, to develop skills in the discipline of the study of art history, to allow the pursuit of an interdisciplinary course of study, or to prepare themselves for an advanced degree.

Campus Locations: Main and Japan

Contact Information

Main Campus

Jane Evans, Art History Department Chair
Tyler School of Art and Architecture
Tyler Building Administrative Suite, Room 210P
215-777-9738
jevans@temple.edu

Erin Pauwels, Undergraduate Advisor
Tyler Building Art History Suite, Room 210A
erin.pauwels@temple.edu

Temple University Japan

Kaoru Sakurai, MFA, Major Coordinator
ksakurai@tuj.temple.edu

Taro Nettleton, PhD, Major Coordinator
taro.nettleton@tuj.temple.edu

Requirements (Except for Tyler School of Art & Architecture BFA Students)

Code	Title	Credit Hours
Select one of the following:		3-4
ARTH 1801	Arts of Asia	
ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 Honors Arts of the World I: Prehistoric to 1300	
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century Honors Arts of the World II: 1300 to the 21st Century	
ARTH 0808	Art Matters: Ideas in Art and Architecture	
Select four Upper-Level 2000+ Art History Electives		12-16
Total Credit Hours		15-20

Requirements for Tyler School of Art & Architecture BFA Students

Code	Title	Credit Hours
ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 Honors Arts of the World I: Prehistoric to 1300	3
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century Honors Arts of the World II: 1300 to the 21st Century	3

Select four Upper-Level 2000+ Art History Electives

12-16

Total Credit Hours**18-22**

Art Minor

Overview

The **Minor in Art** is an opportunity for both Main Campus and Temple University Japan Campus students to study the visual arts, whether the goal is to build on previous experience in the visual arts, develop technical skills, enhance creativity and critical thinking skills to apply to their major area of study, or all of the above.

On Main Campus, Temple University students can pursue the visual arts in world-class facilities at one of the nation's top-ranked art schools with access to the region's vibrant contemporary art scene in Philadelphia and nearby cities like New York and Washington, D.C. Temple University Japan Campus, the only degree-conferring United States-style art program in Tokyo, offers a curriculum that situates visual practice in a liberal arts context with art historical reference, critical perspectives and theoretical insight. Tokyo's unique urban environment and its numerous art galleries and museums offer context, inspiration and stimuli for student learning. Both options provide unique opportunities available to Temple students.

Main Campus courses can be found in the class schedule under the subjects of *Art*, *Community Arts*, *Graphic Arts and Design*, and *Visual Studies*. Temple University Japan Campus courses can be found in the class schedule under the subject of *Art (Japan Campus)*.

Campus Locations: Main and Japan

Contact Information

Main Campus

Kim Strommen, Professor
kim.strommen@temple.edu

Temple Japan Campus

Kaoru Sakurai, MFA, Major Coordinator
ksakurai@tuj.temple.edu

Taro Nettleton, PhD, Major Coordinator
taro.nettleton@tuj.temple.edu

Requirements

Code	Title	Credit Hours	
Select two of the following:			
ART 1012 or ARTU 1501	Introduction to Visual Language, Design 2D Design	6	
ART 1011 or ARTU 1201	Introduction to Visual Language, 3-D Design 3-D Design		
ART 1201	Introduction to Fibers for Non-Tyler BFA Majors		
ART 1301	Introduction to Glass for Non-Tyler BFA Majors		
ART 1401	Introduction to Jewelry for Non-Tyler BFA Students		
ART 1502	Introduction to Visual Language, Painting		
ART 1602	Art Photography: Digital		
ART 1701	Screenprinting		
ART 1702	Artist Books, Zines and Independent Publishing		
ART 1802	Introduction to Welding		
ARTU 1101	Painting for Non-Majors		
ARTU 1401	Drawing I		
Select one of the following:			
ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 Honors Arts of the World I: Prehistoric to 1300		3
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century Honors Arts of the World II: 1300 to the 21st Century		

Select four additional Studio Electives from the following list: ¹

12

ARTU 1000+ courses	
CART 3089 or CART 3989	Research and Project Planning Seminar in Community Arts Honors Research and Project Planning in Community Arts
CART 4012	Community Arts
ART 1402	Introduction to CAD for Non-Tyler BFA Students
ART 2011 or CART 3011 or CART 3911	Socially Engaged Arts Practices in Communities Introductory Seminar in Community Arts Honors Introductory Seminar in Community Arts
ART 2000+ courses	
GAD 2000+ courses	
VS 1651	Visual Studies 1 Foundation: Digital Imaging
VS 2000+ courses	

Total Credit Hours

21

1

Many Tyler courses are open to non-major students. Be sure to review the course description and select an appropriate course. A list of courses currently open to non-majors is listed on the Tyler School of Art and Architecture Advising web site.

Note: The department will accept a maximum of 9 s.h. of transfer studio credits towards the minor. A portfolio of work must be submitted for review by department faculty.

Students who are matriculated in the Tyler BA in Art, BA in Art Therapy, BA in Visual Studies, BSED or BFA degree programs may not declare an Art minor.

Art Therapy BA

Overview

The **Bachelor of Arts in Art Therapy**, offered by the Department of Art Education and Community Arts Practices, introduces students to a professional pathway that integrates mental health, human services and the creative process. The program supports students' development of a broad range of skills needed to succeed in careers from art therapy to counseling, enriching the lives of individuals, families and communities.

While a master's degree is required in the professional field of art therapy, this program rigorously prepares students who are interested in pursuing advanced studies in art therapy at the graduate level or art therapy-related jobs. Students learn communication and collaboration, creative design and planning, critical observation and research and self-awareness and cultural responsiveness—skills that can be applied in many kinds of work and master's-level study in a variety of fields.

Tyler Art Therapy offers students access to the resources of a world-class art school; a large, urban, public research university; and faculty who are committed to the power of healing through art. Students benefit from the school's location in Philadelphia and the city's rich array of schools, communities, clinics, museums and galleries near Temple, opening up opportunities for networking, internships, jobs and graduate school.

Campus Location: Main

Program Code: TA-ARTT-BA

Admissions

For information on how to apply, please visit Tyler's Art Therapy admissions page.

Study Abroad

Students who plan to study abroad should arrange to meet with their academic advisor and the Education Abroad and Overseas Campuses office as early as possible, preferably during the freshman year, in order to explore options and plan the sequence of courses that would be most appropriate.

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational, and other art/design-related endeavors.

Contact Information

Lisa Kay, Art Education and Community Arts Practices Department Chair and Art Therapy Program Head

Tyler School of Art and Architecture
 Tyler Building, Room B10J
 215-777-9264
 lisakay@temple.edu

Learn about the Bachelor of Art in Art Therapy.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The degree of Bachelor of Arts in Art Therapy may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 120 semester hours of credit with a 2.0 GPA.

University Requirements

Students must complete the requirements of the General Education (GenEd (p. 83)) program (32 credits).

- Summer or semester study abroad will satisfy the GenEd Global/World Society (GG) requirement.
- Successful completion (minimum grade of C-) in both FDPR 1511 and ARTH 1156 will waive the GenEd Arts (GA) requirement.

All Temple students must take a minimum of two writing-intensive courses at Temple University as part of the major. Writing-intensive courses are identified by the last two digits of the course number (xx96, xx97, xx98). These courses are also identified by the Course Attribute of "WI."

Foreign Language Requirement

Students must complete the second level of a foreign language (4-8 credits).

Major Requirements

ARTE 1001, ARTT 2011, ARTT 3004, ARTE 3202, and ARTT 4289 must be completed with a C or better to fulfill major requirements.

Students will be expected to complete a portfolio of artwork that shows advanced skills in at least one studio area.

Code	Title	Credit Hours
Studio Requirements		
ART 2011	Socially Engaged Arts Practices in Communities	3
FDPR 1511	Foundation Drawing	3
FDPR 1521	2D Foundation Principles	3
FDPR 1532	3D Foundation Principles/C	3
ART 2501 or ART 2503 or ART 2506	Painting Painting Painting Workshop	3
ART 2201 or ART 1201	Introduction to Fibers and Material Studies Introduction to Fibers for Non-Tyler BFA Majors	3
ART 2702	Survey of Etching and Relief	3
ART 2101 or ART 1101	Beginning Ceramics Introduction to Beginning Ceramics for Non-Tyler BFA Majors	3
ART 2601 or ART 2602 or ART 2603 or ART 2604	Photo I: Digital Digital Imaging Photo I: Digital Introduction to Photography (Online Digital Course)	3
Studio Elective 3000+ level		3
Art Therapy Requirements		
ARTE 1001	Professional Practices in Art Education and Art Therapy	1
ARTT 3004	Introduction to Art Therapy	3
ARTT 2011	Creative Process in Art Therapy	3
ARTE 3202	Teaching Artists	3
ARTT 4289	Field Work in Art Therapy	4

Art History Requirements

ARTH 1155	Arts of the World I: Prehistoric to 1300	3
or ARTH 1955	Honors Arts of the World I: Prehistoric to 1300	
ARTH 1156	Arts of the World II: 1300 to the 21st Century	3
or ARTH 1956	Honors Arts of the World II: 1300 to the 21st Century	
Art History Writing Intensive courses		8

Psychology Requirements

PSY 1001	Introduction to Psychology	3
PSY 2301	Foundations of Developmental Psychology	3
PSY 2201	Foundations of Psychopathology	3
PSY 2103	Foundations of Learning and Behavior Analysis	3

Total Credit Hours**70****Suggested Academic Plan**

Please note that this is a **suggested** academic plan. Depending on your situation and the availability of courses, your academic plan may look different. Please be sure to check your plan with your academic advisor.

Bachelor of Arts in Art Therapy**Suggested Plan for New Students Starting in the 2023-2024 Academic Year****Year 1**

Fall		Credit Hours
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
ARTH 1155	Arts of the World I: Prehistoric to 1300	3
or ARTH 1955	or Honors Arts of the World I: Prehistoric to 1300	
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1532	3D Foundation Principles/C	3
Credit Hours		16
Spring		
ARTE 1001	Professional Practices in Art Education and Art Therapy	1
ART 2011	Socially Engaged Arts Practices in Communities	3
ARTH 1156	Arts of the World II: 1300 to the 21st Century ¹	3
or ARTH 1956	or Honors Arts of the World II: 1300 to the 21st Century	
PSY 1001	Introduction to Psychology	3
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		17

Year 2

Fall		
ARTT 3004	Introduction to Art Therapy	3
Select one of the following:		3
ART 2101	Beginning Ceramics	
ART 1101	Introduction to Beginning Ceramics for Non-Tyler BFA Majors	
Select one of the following:		3
ART 2601	Photo I: Digital	
ART 2602	Digital Imaging	
ART 2603	Photo I: Digital	
ART 2604	Introduction to Photography (Online Digital Course)	
PSY 2301	Foundations of Developmental Psychology	3

IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		15
Spring		
ARTT 2011	Creative Process in Art Therapy	3
Select one of the following:		3
ART 2201	Introduction to Fibers and Material Studies	
ART 1201	Introduction to Fibers for Non-Tyler BFA Majors	
GenEd Breadth Course		3
Free Elective		3
Language Requirement - Second Level ²		4
Credit Hours		16
Year 3		
Fall		
PSY 2201	Foundations of Psychopathology	3
ARTE 3202	Teaching Artists	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Select one of the following:		3
ART 2501	Painting	
ART 2503	Painting	
ART 2506	Painting Workshop	
Credit Hours		15
Spring		
ART 2702	Survey of Etching and Relief	3
PSY 2103	Foundations of Learning and Behavior Analysis	3
Free Elective		2
GenEd Breadth Course		3
Art History Writing Intensive		4
Credit Hours		15
Year 4		
Fall		
Studio Elective ³		3
GenEd Breadth Course		3
Free Elective		3
Art History Writing Intensive		4
Credit Hours		13
Spring		
ARTT 4289	Field Work in Art Therapy	4
GenEd Breadth Course		3
Free Elective		3
Free Elective		3
Credit Hours		13
Total Credit Hours		120

1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2

If second level language (1002) is not required as determined by placement testing, these credits must be taken as academic elective.

3

Students must take a 3000-level studio course or higher in order to build advanced skills in at least one studio area.

Please Note: An approved study abroad program will waive the GenEd Global/World Society (GG) requirement. Art Therapy majors interested in studying abroad should consult with an academic advisor to discuss how a semester or a summer program fits in the program to remain on track for graduation.

BFA Foundation

Tyler's BFA curriculum is designed to give sound preparation to the future artist through coursework that provides a variety of approaches, practices, skills and goals. The BFA Foundation Program and introductory courses in each studio area develop a thorough understanding of fundamental processes and information. Advanced courses in the major stress the development of an individual idiom and preparation for the professional world. At Tyler, art students find an atmosphere of aesthetic freedom that encourages personal experimentation and the exploration of visual concepts.

Freshman Year

The Foundation Program is highly structured and intensive; it forms the base that establishes the fundamental studio practice and principles for all visual art expression. In addition to presenting traditional vocabulary, theory, media, and technique, the Foundation Program develops creative thinking and problem solving, visual thinking, and perceptual and imaginative abilities. Faculty members from across the art and design areas teach the Foundation courses, assuring a broad range of experience and diverse viewpoints.

Sophomore Year

Sophomore studio electives serve as prerequisites to enter the major, of which one or two specific courses are required in each major. During the sophomore year, students are offered the opportunity to explore a wide range of studio areas. This experience gives the necessary background with which to make an informed selection of a major and adds to the overall breadth of the educational experience. Requirements are six 2000-level studio courses (18 s.h.), not to exceed three courses from any one major area and additional credits in Art History electives and/or General Education.

Junior and Senior Years

The Bachelor of Fine Arts degree is completed after a final two-year focus in a major studio area. Because expressive work is often achieved by synthesis of disparate media, studio work outside the major is encouraged. Requirements are the specified major courses (21-24 s.h. depending on the major) and one major capstone course (3 s.h.), with a minimum grade of C- required in each course; a minimum of three studio electives which may be taken outside the major (9-12 s.h. depending on the major); and additional credits in Art History, General Education and elective courses.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Fine Arts degree in one of the studio arts majors (i.e., Ceramics, Fibers and Materials Studies, Glass, Graphic and Interactive Design, Metals/Jewelry/CAD-CAM, Painting, Photography, Printmaking, or Sculpture) may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00.

General Education, courses waiving General Education requirements, and major courses all must be completed with a minimum grade of C- to fulfill requirements. Please confer with the advising staff and review your DARS for further information.

BFA Curriculum

Code	Title	Credit Hours
Studio courses		74
Foundation Program (20 credits)		
2000 level Sophomore studios including major prerequisites (18 credits)		
Major studio requirements (21-24 credits, varies depending on major)		
Capstone (WI) course in Major (3 credits)		
Studio electives (9-12 credits, varies depending on major)		
Art History		13-14
ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 Honors Arts of the World I: Prehistoric to 1300	
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century Honors Arts of the World II: 1300 to the 21st Century	
2000+ ARTH elective		
2000+ ARTH writing intensive		
General Education ¹		32

Successful completion (minimum C-) of FDPR 1511 and ARTH 1156 satisfies the GenEd Arts (GA) requirement.

Summer or semester study abroad program will satisfy the GenEd Global/World Society (GG) requirement.

Non-studio elective

3

Open elective

3-4

1

Students waived from General Education (p. 83) requirements must make up the credits with academic coursework taken outside of Tyler departments to be in compliance with BFA accreditation.

Sophomore Prerequisites for BFA Departments

Code	Title	Credit Hours
Ceramics		
ART 2101	Beginning Ceramics	
ART 2102	Intermediate Ceramics	
Glass		
ART 2301	Introduction to Glass	
ART 2302	Intermediate Glass	
Fibers and Material Studies		
ART 2201	Introduction to Fibers and Material Studies	
ART 2202	Dyeing for Color I	
Metals/Jewelry/CAD-CAM		
ART 2401	Jewelry	
ART 2402	CAD-CAM I: Introduction to 3D Modeling	
Graphic and Interactive Design		
GAD 2001	Graphic Design	
GAD 2021	Computers for Design	
Photography		
ART 2601 or ART 2603	Photo I: Digital	
ART 2602	Digital Imaging	
Printmaking		
ART 2701 or ART 2702	Survey of Lithography and Serigraphy Survey of Etching and Relief	
Select one of the following printmaking studios:		
ART 2704	Serigraphy	
ART 2705 or ART 2706	Etching Intaglio Printmaking	
ART 2707	Lithography	
Painting		
ART 2501 or ART 2503	Painting Painting	
Select one of the following:		
ART 2502 or ART 2504	Intermediate Drawing Intermediate Drawing	
ART 2507	Intermediate Figure Drawing	
Sculpture		
ART 2801 or ART 2807	Sculpture Sculpture: Rome	

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Fine Arts

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3
FDPR 1503	Woodshop Fundamentals	1
ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 or Honors Arts of the World I: Prehistoric to 1300	3
Credit Hours		17
Spring		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
FDPR 1512	Foundation Drawing	3
FDPR 1522	2D Foundation Principles	3
FDPR 1532	3D Foundation Principles/C	3
FDPR 1502	Investigations of Art and Design	1
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
Credit Hours		16
Year 2		
Fall		
Select three of the following:		9
ART 2xxx (Studio Electives/Prerequisites) ²		
GAD 2xxx (Studio Electives/Prerequisites) ²		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Spring		
Select three of the following:		9
ART 2xxx (Studio Electives/Prerequisites) ²		
GAD 2xxx (Studio Electives/Prerequisites) ²		
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
Studio Major Courses		6
Studio Elective		3
Art History Elective ³		4
GenEd Breadth Course		3
Credit Hours		16
Spring		
Studio Major Courses		6
Studio Elective		3
Art History Writing-Intensive Elective ^{WI 4}		4

GenEd Breadth Course	3
Credit Hours	16
Year 4	
Fall	
Studio Major Courses	6
Studio Elective	3
GenEd Breadth Course	3
Non-Studio Elective	3
Credit Hours	15
Spring	
Studio Major Courses	6
Writing Intensive course in major (Capstone) ^{WI 5}	3
GenEd Breadth Course	3
Open Elective ³	3
Credit Hours	15
Total Credit Hours	126

1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a grade of C- or better.

2

See academic advisor for details.

3

Students completing a 3 credit Art History 2000+ elective **must** select a 4 credit open elective to reach the minimum 126 credits to earn the BFA degree.

4

Students may elect to take a second writing intensive course within their majors (if available), but must still fulfill a total of 13-14 credits in Art History - see academic advisor for details.

5

In some majors, the Capstone is taken in the junior year.

Ceramics BFA

Overview

The **Bachelor of Fine Arts in Ceramics**, offered by the Department of Art at the Tyler School of Art and Architecture, welcomes students into a diverse community of thinkers and makers who challenge traditional processes in a forward-looking way.

Led by a faculty of practicing artists in state-of-the-art facilities, Ceramics majors work in a close-knit environment, side-by-side with graduate students, as they explore traditional and experimental clay techniques. The program draws on the energy and resources of the urban landscape of Philadelphia—a city with a longstanding clay culture and vibrant visual art scene—to forge community partnerships that lead to broader, inclusive perspectives, conversations and exchanges of ideas.

Students learn product design and production, studio management and gallery installation, as well as critical thinking and problem solving—transferable skills that help prepare them for success in any artistic discipline or profession, including as educators, gallery operators, architectural designers, curators and more. Students also have opportunities for internships in Philadelphia's densely networked clay community.

Each student moves from a common foundation curriculum (p. 141) that introduces materials and processes and prepares them for success in a range of fields of study. Those who select Art as their major will work side-by-side with majors in Visual Studies, Art Education and Art Therapy. The dynamic exchange of ideas that result from these interdisciplinary conversations spur intellectual risk and drive research-based creative concepts.

Upon graduation, students have the practical skill sets and honed aesthetic for successful careers in studio art, art education and design, as well as attend top-tier graduate programs.

Campus Location: Main

Program Code: TA-CRME-BFA

Concentration

Students may complete an **optional** Concentration in Art Education (p. 147).

Admissions

Admission to Tyler's Studio Art (Bachelor of Fine Arts) programs is based on a review of academic credentials and portfolio review. For detailed information on how to apply, please visit Tyler's Studio Art admissions page.

Study Abroad

Students who plan to study abroad should arrange to meet with their academic advisor and the Education Abroad and Overseas Campuses office as early as possible, preferably during the freshman year, in order to explore options and plan the sequence of courses that would be most appropriate.

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational and other art/design-related endeavors.

Contact Information

Lauren Sandler, Program Head
Tyler School of Art Building, Room 150M
lauren.sandler@temple.edu

Learn more about the Bachelor of Fine Arts in Ceramics.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Fine Arts degree in Ceramics may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00. All Ceramics majors must complete the BFA curriculum (p. 141) and General Education (p. 83) requirements.

- Students must earn a C- or better in ART 2101 and ART 2102 to enter the Ceramics major.
- The eight required Junior/Senior studio courses and ART 4096 (capstone) must be completed with a C- or better to fulfill major requirements.

Major Requirements for BFA in Ceramics

Code	Title	Credit Hours
Sophomore Prerequisites		
ART 2101	Beginning Ceramics	3
ART 2102	Intermediate Ceramics	3
Junior Requirements		
ART 3101	Advanced Ceramics (This course is repeatable and should be taken once in the fall and once in the spring)	6
Two additional specialized Ceramics courses (see list below)		6
Senior Requirements		
ART 4101	Advanced Ceramics (This course is repeatable and should be taken once in the fall and once in the spring)	6
Two additional specialized Ceramics courses (see list below)		6
ART 4096	Professional Practices in Art (Capstone, WI)	3

Specialized Ceramics Courses

Code	Title	Credit Hours
ART 3103	Two-Dimensional Ceramics	3
ART 3104	Ceramic Materials	3
ART 3105	Porcelain	3

ART 3106	Advanced Throwing and Wheel Work	3
ART 3107	Ceramic Mold Making	3
ART 3110	Ceramic Workshop	3

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Fine Arts in Ceramics

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3
FDPR 1503	Woodshop Fundamentals	1
ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 or Honors Arts of the World I: Prehistoric to 1300	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		17
Spring		
FDPR 1512	Foundation Drawing	3
FDPR 1522	2D Foundation Principles	3
FDPR 1532	3D Foundation Principles/C	3
FDPR 1502	Investigations of Art and Design	1
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		16
Year 2		
Fall		
ART 2101	Beginning Ceramics	3
ART or GAD 2000-2999	Sophomore Studio Elective	3
ART or GAD 2000-2999	Sophomore Studio Elective	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Spring		
ART 2102	Intermediate Ceramics	3
ART or GAD 2000-2999	Sophomore Studio Elective	3
ART or GAD 2000-2999	Sophomore Studio Elective	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
ART 3101	Advanced Ceramics	3
ART 31xx (Specialized Ceramics Course)		3
ART or GAD	Studio Elective	3
Art History Elective ²		4

GenEd Breadth Course		3
Credit Hours		16
Spring		
ART 3101	Advanced Ceramics	3
ART 31xx (Specialized Ceramics Course)		3
ART or GAD Studio Elective		3
Art History Elective ^{WI}		4
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
ART 4101	Advanced Ceramics	3
ART 31xx (Specialized Ceramics Course)		3
ART 4096	Professional Practices in Art	3
GenEd Breadth Course		3
Non-Studio Elective		3
Credit Hours		15
Spring		
ART 4101	Advanced Ceramics	3
ART 31xx (Specialized Ceramics Course)		3
ART or GAD Studio Elective		3
GenEd Breadth Course		3
Open Elective ²		3
Credit Hours		15
Total Credit Hours		126

1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2

Students completing a 3 credit Art History 2000+ elective **must** select a 4 credit open elective to reach the minimum 126 credits to earn the BFA degree.

Please Note: An approved study abroad program waives the GenEd Global/World Society (GG) requirement; however, these credits must be made up with academic coursework taken outside of Tyler departments to be in compliance with BFA accreditation. Ceramics majors interested in studying abroad should consult with an academic advisor to determine if a semester (generally spring semester of second year) or a summer program would be the best option to remain on track for graduation. If a student is spending a traditional semester abroad, ART 2101 must be completed prior to studying abroad. To remain on track for graduation, permission may be granted to substitute an additional specialized ceramics course in lieu of an advanced ceramics course.

Art Education Concentration

The **Bachelor of Fine Arts with an optional Concentration in Art Education**, offered by the Department of Art, is one of two pathways at the Tyler School of Art and Architecture to earning art teaching certification in Pennsylvania and becoming a teaching artist. Students may also become certified teachers through the Bachelor of Science in Education in Art Education (p. 125).

Tyler offers students seeking a BFA degree an opportunity to earn Pennsylvania Teacher Certification in Art, K-12. The BFA with Art Education Concentration combines Tyler's art curriculum with approved courses in education and the liberal arts—all with Tyler's uniquely urban, community-based approach.

Offering students access to the resources of both a world-class art school and a large, public research university, Tyler's undergraduate Art Education programs prepare students to become thoughtful art teachers with the extensive knowledge and skills to teach kindergarten through twelfth grade.

Tyler students take full advantage of the school's location in Philadelphia and the city's rich array of schools, communities, museums, galleries and artists, opening up opportunities for artistic growth, research, networking and jobs.

The Tyler faculty is committed to urban art education and the power of collaborating with communities. Tyler students don't just learn how to teach art and grow as artists—they learn how to affect positive change in the communities where they work.

Students must complete BFA requirements (p. 141) along with a three-year sequence in Education and Art Education that begins in the sophomore year. Typically five years are necessary to fulfill all requirements. Students work with both the Art Education faculty advisors and the Tyler academic advisors regarding completion of requirements.

Campus Location: Main

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational, and other art/design-related endeavors.

Licensure/Certification

Teacher certification is the process used in the US to ensure that prospective K-12 teachers are qualified and prepared to teach at the levels and in the subjects that they intend to teach. Certification in Art Education prepares graduates to teach art to students from K-12. Certification is not always required by private institutions, but some may prefer to hire certified teachers.

In order to become certified in Art Education, students must complete a bachelor's degree from a regionally accredited institution of higher education, pass the Praxis exams required in their state of employment, and satisfy other state-licensing examinations, as applicable.

Temple University is a Pennsylvania state-approved teacher preparation program for K-12 Art. Completion of Temple University's Bachelor of Science in Education in Art Education or Master of Education in Art Education with Teaching Certification satisfies the necessary requirements for graduates to sit for the Praxis Core Academic Skills for Educators, Praxis Subject Assessments, and Praxis Fundamentals.

For certification in some states, students may need to take the Praxis Principles of Learning and Teaching (PLT) exam for their desired grade levels, which they are prepared for through their field placements, classroom observations, and study of human development and pedagogy.

<https://www.education.pa.gov/Educators/Certification/BecomeAnEducator/Pages/ACPSpecialty.aspx>

Admission

Admission to Tyler's Bachelor of Fine Arts programs is based on a review of academic credentials and portfolio review. For detailed information on how to apply, please visit Tyler's Studio Art admissions page.

Contact Information

Renee Jackson, Program Head for Art Education
Tyler Building, Art Education and Community Arts Practices Suite B090C
215-777-9258
renee.jackson@temple.edu

Summary of Requirements

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

The Bachelor of Fine Arts degree with the Art Education Concentration may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 155 semester hours of credit with a minimum cumulative GPA of 3.0.

University Requirements

All Temple students are required to complete the General Education (GenEd (p. 83)) curriculum.

- Successful completion (minimum C-) of FDPR 1511 and ARTH 1156 satisfies the GenEd Arts (GA) requirement.
- Successful completion (minimum C-) of EDUC 2109, SPED 2231, and TESL 3631 satisfies the GenEd Human Behavior (GB) requirement.
- Summer or semester study abroad will satisfy the GenEd Global/World Society (GG) requirement.

BFA with Art Education Concentration Requirements

ARTE 2001, ARTE 3096, ARTE 4003, ARTE 4088, and ARTE 1001 must be completed with a C or better to fulfill concentration requirements.

Students must earn a minimum grade of C- in required College of Education coursework and additional mathematics requirement to fulfill concentration requirements.

Students in the BFA degree with the Art Education Concentration are required to take a Ceramics studio course and an additional studio course in Glass, Metals/Jewelry/CAD-CAM, or Fibers and Materials Studies; a Painting studio course and an additional studio course in Painting or Sculpture; a

Printmaking studio course and an additional studio course in Photography or Graphic Design. These courses may include prerequisite, sophomore, and/or studio courses within the student's chosen BFA major.

Any BFA student who wishes to pursue the Art Education Concentration must arrange to meet with the Art Education faculty advisor to discuss field placement, clearances, and requirements, as the state of Pennsylvania may change requirements after the *Bulletin* information has been posted. It is strongly suggested that students do so during their freshman year.

Code	Title	Credit Hours
Studio Courses		74
Foundation Program (20 credits)		
2000 level Sophomore studios including major prerequisites (18 credits)		
Major studio requirements (24-27 credits, varies depending on major)		
Studio electives (9-12 credits, varies depending on major)		
Art History Courses		12-13
ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 Honors Arts of the World I: Prehistoric to 1300	
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century Honors Arts of the World II: 1300 to the 21st Century	
2000+ ARTH elective		
2000+ ARTH elective		
General Education Courses ¹		29
Education Requirements		19-18
EDUC 2103	Socio-cultural Foundations of Education in the United States	
EDUC 2109	Adolescent Development for Educators	
SPED 2231	Introduction to Special Education	
SPED 3211	Effective Instructional Strategies for Students with Disabilities	
TESL 3631	Principles and Practice for Teaching English Learners	
Mathematics course (1000 level) for PA Certification		
Art Education Courses		21
ARTE 1001	Professional Practices in Art Education and Art Therapy	
ARTE 2001	Science and Art of Teaching	
ARTE 3096	Art in Elementary and Secondary School	
ARTE 4003	Inclusive Art Education K-12 Students in the Art Room	
ARTE 4088	Student Teaching	
Total Credit Hours		155

¹

Students waived from General Education (p. 83) requirements via placement test (GW) or study abroad (GG) must make up the credits with electives to reach the minimum 155 credits to earn the degree.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

BFA with Art Education Concentration (Five-Year)

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3
FDPR 1503	Woodshop Fundamentals	1

ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 or Honors Arts of the World I: Prehistoric to 1300	3
Credit Hours		17
Spring		
ARTE 1001	Professional Practices in Art Education and Art Therapy	1
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
FDPR 1512	Foundation Drawing	3
FDPR 1522	2D Foundation Principles	3
FDPR 1532	3D Foundation Principles/C	3
FDPR 1502	Investigations of Art and Design	1
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
Credit Hours		17
Year 2		
Fall		
Studio		3
Studio		3
Studio		3
EDUC 2103	Socio-cultural Foundations of Education in the United States	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		15
Spring		
Studio		3
Studio		3
Studio		3
EDUC 2109	Adolescent Development for Educators ²	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Year 3		
Fall		
Studio Major Course		3
Studio Major Course		3
Studio Elective		3
Second Mathematics course for certification ³		3-4
GenEd Breadth Course		3
Credit Hours		15-16
Spring		
Studio Major Course		3
Studio Major Course		3
ARTE 2001	Science and Art of Teaching	4
SPED 2231	Introduction to Special Education ²	3
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
Studio Major Course		3
Studio Major Course		3
2000+ ARTH Elective ³		4-3
TESL 3631	Principles and Practice for Teaching English Learners ²	3

GenEd Breadth Course		3
Credit Hours		16-15
Spring		
Studio Major Course		3
Studio Major Course		3
Select one of the following:		3
CRFT (Major Capstone) ^{WI}		
GAD (Major Capstone) ^{WI}		
PDS (Major Capstone) ^{WI}		
2000+ ARTH Elective		3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
Credit Hours		15
Year 5		
Fall		
Studio Elective		3
Studio Elective		3
ARTE 3096	Art in Elementary and Secondary School	4
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Spring		
ARTE 4003	Inclusive Art Education K-12 Students in the Art Room	3
ARTE 4088	Student Teaching	9
Credit Hours		12
Total Credit Hours		155

1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2

These 3 courses constitute the waiver for the GenEd Human Behavior category if the courses are completed with a C- or better.

3

Students need to complete either a 4-credit Art History 2000+ elective **or** a 4-credit second Mathematics course to reach the minimum 155 credits to earn the BFA degree with Art Education Concentration.

Ceramics with Entrepreneurial Studies BFA

Overview

The **Bachelor of Fine Arts in Ceramics with Entrepreneurial Studies**, offered by the Department of Art, welcomes students into a diverse community of thinkers and makers who challenge traditional processes in a forward-looking way.

Led by a faculty of practicing artists in state-of-the-art facilities, Ceramics majors work in a close-knit environment, side-by-side with graduate students, as they explore traditional and experimental clay techniques. The program draws on the energy and resources of the urban landscape of Philadelphia—a city with a longstanding clay culture and vibrant visual art scene—to forge community partnerships that lead to broader, inclusive perspectives, conversations and exchanges of ideas.

Students learn product design and production, studio management and gallery installation, as well as critical thinking and problem solving—transferable skills that help prepare them for success in any artistic discipline or profession, including as educators, gallery operators, architectural designers, curators and more. Students also have opportunities for internships in Philadelphia's densely networked clay community.

Designed to complement the studio experience with tools to support a studio practice or pursue graduate studies, the Entrepreneurship coursework enhances students' career options. Graduates of this degree program will possess requisite business skills to support themselves as visual artists or entrepreneurs in art and related fields.

Each student moves from a common foundation curriculum (p. 141) that introduces materials and processes and prepares them for success in a range of fields of study. Those who select Art as their major will work side-by-side with majors in Visual Studies, Art Education and Art Therapy. The dynamic exchange of ideas that result from these interdisciplinary conversations spur intellectual risk and drive research-based creative concepts.

Upon graduation, students have the practical skill sets and honed aesthetic for successful careers in studio art, art education and design, as well as attend top-tier graduate programs.

Campus Location: Main

Program Code: TA-CREN-BFA

Admissions

Admission to Tyler's BFA in studio art majors is based on a review of academic credentials and portfolio review. For detailed information on how to apply, please visit Tyler's Studio Art admissions page.

Study Abroad

Students who plan to study abroad should arrange to meet with their academic advisor and the Education Abroad and Overseas Campuses office as early as possible, preferably during the freshman year, in order to explore options and plan the sequence of courses that would be most appropriate.

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational, and other art/design-related endeavors.

Contact Information

Lauren Sandler, Program Head
Tyler School of Art Building, Room 150M
lauren.sandler@temple.edu

Learn more about the Bachelor of Fine Arts in Ceramics.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Fine Arts degree in Ceramics with Entrepreneurial Studies may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00. All Ceramics with Entrepreneurial Studies majors must complete the General Education (p. 83) requirements.

- Students must earn a C- or better in ART 2101 and ART 2102 to enter the Ceramics with Entrepreneurial Studies major.
- The eight required Junior/Senior studio courses and ART 4096 (capstone) must be completed with a C- or better to fulfill major requirements.

Major Requirements for the BFA in Ceramics with Entrepreneurial Studies

Code	Title	Credit Hours
Sophomore Prerequisites		
ART 2101	Beginning Ceramics	3
ART 2102	Intermediate Ceramics	3
Junior Requirements		
ART 3101	Advanced Ceramics (This course is repeatable and should be taken once in the fall and once in the spring)	6
Two additional specialized Ceramics courses (see list below)		6
Senior Requirements		
ART 4101	Advanced Ceramics (This course is repeatable and should be taken once in the fall and once in the spring)	6
Two additional specialized Ceramics courses (see list below)		6
ART 4096	Professional Practices in Art (Capstone, WI)	3

Specialized Ceramics Courses

Code	Title	Credit Hours
ART 3103	Two-Dimensional Ceramics	3
ART 3104	Ceramic Materials	3
ART 3105	Porcelain	3
ART 3106	Advanced Throwing and Wheel Work	3
ART 3107	Ceramic Mold Making	3
ART 3110	Ceramic Workshop	3

Entrepreneurship Courses

Code	Title	Credit Hours
Select three of the following:		9
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
or SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
Select one of the following: ¹		3
ART 3085	Field Internship	
GAD 3053	Art Careers Promotion	
GAD 3096	The Business of Design (WI)	
GAD 3185	Field Internship	
ART 3796	Art Career Workshop (WI)	
TYLE 3211	Creative Cottage Industrialist	
TYLE 4285	Rome Internship	

Total Credit Hours

12

1

These courses cannot fulfill both a requirement for the major and for this category.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Fine Arts in Ceramics with Entrepreneurial Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3
FDPR 1503	Woodshop Fundamentals	1
ARTH 1155	Arts of the World I: Prehistoric to 1300	3
or ARTH 1955	or Honors Arts of the World I: Prehistoric to 1300	
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
Credit Hours		17

Spring		
FDPR 1512	Foundation Drawing	3
FDPR 1522	2D Foundation Principles	3
FDPR 1532	3D Foundation Principles/C	3
FDPR 1502	Investigations of Art and Design	1
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		16
Year 2		
Fall		
ART 2101	Beginning Ceramics	3
ART or GAD 2000-2999	Sophomore Studio Elective	3
ART or GAD 2000-2999	Sophomore Studio Elective	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Spring		
ART 2102	Intermediate Ceramics	3
ART or GAD 2000-2999	Sophomore Studio Elective ²	3
Select one of the following:		3
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
ART 3101	Advanced Ceramics	3
ART 31xx (Specialized Ceramics Course)		3
Select one of the following (not previously chosen):		3
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
Art History Elective ³		4
GenEd Breadth Course		3
Credit Hours		16

Spring		
ART 3101	Advanced Ceramics	3
ART 31xx (Specialized Ceramics Course)		3
Select one of the following (not previously chosen):		3
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
Art History Elective WI ^{3,5}		4
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
ART 4101	Advanced Ceramics	3
ART 31xx (Specialized Ceramics Course)		3
ART 4096	Professional Practices in Art	3
GenEd Breadth Course		3
Open Elective ³		3
Credit Hours		15
Spring		
ART 4101	Advanced Ceramics	3
ART 31xx (Specialized Ceramics Course)		3
ART or GAD 2000+ Studio Elective		3
Select one of the following: ⁴		3
ART 3085	Field Internship	
GAD 3053	Art Careers Promotion	
GAD 3096	The Business of Design	
GAD 3185	Field Internship	
ART 3796	Art Career Workshop	
TYLE 3211	Creative Cottage Industrialist	
TYLE 4285	Rome Internship	
GenEd Breadth Course		3
Credit Hours		15
Total Credit Hours		126

1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2

Only three 2xxx level courses can be taken in any one subject area in order to count for sophomore studio credit.

3

Students completing a 3-credit Art History 2000+ elective must select a 4-credit open elective to reach the minimum 126 credits to earn the BFA degree.

4

These courses cannot fulfill both a requirement for the major and a requirement for this category.

5

Students who select a WI from the Tyler entrepreneurship courses may elect to take a non-WI 4-credit Art History course.

Please Note: An approved study abroad program waives the GenEd Global/World Society (GG) requirement; however, these credits must be made up with academic coursework taken outside of Tyler departments to be in compliance with BFA accreditation. Ceramics majors interested in studying

abroad should consult with an academic advisor to determine if a semester (generally spring semester of second year) or a summer program would be the best option to remain on track for graduation. If a student is spending a traditional semester abroad, ART 2101 must be completed prior to studying abroad. To remain on track for graduation, permission may be granted to substitute an additional specialized ceramics course in lieu of an advanced ceramics course.

City and Regional Planning Minor

Overview

The **Minor in City and Regional Planning**, offered by the Department of Architecture and Environmental Design (AED), is available to all undergraduate matriculating Temple University students (except for students pursuing the Community Development major or minor). Through this minor students undertake formal studies about public planning, thereby preparing themselves for contributions as informed citizens, civically engaged professionals, or ultimately as professional planners.

In this 18-credit minor, the required courses provide common background in the basics of planning, including history, theory, comprehensive planning and its components, ethics and principles of planning practice with particular emphasis on citizen participation, and exposure to a range of analytical methods for understanding community planning issues. The four electives allow students to explore interests in different facets of city planning: land use; housing; economic development; transportation; sustainability and environmental planning.

The minor provides students with the background and with stronger credentials to apply for graduate level work in planning.

Campus Location: Main

Contact Information

Jeffrey P. Doshna, PhD, AICP, Program Head, Planning and Community Development
Tyler School of Art and Architecture
Architecture Building, Room 213
2001 N. 13th Street
Philadelphia, PA 19122
doshna@temple.edu

Requirements

Students must earn a minimum grade of C- in courses satisfying minor requirements and must have a minimum 2.0 grade point average in the required 18 credits to earn the minor.

- A student may not double count any course for the Minor in City & Regional Planning toward any other major, minor, or certificate.
- At least half of the courses for the minor must be taken at Temple University.
- Courses for the minor must be completed prior to graduation.

Code	Title	Credit Hours
Required Courses		
CTRP 1017	City Planning Principles and Practice	3
CTRP 2213	Environmental Planning	3
Electives		
Four City & Regional Planning electives numbered 2000-3999 ^{1,2}		12
CTRP 2114	Urban Form and Design	
CTRP 2166	Land Use Planning	
CTRP 2251	Sustainable Food Systems Planning	
CTRP 2524	Fundamentals of Geographic Information Systems (GIS)	
CTRP 3155	Ecological Planning and Development	
CTRP 3255	Sustainability in Suburban Communities	
CTRP 3256	Sustainable Community Design and Development	
CTRP 3555	Internet and Digital Technologies for Community Engagement	
CTRP 3655	Transportation Planning	
CTRP 3755	Introduction to Emergency Management Planning	
CTRP 3860	Topics in Community & Regional Planning	

CTRP 3870

Special Topics

Total Credit Hours**18**

1

Except CTRP 3882, CTRP 3883 and CTRP 3889.

2

One of the four electives may be a course from another subject approved by the Department Chair for Planning and Community Development.

Community Arts Practices Certificate

This certificate is not open for enrollment for the 2023-2024 academic year.

Overview

The **Certificate in Community Arts Practices** is offered by the Department of Art Education and Community Arts Practices.

The Community Arts Practices Program is committed to the many and varied communities in Philadelphia and to Tyler students' education as artists to combine artistic disciplines with skills and knowledge in community organizing, positioning them for an expanded civic role in the 21st century. The Community Arts Practices Program develops and delivers university courses, after-school workshops, inter-generational forums, inter-disciplinary performances and site-specific installations.

At the heart of the program are community partnerships and internships that enable Tyler/Temple students to expand their art disciplines as community collaborators. During the last several years, the Community Arts Practices Program has created a body of community-based arts works, establishing a network of relationships and ongoing presence in neighborhoods that translates into continued projects. During this time, we have worked with youths and adults, organizations and families, in North Philadelphia neighborhoods and beyond, building a broad range of community arts partnerships that stimulate dialogue and share history to create exhibitions and interdisciplinary performances based on community lives and stories and shared student experiences.

Campus Location: Main**Program Code:** TA-CARP-CERT

Contact Information

William Yalowitz
yalowitz@temple.edu

Requirements

The undergraduate Certificate in Community Arts Practices, offered on the Main Campus only, consists of a four-course, 12-credit sequence. Both matriculated and non-matriculated students may register for these courses. The required courses for the undergraduate certificate are:

Code	Title	Credit Hours
CART 3011 or CART 3911	Introductory Seminar in Community Arts Honors Introductory Seminar in Community Arts	3
CART 3089 or CART 3989	Research and Project Planning Seminar in Community Arts Honors Research and Project Planning in Community Arts	3
CART 4012	Community Arts	3
CART 4089	Evaluation and Documentation in Community Arts	3

Total Credit Hours**12**

Community Development BS

Overview

The **Bachelor of Science in Community Development**, offered by the Department of Architecture and Environmental Design (AED), prepares students to learn to understand and think critically about the social, political, economic, and cultural dynamics shaping various types of communities. Particular emphasis is given to empowering disadvantaged communities to address inequalities and improve their long-term social, economic, and environmental sustainability. The program enables students to lead efforts to create and maintain healthy, sustainable communities by providing a

broad-based understanding and awareness of multi-dimensional aspects of urban and suburban community challenges in a metropolitan regional context and the means of effecting change from both grass-roots and public policy perspectives.

Students will learn how to engage stakeholders; assess a community's assets, needs and opportunities; plan what the community wants to achieve; and develop strategies, programs, and policies to improve quality of life. Learning will extend beyond the classroom with hands-on experience through service learning, field research, informal gatherings, and workshops.

Campus Location: Main

Program Code: TA-CMDV-BS

Admissions

For more information on how to apply, please visit Tyler's Community Development admissions page.

Accelerated Program

Eligible undergraduate students can also choose the +1 accelerated BS in Community Development and MS in City and Regional Planning program. The accelerated degree program enables students to complete both degree programs in 5 years by taking up to 12 specified graduate credits to fulfill the undergraduate degree requirements. Upon graduation from their undergraduate program, students move seamlessly into their graduate program, which they complete in one additional year.

To be eligible for the program, students must be declared Community Development majors; have a minimum of 3.25 cumulative GPA in at least 45 credits of coursework taken at Temple; be able to complete their undergraduate degree according to the specified academic plan; and be able to complete the graduate degree in one additional year including two summer semesters of graduate coursework. Community Development majors apply to the +1 accelerated program in March of their sophomore year.

Study Abroad

Students who plan to study abroad should arrange to meet with their academic advisor and the Education Abroad and Overseas Campuses office as early as possible, preferably during the freshman year, in order to explore options and plan the sequence of courses that would be most appropriate.

Career Opportunities

In the Community Development program students prepare to tackle the challenges of the community development worker in the 21st century, specifically how to empower culturally, economically or geographically disadvantaged communities to address inequalities and improve their long-term social, economic and environmental sustainability. Graduates are prepared to serve as the critical link between communities, local governments, and state and federal programs in various positions including community organizing, nonprofit organizations, private foundations, community development corporations, community investment specialists and more.

Contact Information

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Learn more about the Bachelor of Science in Community Development.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The degree of Bachelor of Science in Community Development may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 122 semester hours of credit with a minimum cumulative GPA of 2.0 overall and in the major.

At least half of the courses required for the major must be completed at Temple University.

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement assessment.
- Students must complete requirements of the university General Education (GenEd (p. 83)) program.
 - Summer or semester study abroad will satisfy the GenEd Global/World Society requirement.

Program Requirements

- The courses fulfilling requirements for the Community Development major must be completed with a minimum grade of C- to apply towards degree requirements.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. CDEV 2596 and CDEV 3197 are the specific writing-intensive courses that are required for Community Development majors.

Code	Title	Credit Hours
Fundamentals courses		
Select one of the following:		3
PSY 1003	Statistics for Psychology ¹	
ANTH/SOC/PSY/POLS 0825	Quantitative Methods in the Social Sciences ¹	
MATH 1013	Elements of Statistics ¹	
SOC 1167	Social Statistics ¹	
Select one of the following:		3
ECON 1001	Introduction to the Economy	
ECON 1101	Macroeconomic Principles ¹	
ECON 1102	Microeconomic Principles ¹	
ARCH 1502	Investigations into Built Environment Professions ¹	1
Community Development Core courses		
ARCH 1196	History of Form of Cities	3
CDEV 1113	Introduction to Community Development	3
CTRP 1017	City Planning Principles and Practice	3
CDEV 2013	Community Redevelopment and Revitalization	3
CDEV 2155	Housing and Community Development	3
CTRP 2524	Fundamentals of Geographic Information Systems (GIS)	3
CDEV 2596	Community Planning Analysis (WI)	3
CDEV 3113	Nonprofit Management	3
CDEV 3197	Community-based Organizations (WI) ¹	3
CDEV 3313	Community Development Finance	3
CDEV 3455	Community Engagement and Empowerment	3
CDEV 4889	Community Development Workshop ¹	3
CDEV Methods and Practice Electives		
Select from the following courses for a total of 12 credits:		12
CDEV 2255	Environmental Justice in Communities	
CDEV 2354	Cooperatives	
CDEV 2454	Grant Writing for Non-Profits	
CDEV 3155	Healthy Community Design and Development	
CDEV 3165	Placemaking: Revitalizing Urban Communities	
CDEV 3175	Gentrification and Equitable Development	
CDEV 3334	Community Economic Development	
CDEV 3860	Topics in Community Development	
CDEV 3870	Special Topics in Community Development	
CDEV 3882	Independent Study in Community Development	
CDEV 3883	Directed Reading/Study in Community Development	
CDEV 4885	Internship and Professional Practice in Community Development ¹	
CTRP 2114	Urban Form and Design ²	

CTRP 2166	Land Use Planning
CTRP 2213	Environmental Planning ²
CTRP 2251	Sustainable Food Systems Planning ²
CTRP 3155	Ecological Planning and Development ²
CTRP 3255	Sustainability in Suburban Communities ²
CTRP 3256	Sustainable Community Design and Development ^{1, 2}
CTRP 3555	Internet and Digital Technologies for Community Engagement
CTRP 3655	Transportation Planning ²
CTRP 3755	Introduction to Emergency Management Planning
CTRP 3860	Topics in Community & Regional Planning
CTRP 3870	Special Topics

CDEV Interdisciplinary Electives

Select from the following courses for a total of 6 credits:

6

ARCH 3040	Seminar: Special Topics in History and Theory ^{1, 3}
ARCH 3070	Seminar: Special Topics in Site and Context ^{1, 3}
ARCH 3146	Engaging Places: Observations
ARCH 3273	Housing and Community Design ¹
ART 2011	Socially Engaged Arts Practices in Communities
or CART 3011	Introductory Seminar in Community Arts
or CART 3911	Honors Introductory Seminar in Community Arts
ARTH 2753	Art and Environment in American Culture
CART 3089	Research and Project Planning Seminar in Community Arts
GAD 2073	Introduction to Web Design
GAD 2078	The Art of Infographics ¹
RE 3501	Real Estate Fundamentals ¹
RE 3502	Real Estate Practice ¹
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact
AOD 2218	Leadership in Organizations
AOD 3376	Facilitating Group Decision-Making
CJ 3102	Community and Crime Prevention
CJ 3404	Urban Crime Patterns
POLS 3134	The Politics of Inequality
POLS 3153	The Politics of Poverty
GSWS 2022	Gender, Race, Class, and the City
GSWS 3259	Women and Poverty

Total Credit Hours**61**

1

This course has a prerequisite(s) or registration restriction(s).

2

4+1 students will take the approved graduate level CTRP courses in lieu of free electives in years 3 and 4. These students should consult with advisor before taking CTRP courses to fulfill Methods and Practice electives, to avoid conflicts with the graduate curriculum requirements.

3

Students should consult with their advisor before enrolling in Special Topics courses as topics may vary.

Note: CDEV students are not eligible for the minors in Community Development or City and Regional Planning.

Suggested Academic Plan

Bachelor of Science in Community Development

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Note: The symbol after the course number indicates that the class is offered ONLY in the semester indicated.

Code	Title	Credit Hours
(F) = offered fall only		
(S) = offered spring only		
(SE) = offered spring of even numbered years		
(SO) = offered spring of odd numbered years		
Year 1		
Fall		Credit Hours
CDEV 1113	Introduction to Community Development (F)	3
ARCH 1196	History of Form of Cities	3
ARCH 1502	Investigations into Built Environment Professions	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		17
Spring		
CTRP 1017	City Planning Principles and Practice	3
Select one of the following Economics courses:		3
ECON 1001	Introduction to the Economy	
ECON 1101	Macroeconomic Principles	
ECON 1102	Microeconomic Principles	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Quantitative Literacy (GQ)		4
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
CTRP 2524	Fundamentals of Geographic Information Systems (GIS)	3
CDEV 2013	Community Redevelopment and Revitalization	3
Select one of the following Statistics courses:		3
MATH 1013	Elements of Statistics	
SOC 1167	Social Statistics	
PSY 1003	Statistics for Psychology	
ANTH 0825 or SOC 0825 or PSY 0825 or POLS 0825	Quantitative Methods in the Social Sciences or Quantitative Methods in the Social Sciences or Quantitative Methods in the Social Sciences or Quantitative Methods in the Social Sciences	
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Credit Hours		15
Spring		
CDEV 2155	Housing and Community Development (SO)	3
CDEV 2596	Community Planning Analysis	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Free Elective ¹		3
Credit Hours		15

Year 3		
Fall		
CDEV 3113	Nonprofit Management (F)	3
CDEV 3455	Community Engagement and Empowerment	3
CDEV Methods & Practice Elective I		3
Free Electives ¹		6
Credit Hours		15
Spring		
CDEV 3313	Community Development Finance	3
CDEV Methods & Practice Elective II		3
GenEd Breadth Course		3
Free Electives ¹		6
Credit Hours		15
Year 4		
Fall		
CDEV 3197	Community-based Organizations (F)	3
CDEV Methods & Practice Elective III		3
CDEV Interdisciplinary Elective I ²		2-3
Free Electives ¹		6
Credit Hours		14-15
Spring		
CDEV 4889	Community Development Workshop (S)	3
CDEV Methods & Practice Elective IV		3
CDEV Interdisciplinary Elective II ²		4-3
Free Electives ¹		5
Credit Hours		15-14
Total Credit Hours		122

1

Consult with your advisor for suggested options.

2

If one of the CDEV Interdisciplinary Electives is taken for 2 credits, then the second CDEV Interdisciplinary Elective must be 4 credits in order to meet the 6-credit CDEV Interdisciplinary Electives requirement for the major.

Community Development Minor

Overview

The **Minor in Community Development**, offered by the Department of Architecture and Environmental Design (AED), is available to all undergraduate matriculating Temple University students (except for students majoring in Community Development). Community Development as a field embraces both citizen activists and professionals in planned efforts to identify, enhance and create social and physical assets that increase the capacity of residents to improve their quality of life. Through this minor, students undertake formal studies about community development, thereby preparing themselves for contributions as informed citizens and civically engaged professionals.

In this 18-credit minor, students will learn to understand and think critically about the social, political, economic, historic, and cultural dynamics shaping various types of communities. Courses provide important knowledge, values, and skills necessary for community development work. The three electives allow students to explore interests in different facets of community development.

The minor provides students with stronger credentials to apply for graduate level work in planning and other related fields.

Campus Location: Main

Contact Information

Jeffrey P. Doshna, PhD, AICP, Program Head, Planning and Community Development
Tyler School of Art and Architecture
Architecture Building, Room 213
2001 N. 13th Street

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doshna@temple.edu

Requirements

Students must earn a minimum grade of C- in courses satisfying minor requirements and must have a minimum 2.0 grade point average in the required 18 credits to earn the minor.

- A student may not double count any course for the Minor in Community Development toward any other major, minor, or certificate.
- At least half of the courses for the minor must be taken at Temple University.
- Courses for the minor must be completed prior to graduation.

Code	Title	Credit Hours
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Note: The symbol after the course title indicates that the class is offered ONLY in the semester indicated.

(F) = offered fall only

(S) = offered spring only

(SE) = offered spring of even numbered years

(SO) = offered spring of odd numbered years

Code	Title	Credit Hours
------	-------	--------------

Required Courses

CDEV 1113	Introduction to Community Development (F)	3
CDEV 2013	Community Redevelopment and Revitalization	3
Select two of the following:		6
CDEV 2155	Housing and Community Development (SO)	
CDEV 3113	Nonprofit Management (F)	
CDEV 3313	Community Development Finance (SE)	
CDEV 3455	Community Engagement and Empowerment	
CTRP 2524	Fundamentals of Geographic Information Systems (GIS) (F)	

Electives

Select two of the following:		6
CDEV 2255	Environmental Justice in Communities	
CDEV 2354	Cooperatives	
CDEV 2454	Grant Writing for Non-Profits	
CDEV 3155	Healthy Community Design and Development	
CDEV 3165	Placemaking: Revitalizing Urban Communities	
CDEV 3175	Gentrification and Equitable Development	
CDEV 3334	Community Economic Development	
CDEV 3860	Topics in Community Development	
CDEV 3870	Special Topics in Community Development	
CTRP 2114	Urban Form and Design	
CTRP 2166	Land Use Planning	
CTRP 2213	Environmental Planning	
CTRP 2251	Sustainable Food Systems Planning	
CTRP 3155	Ecological Planning and Development	
CTRP 3255	Sustainability in Suburban Communities	
CTRP 3256	Sustainable Community Design and Development	
CTRP 3555	Internet and Digital Technologies for Community Engagement	
CTRP 3655	Transportation Planning	
CTRP 3755	Introduction to Emergency Management Planning	
CTRP 3860	Topics in Community & Regional Planning	

CTRP 3870

Special Topics

Total Credit Hours

18

Creative Entrepreneurship Certificate

Overview

The **Certificate in Creative Entrepreneurship** will aid students interested in art to acquire the requisite skills to support themselves as visual artists or entrepreneurs in art or related fields. This certificate is a collaboration between the Tyler School of Art and Architecture and the Fox School of Business and Management. The certificate is an attractive option for those who seek entrepreneurship skills with which to support their creative practice but do not wish to pursue a graduate degree.

The certificate requires 12 credits: 9 credits of Fox Entrepreneurship coursework and a 3-credit Tyler entrepreneurship, business practices or internship course.

The certificate is available for alumni, continuing education / non-matriculating students, and students in other Tyler and non-Tyler degree programs (with the exception of the BFA in Studio with Entrepreneurship degree programs).

Campus Location: Main

Program Code: TA-CRET-CERT

Contact Information

Alan B. Kerzner, Director
 Temple University Entrepreneurship Academy
 Fox School of Business and Management
 215-204-8188
 alan.kerzner@temple.edu

Learn more about the undergraduate certificate in Creative Entrepreneurship.

Requirements

This credit certificate may be conferred upon a student by recommendation of the faculty and upon satisfactory completion of the required credits with a minimum cumulative GPA of 2.0.

Code	Title	Credit Hours
Select three of the following:		9
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
or SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
Select one of the following: ¹		3
ARTU 4785	Field Internship	
ART 3085	Field Internship	
ART 4096	Professional Practices in Art (WI)	
GAD 3053	Art Careers Promotion	
GAD 3096	The Business of Design (WI)	
GAD 3185	Field Internship	
ART 3796	Art Career Workshop (WI)	
TYLE 3211	Creative Cottage Industrialist	
TYLE 3385	Field Internship	

TYLE 4285

Rome Internship

Total Credit Hours**12**

1

Course cannot fulfill both a requirement for the major and a requirement for this category.

Ecological Planning and Design Minor

Overview

The **Minor in Ecological Planning and Design**, offered by the Department of Architecture and Environmental Design (AED), provides all Temple University undergraduate students the opportunity to deepen their understanding of the concept of ecological planning and design. The minor enhances students' understanding of the impact of development on natural resources and processes while gaining an appreciation of ecologically sensitive design and development. Students will develop leadership and decision-making skills relevant to ensuring that design and development takes into consideration ecological, social, political, economic and governance factors. This minor prepares students for lifelong contributions to the sustainability of the communities in which they live and work.

The Minor in Ecological Planning and Design consists of 18 credits, with two required foundation courses and four elective courses. The two foundation courses ensure that all students understand the fundamentals of natural and built systems and ecological planning. The electives allow students to develop a deeper understanding of ecologically sensitive development from the perspective of city planning, horticulture and/or landscape architecture.

Campus Locations: Main and Ambler

Contact Information

Sasha W. Eisenman, PhD, Architecture and Environmental Design Department Chair
 Tyler School of Art and Architecture
 Dixon Hall, Room 201
 580 Meetinghouse Road
 Ambler, PA 19002
 267-468-8168
 eisenman@temple.edu

Kate Benisek, MALD, MLA, ASLA, Landscape Architecture Program Head
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 580 Meetinghouse Road
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 267-468-8186
 kate.benisek@temple.edu

Requirements

Students must earn a minimum grade of C- in courses satisfying minor requirements and must have a minimum 2.0 grade point average in the required 18 credits to earn the minor.

- A student may not double count any course for the Minor in Ecological Planning and Design toward any other major, minor, or certificate.
- At least half of the courses for the minor must be taken at Temple University.
- Courses for the minor must be completed prior to graduation.

Code	Title	Credit Hours
Note: The symbol after the course title indicates that the class is offered ONLY in the semester indicated.		
(F)	= offered fall only	
(FE)	= offered fall of even numbered years	
(FO)	= offered fall of odd numbered years	
(S)	= offered spring only	
(SE)	= offered spring of even numbered years	
(SO)	= offered spring of odd numbered years	
(O)	= offered occasionally	

Code	Title	Credit Hours
Required Courses		
Select two of the following:		6
BOT 1112	Plant Ecology (S)	
CTRP 2213	Environmental Planning (S)	
CTRP 3155	Ecological Planning and Development (FE)	
LARC 2496	Landscape Traditions (F)	
Electives		
Select four of the following:		12
CTRP 2114	Urban Form and Design (O)	
CTRP 2166	Land Use Planning (FO)	
CTRP 3255	Sustainability in Suburban Communities	
CTRP 3256	Sustainable Community Design and Development (SO) ¹	
HORT 2552	Trees in the Urban Landscape (S)	
HORT 3514	Landscape Restoration (S) ¹	
LARC 1142		
LARC 1544	Landscape Architecture Computer Technology I (S)	
LARC 2754	Water Design in the City (O)	
LARC 2758	Summer Field Ecology (Summer) ¹	
Total Credit Hours		18

1

This course has a prerequisite(s) or registration restriction.

Environmental Horticulture Minor

Overview

The **Minor in Environmental Horticulture**, offered by the Department of Architecture and Environmental Design (AED), is available to all undergraduate matriculating Temple University students. Students complete courses related to horticultural concepts and practices which allow them to develop an understanding of the science and practice of protecting, restoring, and managing existing and natural landscape resources.

The curriculum involves 18 credits, with two required courses and at least four elective courses. The required courses give students a solid basis for understanding the fundamentals of horticulture, botany, and plant identification. The electives allow students to explore their own interests in different facets of horticulture, including soils, plantscaping and food crops. The majority of courses are offered on the Ambler Campus.

The coursework completed for the minor allows students the opportunity to consider pursuing a graduate-level degree in Landscape Architecture.

Campus Location: Ambler

Contact Information

Sasha W. Eisenman, PhD, Architecture and Environmental Design Department Chair
 Tyler School of Art and Architecture
 Dixon Hall, Room 201
 580 Meetinghouse Road
 Ambler, PA 19002
 267-468-8168
 eisenman@temple.edu

Requirements

Students must earn a minimum grade of C- in courses satisfying minor requirements and must have a minimum 2.0 grade point average in the required 18 credits to earn the minor.

- A student may not double count any course for the Minor in Environmental Horticulture toward any other major, minor, or certificate.
- At least half of the courses for the minor must be taken at Temple University.
- Courses for the minor must be completed prior to graduation.

Code	Title	Credit Hours
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Note: The symbol after the course title indicates that the class is offered ONLY in the semester indicated.

(F) = offered fall only

(FE) = offered fall of even numbered years

(FO) = offered fall of odd numbered years

(S) = offered spring only

(SE) = offered spring of even numbered years

(SO) = offered spring of odd numbered years

(O) = offered occasionally

Code	Title	Credit Hours
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Required

HORT 1001	Fundamentals of Horticulture	2
HORT 2324	Plant Propagation (S)	3

Electives

Select a minimum of 13 credit hours from the following: 13

BOT 1111	General Botany (F)	
BOT 1112	Plant Ecology (S)	
HORT 1211	Woody Plants I (F)	
HORT 1212	Woody Plants II (S)	
HORT 2114	Soils (S) ¹	
HORT 2221	Herbaceous Plants I (F)	
HORT 2222	Herbaceous Plants II (S)	
HORT 2256	Interior Plantscaping (O)	
HORT 2334	Food Crops I (S)	
HORT 2353	Food Crops II (O)	
HORT 2366	Nursery Operation, Management, and Production Techniques (O) ¹	
HORT 2552	Trees in the Urban Landscape (S)	
HORT 2555	Arboriculture (O) ¹	
HORT 2575	Introduction to Public Horticulture (O)	
HORT 2753	Introduction to Horticultural Therapy (FO)	
HORT 3423	Applied Entomology (F) ¹	

Total Credit Hours 18

1

This course has a prerequisite(s).

Environmental Sustainability Certificate

Overview

The **Certificate in Environmental Sustainability**, offered by the Department of Architecture and Environmental Design (AED), allows students at Temple University to enhance their major with focused coursework on environmental sustainability. This certificate provides students with an interdisciplinary perspective that draws from the fields of botany, city planning, community development, horticulture and landscape architecture. Students will gain basic knowledge needed to evaluate environmental problems and to draw environmentally-, socially- and economically-sound solutions.

The certificate is available to all undergraduate degree students and non-degree students. Consult with an academic advisor about how the required courses fit into academic and career plans.

Campus Locations: Ambler, Main

Program Code: TA-ENSU-CERT

Contact Information

Ambler Campus

Office of Academic Advising and Student Success
West Hall 109
267-468-8200
tuaadvis@temple.edu

Main Campus

Academic Advising Office
Tyler Art Building, Suite 212
215-777-9229
tyler.advising@temple.edu

Learn more about the undergraduate certificate in Environmental Sustainability.

Requirements

This 12 credit certificate may be conferred upon a student by recommendation of the faculty and upon satisfactory completion of the required credits with a minimum cumulative GPA of 2.0.

At least half of the courses required for the certificate must be completed at Temple University.

Code	Title	Credit Hours
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Note: The symbol after the course title indicates that the class is offered ONLY in the semester indicated.

(F) = offered fall only

(FE) = offered fall of even numbered years

(FO) = offered fall of odd numbered years

(S) = offered spring only

(SE) = offered spring of even numbered years

(SO) = offered spring of odd numbered years

(O) = offered occasionally

Code	Title	Credit Hours
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Required Courses

Select two of the following:	5-6
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CTRP 2166	Land Use Planning (FO)
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CTRP 2213	Environmental Planning (S)
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BOT 1112	Plant Ecology (S)
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HORT 1001	Fundamentals of Horticulture ¹
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Electives

Select at least two of the following: ¹	7-6
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CDEV 2255	Environmental Justice in Communities
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CDEV 3155	Healthy Community Design and Development
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CDEV 3860	Topics in Community Development ²
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CDEV 3870	Special Topics in Community Development ²
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CTRP 2114	Urban Form and Design (S)
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CTRP 2251	Sustainable Food Systems Planning (F)
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CTRP 3155	Ecological Planning and Development (FE)
-----------	--

CTRP 3255	Sustainability in Suburban Communities (SE)
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CTRP 3256	Sustainable Community Design and Development (SO) ³
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CTRP 3655	Transportation Planning (F)
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CTRP 3860	Topics in Community & Regional Planning (O) ²
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CTRP 3870	Special Topics (O) ²
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HORT 2334	Food Crops I (S)
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HORT 2353	Food Crops II (O)
HORT 2575	Introduction to Public Horticulture (O)
HORT 2850	Special Topics in Horticulture/Landscape Architecture I (O) ²
HORT 2860	Special Topics in Horticulture/Landscape Architecture II (O) ²
HORT 2870	Special Topics (O) ²
HORT 3514	Landscape Restoration (S) ³
LARC 2758	Summer Field Ecology (Summer) ³
LARC 2870	Special Topics (O) ²

Total Credit Hours**12**

1

If HORT 1001 is taken as one of the required courses, students must complete 7 credits of elective coursework.

2

Consult with an advisor to make certain topic is relevant for the certificate.

3

This course has a prerequisite(s) or registration restriction(s).

Facilities Management BS

Overview

The **Bachelor of Science in Facilities Management**, offered by the Department of Architecture and Environmental Design (AED), prepares students for a career in the profession of facility management. This profession encompasses multiple disciplines to ensure functionality of the built environment by integrating people, place, process and technology.

Students take courses in the architecture foundation program for the first two years of study then focus on facilities management practice in the third and fourth year. The program features theoretical and applied learning and real world experience. The Facilities Management courses include industry connections and/or partnerships with professionals coming into the classroom and students visiting them on sites, thus building professional networks. The Facilities Management Lab is a dedicated workspace for Facilities Management students to utilize resources and engage in hands-on projects related to facility design and installation. Dedicated group work areas, studio, woodshop, digital fabrication, and digital lab spaces allow for in-house research drawing, modeling, and digital visualization.

Campus Location: Main

Program Code: TA-ARFM-BS

Admissions

For more information on how to apply, please visit Tyler's Architecture and Environmental Design admissions page.

Study Abroad

All AED department students have the opportunity to study abroad for a semester at Temple Rome or Temple Japan. Admission to these programs is competitive. Applications are made through the Temple Education Abroad and Overseas Campuses office.

Students who plan to study abroad should arrange to meet with an academic advisor as early as possible, preferably during the freshman year, in order to plan the sequence of courses that would be most appropriate. Because of program requirements in the fall semesters of junior and senior years, Historic Preservation and Facilities Management majors should consider attending the Rome or Japan program only during the spring semester of the junior year.

Career Opportunities

Graduates of the program are equipped to work in a range of facility management specializations including government, healthcare, higher education, corporate and real estate. Graduates are prepared to apply for graduate studies in architecture, facilities management or a related discipline, and can pursue facility management certification after entering into the profession.

Continuing Studies

All of Tyler's undergraduate architecture programs prepare students for continued study in the National Architectural Accrediting Board (NAAB) accredited Master of Architecture (MArch) professional program which has the following tracks to accommodate students from different undergraduate majors:

- A 2-year track for students with a 4-year pre-professional bachelor's degree program in architecture.
- A 3-year track for students with a bachelor's degree in other disciplines or in a non-pre-professional architecture program.

For more information on NAAB accreditation, please visit our NAAB Professional Program Information page.

Licensure/Certification

Certification for Facility Managers is a professional credential that indicates career experience and preparedness that is achieved through professional experience. The certification process is administered by the International Facilities Management Association (IFMA). The Tyler Bachelor of Science in Facilities Management prepares students for a career in Facility Management and a number of facilities career-related certifications.

The Tyler program is accredited by the Applied and Natural Science Accreditation Commission (ANSAC) of the Accreditation Board of Engineering and Technology (ABET). IFMA has joined ABET as a member society with lead responsibilities for facility management programs accredited by ANSAC. IFMA provides professional credentials and opportunities for facility managers including Facilities Management Professional (FMP), Sustainability Facility Professional (SFP), and Certified Facility Manager (CFM). While IFMA does not require accredited degrees or particular coursework in order to receive IFMA certification or their other credentials and continuing education opportunities, earning an accredited degree supports a Facilities Management graduate entry to IFMA Certification (FMP, SFP and CFM). The Bachelor of Science in Facilities Management provides a pathway from education to the profession. The degree provides the fastest path to certification.

<https://www.ifma.org/credentials/overview/>

Architecture Laptop Policy

Laptops are required for all students entering Architecture, Facilities Management, and Historic Preservation programs. The computer and its corresponding digital tools, such as laser cutters, 3D printers, and digital fabrication machines, have become an integral part of architectural pedagogy and the design studio environment. All architecture, facilities management, and historic preservation students begin working digitally in their freshman representation courses within the Architecture Foundations program. This Laptop Policy has been implemented to provide advantageous learning environments that guide students towards the acquisition of tools and skillsets that are most appropriate for the furthering of both their academic and professional journeys. Students should purchase a Windows-compatible laptop.

For full device and software requirements and recommendations, please see the Architecture Program Laptop Policy.

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Learn more about the Bachelor of Science in Facilities Management.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All students are required to complete the General Education (GenEd) requirements. Go to the General Education (p. 83) section for more information.

Summer or semester study abroad will satisfy the GenEd Global/World Society requirement.

All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses required for this major are ARCH 3097 and ARCH 4296.

Program Requirements

A total of 122 s.h. is required for completion of the Bachelor of Science in Facilities Management.

Code	Title	Credit Hours
MATH 1031	Differential and Integral Calculus	4
Select one of the following:		4
PHYS 1021	Introduction to General Physics I	
ECE 2142	Engineering Principles for Building Science ¹	
Freshman Requirements		
ARCH 1011	Visual Literacy for Architects 1	3
ARCH 1001	Introduction to Design and the Environment	3
ARCH 1012	Visual Literacy for Architects 2	3
Sophomore Requirements		
Select one of the following:		4
ARCH 2121	Foundation Architectural Design 1	
ARCH 2123 & ARCH 2153	Facility Management Foundation I and Facility Management Case Study Research I	
ARCH 2141	Architectural History: Ancient through Renaissance	3
ARCH 2151	Architecture, Technology, and the Environment	3
Select one of the following:		4
ARCH 2122	Foundation Architectural Design 2	
ARCH 2124 & ARCH 2154	Facility Management Foundation II and Facility Management Case Study Research II	
ARCH 2142	Architectural History: 17th Century through 20th Century	3
Junior Requirements		
ARCH 3097	Introduction to Facility Management	3
ARCH 3152	Materials and Methods	4
ARCH 3013	Project Planning & Programming	3
ARCH 3354	Sustainability and Architecture	3
Senior Requirements		
ARCH 3012	Computer Aided Facility Management	3
ARCH 4011	Research Methods for Facility Management	3
ARCH 4296	Design, Behavior and Culture	3
ARCH 4099	Capstone Research Seminar for Facility Management	4
ARCH Elective		3
Additional Requirements		
ACCT 2501	Survey of Accounting	3
ECON 1102	Microeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
BA 1103	Legal and Ethical Reasoning in Business	3
RE 3501	Real Estate Fundamentals	3
RE 3502	Real Estate Practice	3
STAT 2103	Statistical Business Analytics	4
MSOM 3101	Operations Management	3

1

If ECE 2142 is selected, students will need two GenEd Science and Technology (GS) courses to satisfy the GenEd requirement.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Facilities Management

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Architecture Foundation Studies Courses (Year 1 & 2)

Year 1		Credit Hours
Fall		
ARCH 1011	Visual Literacy for Architects 1 ¹	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
MATH 1031	Differential and Integral Calculus	4
GenEd Breadth Course		3
Credit Hours		14
Spring		
ARCH 1001	Introduction to Design and the Environment	3
ARCH 1012	Visual Literacy for Architects 2 (spring only)	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Select one of the following:		4
PHYS 1021	Introduction to General Physics I	
ECE 2142	Engineering Principles for Building Science ²	
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
ARCH 2121	Foundation Architectural Design 1 (fall only) ³	4
ARCH 2141	Architectural History: Ancient through Renaissance (fall only)	3
ARCH 2151	Architecture, Technology, and the Environment	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Credit Hours		16
Spring		
ARCH 2122	Foundation Architectural Design 2 ((spring only)) ⁴	4
ARCH 2142	Architectural History: 17th Century through 20th Century	3
GenEd Breadth Course		3
Free Elective ⁵		3
Free Elective ⁵		3
Credit Hours		16
Total Credit Hours		62

¹ Although not required, freshman students registered for ARCH 1011 should also take ARCH 1502.

² If ECE 2142 is selected, students will need two GenEd Science and Technology (GS) courses to satisfy the GenEd requirement.

³ Option to take ARCH 2123 / ARCH 2153 instead of ARCH 2121 for BS in Facilities Management.

⁴ Option to take ARCH 2124 / ARCH 2154 instead of ARCH 2122 for BS in Facilities Management.

⁵ Students planning to study abroad should substitute the Free Elective for a required course available only on main campus. For more information, please see your advisor.

Note: The Architecture Foundation is common to all three undergraduate degrees. In the spring of the sophomore year, students declare a major in one of the degrees offered. A place in the BS in Facilities Management or the BS in Historic Preservation is guaranteed for all students in good standing with the University. Admission to the Bachelor of Science in Architecture is competitive. Typically, students have a cumulative GPA of 3.0 or higher and an excellent portfolio. Students in all three programs can apply to the Master of Architecture program. Bachelor of Science in Architecture students are eligible for the 2-year, 60 credit track. BS in Historic Preservation and BS in Facilities Management students may be required to take additional coursework (between 60-90 credits) at the graduate level. Students can meet with an advisor to plan ahead and can refer to the Temple University Graduate Bulletin.

Bachelor of Science in Facilities Management (Year 3 & 4)

Year 3		Credit Hours
Fall		
ARCH 3097	Introduction to Facility Management (fall only)	3
ARCH 3152	Materials and Methods	4
ACCT 2501	Survey of Accounting	3
HRM 1101	Leadership and Organizational Management	3
RE 3501	Real Estate Fundamentals	3
Credit Hours		16
Spring		
ARCH 3013	Project Planning & Programming	3
ARCH 3354	Sustainability and Architecture	3
ECON 1102	Microeconomic Principles	3
RE 3502	Real Estate Practice	3
GenEd Breadth Course		3
Credit Hours		15
Year 4		
Fall		
ARCH 3012	Computer Aided Facility Management (fall only)	3
ARCH 4011	Research Methods for Facility Management (fall only)	3
ARCH 4296	Design, Behavior and Culture (fall only)	3
STAT 2103	Statistical Business Analytics	4
BA 1103	Legal and Ethical Reasoning in Business	3
Credit Hours		16
Spring		
ARCH 4099	Capstone Research Seminar for Facility Management (spring only)	4
MSOM 3101	Operations Management	3
Architecture Elective		3
GenEd Breadth Course		3
Credit Hours		13
Total Credit Hours		60
Code	Title	Credit Hours
Total Credits for the BS in Facilities Management:		122

Rome Option

Students who plan to study abroad are encouraged to meet with an advisor as early as the freshman year. While the grid below suggests appropriate coursework, a semester abroad would require using free electives that ordinarily would be taken in other semesters. It will take careful planning with an advisor to ensure that the degree is completed as efficiently as possible, and that courses normally taken in the spring of junior year on Main campus are completed before the semester abroad. ARCH 3241 counts as an Architecture elective.

Code	Title	Credit Hours
ARCH 3241	Seminar Analysis of Urban Structure in Rome	3
Free Elective		3
Free Elective		3

Free Elective	3
Free Elective	3
Total Credit Hours	15

Japan Option

Students who plan to study abroad are encouraged to meet with an advisor as early as the freshman year. While the grid below suggests appropriate coursework, a semester abroad would require using free electives that ordinarily would be taken in other semesters. It will take careful planning with an advisor to ensure that the degree is completed as efficiently as possible, and that courses normally taken in the spring of junior year on Main campus are completed before the semester abroad.

GenEd courses are offered at the Japan campus and can be substituted where appropriate for Free electives. ARCH 3242 counts as an Architecture elective.

Code	Title	Credit Hours
ARCH 3242	Urban Seminar in Tokyo (Undergraduate) (spring only)	3
Free Elective		3
Free Elective		3
Free Elective		3
Free Elective		3
Total Credit Hours		15

Fibers and Material Studies with Entrepreneurial Studies BFA

Overview

The **Bachelor of Fine Arts in Fibers and Material Studies with Entrepreneurial Studies**, offered by the Department of Art, introduces students to a bold, interdisciplinary approach to the exploration of one of the world's oldest and most accessible traditions: working with fibers. Students explore the expressive potential and social meaning of fiber materials as they learn technical skills that prepare them for focused, graduate-level study and a variety of careers.

Tyler Fibers and Materials Studies majors join a close-knit, inclusive community led by a strong, diverse faculty that pushes students to experiment and collaborate. Students learn traditional skills and activate them in a contemporary context, contributing to vital discussions on history, identity, current social issues and more. Through dynamic events and projects such as the annual Wearable Art Show and the Natural Dye Garden, Fibers and Materials Studies majors create exciting conversations with artists and students throughout Tyler.

Students take full advantage of Philadelphia's vibrant fibers community and DIY scene and opportunities to engage global social challenges, working closely with professors to engage in community-based projects that challenge them as critical, reflective participants in a broader creative culture. These experiences prepare Fibers and Materials Studies majors to flourish in top graduate programs and production design careers.

Designed to complement the studio experience with tools to support a studio practice or pursue graduate studies, the Entrepreneurship coursework enhances students' career options. Graduates of this degree program will possess requisite business skills to support themselves as visual artists or entrepreneurs in art and related fields.

Each student moves from a common foundation curriculum (p. 141) that introduces materials and processes and prepares them for success in a range of fields of study. Those who select Art as their major will work side-by-side with majors in Visual Studies, Art Education and Art Therapy. The dynamic exchange of ideas that result from these interdisciplinary conversations spur intellectual risk and drive research-based creative concepts.

Upon graduation, students have the practical skill sets and honed aesthetic for successful careers in studio art, art education and design, as well as attend top-tier graduate programs.

Campus Location: Main

Program Code: TA-FMSE-BFA

Admissions

Admission to Tyler's Studio Art (Bachelor of Fine Arts) programs is based on a review of academic credentials and portfolio review. For detailed information on how to apply, please visit Tyler's Studio Art admissions page.

Study Abroad

Students who plan to study abroad should arrange to meet with their academic advisor and the Education Abroad and Overseas Campuses office as early as possible, preferably during the freshman year, in order to explore options and plan the sequence of courses that would be most appropriate.

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational and other art/design-related endeavors.

Contact Information

Jesse Harrod, Program Head
Tyler School of Art Building, Suite 250N
215-777-9136
jessica.harrod@temple.edu

Learn more about the Bachelor of Fine Arts in Fibers and Material Studies.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Fine Arts degree in Fibers and Material Studies with Entrepreneurial Studies may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00. All Fibers and Material Studies with Entrepreneurial Studies majors must complete the General Education (p. 83) requirements.

- Students must earn a C- or better in ART 2201 and ART 2202 to enter the Fibers and Material Studies with Entrepreneurial Studies major.
- The required Junior/Senior studio courses, ART 4205 and ART 4096 (capstone) must be completed with a C- or better to fulfill major requirements.

Major Requirements for the BFA in Fibers and Material Studies with Entrepreneurial Studies

Code	Title	Credit Hours
Sophomore Prerequisites		
ART 2201	Introduction to Fibers and Material Studies	3
ART 2202	Dyeing for Color I	3
Junior and Senior Requirements		
ART 2204	Woven Structure I	3
ART 3209	Screen Print on Fabric I	3
Two 22xx/32xx level Specialized Fibers & Material Studies courses (see specialized list below)		6
Three 32xx/42xx level Specialized Fibers & Material Studies courses (see specialized list below)		9
ART 4205	Senior Seminar in Fibers and Material Studies (Spring Only)	3
ART 4096	Professional Practices in Art (Capstone, WI)	3

Specialized Fibers and Material Studies Courses

Code	Title	Credit Hours
ART 2203	Alternative Materials	3
ART 3201	Threading the Needle: Drawing with Stitch I	3
ART 3202	Soft Sculpture	3
ART 3203	Alternative Materials II	3
ART 3204	Woven Structure II	3
ART 3205	Figurative Futures - Technology and the Body	3
ART 3206	Sewn	3
ART 3207	Intermediate Fibers and Material Studies	3
ART 3208	Jacquard I	3
ART 3210	Special Topics in Fibers and Material Studies	3
ART 3211	Cultivating a Collection	3

ART 3212	Digital Drawing and Pattern Making	3
ART 3213	Experimental Costume and Performance	3
ART 3214	History of Wearable Art and Costume	3
ART 3085	Field Internship	3
ART 4201	Threading the Needle: Drawing with Stitch II	3
ART 4202	Dyeing for Color II	3
ART 4203	Jacquard II	3
ART 4204	Woven Structure III	3
ART 4209	Screen Print on Fabric II	3
ART 4210	Special Topics in Fibers and Material Studies	3

Entrepreneurship Courses

Code	Title	Credit Hours
Select three of the following:		9
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
or SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
Select one of the following: ¹		3
ART 3085	Field Internship	
GAD 3053	Art Careers Promotion	
GAD 3096	The Business of Design (WI)	
GAD 3185	Field Internship	
ART 3796	Art Career Workshop (WI)	
TYLE 3211	Creative Cottage Industrialist	
TYLE 4285	Rome Internship	
Total Credit Hours		12

1

Courses cannot fulfill both a requirement for the major and for this category.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Fine Arts in Fibers and Material Studies with Entrepreneurial Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3
FDPR 1503	Woodshop Fundamentals	1
ARTH 1155	Arts of the World I: Prehistoric to 1300	3
or ARTH 1955	or Honors Arts of the World I: Prehistoric to 1300	

ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		17
Spring		
FDPR 1512	Foundation Drawing	3
FDPR 1522	2D Foundation Principles	3
FDPR 1532	3D Foundation Principles/C	3
FDPR 1502	Investigations of Art and Design	1
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		16
Year 2		
Fall		
ART 2201	Introduction to Fibers and Material Studies	3
ART or GAD 2000-2999	Sophomore Studio Elective	3
ART or GAD 2000-2999	Sophomore Studio Elective	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Spring		
ART 2202	Dyeing for Color I	3
ART or GAD 2000-2999	Sophomore Studio Elective	3
Select one of the following:		3
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
ART 2204	Woven Structure I	3
ART 2200+ (Specialized Fibers Course)		3
Select one of the following (not previously chosen):		3
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	

Art History Elective ²		4
GenEd Breadth Course		3
Credit Hours		16
Spring		
ART 3209	Screen Print on Fabric I	3
ART 2200+ (Specialized Fibers Course)		3
Select one of the following (not previously chosen):		3
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
Art History Elective WI ³		4
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
ART 4096	Professional Practices in Art	3
ART 3200+ (Specialized Fibers Course)		3
ART 3200+ (Specialized Fibers Course)		3
GenEd Breadth Course		3
Open Elective ²		3
Credit Hours		15
Spring		
ART 4205	Senior Seminar in Fibers and Material Studies ⁴	3
ART 3200+ (Specialized Fibers Course)		3
ART or GAD 2000+ Studio Elective		3
Select one of the following: ⁵		3
ART 3085	Field Internship	
GAD 3053	Art Careers Promotion	
GAD 3096	The Business of Design	
GAD 3185	Field Internship	
ART 3796	Art Career Workshop	
TYLE 3211	Creative Cottage Industrialist	
TYLE 4285	Rome Internship	
GenEd Breadth Course		3
Credit Hours		15
Total Credit Hours		126

1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2

Students completing a 3-credit Art History 2000+ elective must select a 4-credit open elective to reach the minimum 126 credits to earn the BFA degree.

3

Students selecting a WI Tyler entrepreneurship course may elect to take a non-WI Art History course.

4

ART 4205 may be taken in spring of third or fourth year.

5

These courses cannot fulfill both a requirement for the major and a requirement for this category.

Please Note: An approved study abroad program waives the GenEd Global/World Society (GG) requirement; however, these credits must be made up with academic coursework taken outside of Tyler departments to be in compliance with BFA accreditation. BFA majors interested in studying abroad should consult with an academic advisor to determine if a semester (generally spring semester of second year) or a summer program would be the best option to remain on track for graduation.

Fibers and Materials Studies BFA

Overview

The **Bachelor of Fine Arts in Fibers and Materials Studies**, offered by the Department of Art, introduces students to a bold, interdisciplinary approach to the exploration of one of the world's oldest and most accessible traditions: working with fibers. Students explore the expressive potential and social meaning of fiber materials as they learn technical skills that prepare them for focused, graduate-level study and a variety of careers.

Tyler Fibers and Materials Studies majors join a close-knit, inclusive community led by a strong, diverse faculty that pushes students to experiment and collaborate. Students learn traditional skills and activate them in a contemporary context, contributing to vital discussions on history, identity, current social issues and more. Through dynamic events and projects such as the annual Wearable Art Show and the Natural Dye Garden, Fibers and Materials Studies majors create exciting conversations with artists and students throughout Tyler.

Students take full advantage of Philadelphia's vibrant fibers community and DIY scene and opportunities to engage global social challenges, working closely with professors to engage in community-based projects that challenge them as critical, reflective participants in a broader creative culture. These experiences prepare Fibers and Materials Studies majors to flourish in top graduate programs and production design careers.

Each student moves from a common foundation curriculum (p. 141) that introduces materials and processes and prepares them for success in a range of fields of study. Those who select Art as their major will work side-by-side with majors in Visual Studies, Art Education and Art Therapy. The dynamic exchange of ideas that result from these interdisciplinary conversations spur intellectual risk and drive research-based creative concepts.

Upon graduation, students have the practical skill sets and honed aesthetic for successful careers in studio art, art education and design, as well as attend top-tier graduate programs.

Campus Location: Main

Program Code: TA-FIBR-BFA

Concentration

Students may complete an **optional** Concentration in Art Education (p. 182).

Admissions

Admission to Tyler's Studio Art (Bachelor of Fine Arts) programs is based on a review of academic credentials and portfolio review. For detailed information on how to apply, please visit Tyler's Studio Art admissions page.

Study Abroad

Students who plan to study abroad should arrange to meet with their academic advisor and the Education Abroad and Overseas Campuses office as early as possible, preferably during the freshman year, in order to explore options and plan the sequence of courses that would be most appropriate.

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational and other art/design-related endeavors.

Contact Information

Jesse Harrod, Program Head
Tyler School of Art Building, Suite 250N
215-777-9136
jessica.harrod@temple.edu

Learn more about the Bachelor of Fine Arts in Fibers and Material Studies.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Fine Arts degree in Fibers and Materials Studies may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00. All Fibers and Materials Studies majors must complete the BFA curriculum (p. 141) and General Education (p. 83) requirements.

- Students must earn a C- or better in ART 2201 and ART 2202 to enter the Fibers and Materials Studies major.
- The seven required Junior/Senior studio courses, ART 4205 and ART 4096 (capstone) must be completed with a C- or better to fulfill major requirements.

Major Requirements for BFA in Fibers and Materials Studies

Code	Title	Credit Hours
Sophomore Prerequisites		
ART 2201	Introduction to Fibers and Material Studies	3
ART 2202	Dyeing for Color I	3
Junior and Senior Requirements		
Three 22xx/32xx level Specialized Fibers & Material Studies courses (see specialized list below)		9
Four 32xx/42xx level Specialized Fibers & Material Studies courses (see specialized list below)		12
ART 4205	Senior Seminar in Fibers and Material Studies (spring only)	3
ART 4096	Professional Practices in Art (Capstone, WI)	3

Specialized Fibers and Material Studies Courses

Code	Title	Credit Hours
ART 2203	Alternative Materials	3
ART 2204	Woven Structure I	3
ART 3201	Threading the Needle: Drawing with Stitch I	3
ART 3202	Soft Sculpture	3
ART 3203	Alternative Materials II	3
ART 3204	Woven Structure II	3
ART 3205	Figurative Futures - Technology and the Body	3
ART 3206	Sewn	3
ART 3207	Intermediate Fibers and Material Studies	3
ART 3208	Jacquard I	3
ART 3209	Screen Print on Fabric I	3
ART 3210	Special Topics in Fibers and Material Studies	3
ART 3211	Cultivating a Collection	3
ART 3212	Digital Drawing and Pattern Making	3
ART 3213	Experimental Costume and Performance	3
ART 3214	History of Wearable Art and Costume	3
ART 3085	Field Internship	3
ART 4201	Threading the Needle: Drawing with Stitch II	3
ART 4202	Dyeing for Color II	3
ART 4203	Jacquard II	3
ART 4204	Woven Structure III	3
ART 4209	Screen Print on Fabric II	3
ART 4210	Special Topics in Fibers and Material Studies	3

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Fine Arts in Fibers and Materials Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3
FDPR 1503	Woodshop Fundamentals	1
ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 or Honors Arts of the World I: Prehistoric to 1300	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		17
Spring		
FDPR 1512	Foundation Drawing	3
FDPR 1522	2D Foundation Principles	3
FDPR 1532	3D Foundation Principles/C	3
FDPR 1502	Investigations of Art and Design	1
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		16
Year 2		
Fall		
ART 2201	Introduction to Fibers and Material Studies	3
ART or GAD 2000-2999 Sophomore Studio Elective		3
ART or GAD 2000-2999 Sophomore Studio Elective		3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Spring		
ART 2202	Dyeing for Color I	3
ART or GAD 2000-2999 Sophomore Studio Elective		3
ART or GAD 2000-2999 Sophomore Studio Elective		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
ART 22xx/32xx (Specialized Fibers Course)		3
ART 22xx/32xx (Specialized Fibers Course)		3
ART or GAD Studio Elective		3
Art History Elective ²		4
GenEd Breadth Course		3
Credit Hours		16

Spring

ART 22xx/32xx (Specialized Fibers Course)	3
ART 32xx/42xx (Specialized Fibers Course)	3
ART or GAD Studio Elective	3
Art History Elective ^{WI}	4
GenEd Breadth Course	3
Credit Hours	16

Year 4**Fall**

ART 4096 Professional Practices in Art	3
ART 32xx/42xx (Specialized Fibers Course)	3
ART 32xx/42xx (Specialized Fibers Course)	3
GenEd Breadth Course	3
Non-Studio Elective	3
Credit Hours	15

Spring

ART 4205 Senior Seminar in Fibers and Material Studies ³	3
ART 32xx/42xx (Specialized Fibers Course)	3
ART or GAD Studio Elective	3
GenEd Breadth Course	3
Open Elective ²	3
Credit Hours	15

Total Credit Hours	126
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1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2

Students completing a 3 credit Art History 2000+ elective **must** select a 4 credit open elective to reach the minimum 126 credits to earn the BFA degree.

3

ART 4096 and ART 4205 may be taken in spring of third or fourth year.

Please Note: An approved study abroad program waives the GenEd Global/World Society (GG) requirement; however, these credits must be made up with academic coursework taken outside of Tyler departments to be in compliance with BFA accreditation. Fibers and Materials Studies majors interested in studying abroad should consult with an academic advisor to determine if a semester (generally spring semester of second year) or a summer program would be the best option to remain on track for graduation.

Art Education Concentration

The **Bachelor of Fine Arts with an optional Concentration in Art Education**, offered by the Department of Art, is one of two pathways at the Tyler School of Art and Architecture to earning art teaching certification in Pennsylvania and becoming a teaching artist. Students may also become certified teachers through the Bachelor of Science in Education in Art Education (p. 125).

Tyler offers students seeking a BFA degree an opportunity to earn Pennsylvania Teacher Certification in Art, K-12. The BFA with Art Education Concentration combines Tyler's art curriculum with approved courses in education and the liberal arts—all with Tyler's uniquely urban, community-based approach.

Offering students access to the resources of both a world-class art school and a large, public research university, Tyler's undergraduate Art Education programs prepare students to become thoughtful art teachers with the extensive knowledge and skills to teach kindergarten through twelfth grade.

Tyler students take full advantage of the school's location in Philadelphia and the city's rich array of schools, communities, museums, galleries and artists, opening up opportunities for artistic growth, research, networking and jobs.

The Tyler faculty is committed to urban art education and the power of collaborating with communities. Tyler students don't just learn how to teach art and grow as artists—they learn how to affect positive change in the communities where they work.

Students must complete BFA requirements (p. 141) along with a three-year sequence in Education and Art Education that begins in the sophomore year. Typically five years are necessary to fulfill all requirements. Students work with both the Art Education faculty advisors and the Tyler academic advisors regarding completion of requirements.

Campus Location: Main

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational, and other art/design-related endeavors.

Licensure/Certification

Teacher certification is the process used in the US to ensure that prospective K-12 teachers are qualified and prepared to teach at the levels and in the subjects that they intend to teach. Certification in Art Education prepares graduates to teach art to students from K-12. Certification is not always required by private institutions, but some may prefer to hire certified teachers.

In order to become certified in Art Education, students must complete a bachelor's degree from a regionally accredited institution of higher education, pass the Praxis exams required in their state of employment, and satisfy other state-licensing examinations, as applicable.

Temple University is a Pennsylvania state-approved teacher preparation program for K-12 Art. Completion of Temple University's Bachelor of Science in Education in Art Education or Master of Education in Art Education with Teaching Certification satisfies the necessary requirements for graduates to sit for the Praxis Core Academic Skills for Educators, Praxis Subject Assessments, and Praxis Fundamentals.

For certification in some states, students may need to take the Praxis Principles of Learning and Teaching (PLT) exam for their desired grade levels, which they are prepared for through their field placements, classroom observations, and study of human development and pedagogy.

<https://www.education.pa.gov/Educators/Certification/BecomeAnEducator/Pages/ACPSpecialty.aspx>

Admission

Admission to Tyler's Bachelor of Fine Arts programs is based on a review of academic credentials and portfolio review. For detailed information on how to apply, please visit Tyler's Studio Art admissions page.

Contact Information

Renee Jackson, Program Head for Art Education
Tyler Building, Art Education and Community Arts Practices Suite B090C
215-777-9258
renee.jackson@temple.edu

Summary of Requirements

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

The Bachelor of Fine Arts degree with the Art Education Concentration may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 155 semester hours of credit with a minimum cumulative GPA of 3.0.

University Requirements

All Temple students are required to complete the General Education (GenEd (p. 83)) curriculum.

- Successful completion (minimum C-) of FDPR 1511 and ARTH 1156 satisfies the GenEd Arts (GA) requirement.
- Successful completion (minimum C-) of EDUC 2109, SPED 2231, and TESL 3631 satisfies the GenEd Human Behavior (GB) requirement.
- Summer or semester study abroad will satisfy the GenEd Global/World Society (GG) requirement.

BFA with Art Education Concentration Requirements

ARTE 2001, ARTE 3096, ARTE 4003, ARTE 4088, and ARTE 1001 must be completed with a C or better to fulfill concentration requirements.

Students must earn a minimum grade of C- in required College of Education coursework and additional mathematics requirement to fulfill concentration requirements.

Students in the BFA degree with the Art Education Concentration are required to take a Ceramics studio course and an additional studio course in Glass, Metals/Jewelry/CAD-CAM, or Fibers and Materials Studies; a Painting studio course and an additional studio course in Painting or Sculpture; a Printmaking studio course and an additional studio course in Photography or Graphic Design. These courses may include prerequisite, sophomore, and/or studio courses within the student's chosen BFA major.

Any BFA student who wishes to pursue the Art Education Concentration must arrange to meet with the Art Education faculty advisor to discuss field placement, clearances, and requirements, as the state of Pennsylvania may change requirements after the *Bulletin* information has been posted. It is strongly suggested that students do so during their freshman year.

Code	Title	Credit Hours
Studio Courses		74
Foundation Program (20 credits)		
2000 level Sophomore studios including major prerequisites (18 credits)		
Major studio requirements (24-27 credits, varies depending on major)		
Studio electives (9-12 credits, varies depending on major)		
Art History Courses		12-13
ARTH 1155	Arts of the World I: Prehistoric to 1300	
or ARTH 1955	Honors Arts of the World I: Prehistoric to 1300	
ARTH 1156	Arts of the World II: 1300 to the 21st Century	
or ARTH 1956	Honors Arts of the World II: 1300 to the 21st Century	
2000+ ARTH elective		
2000+ ARTH elective		
General Education Courses ¹		29
Education Requirements		19-18
EDUC 2103	Socio-cultural Foundations of Education in the United States	
EDUC 2109	Adolescent Development for Educators	
SPED 2231	Introduction to Special Education	
SPED 3211	Effective Instructional Strategies for Students with Disabilities	
TESL 3631	Principles and Practice for Teaching English Learners	
Mathematics course (1000 level) for PA Certification		
Art Education Courses		21
ARTE 1001	Professional Practices in Art Education and Art Therapy	
ARTE 2001	Science and Art of Teaching	
ARTE 3096	Art in Elementary and Secondary School	
ARTE 4003	Inclusive Art Education K-12 Students in the Art Room	
ARTE 4088	Student Teaching	
Total Credit Hours		155

1

Students waived from General Education (p. 83) requirements via placement test (GW) or study abroad (GG) must make up the credits with electives to reach the minimum 155 credits to earn the degree.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

BFA with Art Education Concentration (Five-Year)

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3
FDPR 1503	Woodshop Fundamentals	1

ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 or Honors Arts of the World I: Prehistoric to 1300	3
Credit Hours		17
Spring		
ARTE 1001	Professional Practices in Art Education and Art Therapy	1
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
FDPR 1512	Foundation Drawing	3
FDPR 1522	2D Foundation Principles	3
FDPR 1532	3D Foundation Principles/C	3
FDPR 1502	Investigations of Art and Design	1
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
Credit Hours		17
Year 2		
Fall		
Studio		3
Studio		3
Studio		3
EDUC 2103	Socio-cultural Foundations of Education in the United States	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		15
Spring		
Studio		3
Studio		3
Studio		3
EDUC 2109	Adolescent Development for Educators ²	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Year 3		
Fall		
Studio Major Course		3
Studio Major Course		3
Studio Elective		3
Second Mathematics course for certification ³		3-4
GenEd Breadth Course		3
Credit Hours		15-16
Spring		
Studio Major Course		3
Studio Major Course		3
ARTE 2001	Science and Art of Teaching	4
SPED 2231	Introduction to Special Education ²	3
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
Studio Major Course		3
Studio Major Course		3
2000+ ARTH Elective ³		4-3
TESL 3631	Principles and Practice for Teaching English Learners ²	3

GenEd Breadth Course		3
Credit Hours		16-15
Spring		
Studio Major Course		3
Studio Major Course		3
Select one of the following:		3
CRFT (Major Capstone) ^{WI}		
GAD (Major Capstone) ^{WI}		
PDS (Major Capstone) ^{WI}		
2000+ ARTH Elective		3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
Credit Hours		15
Year 5		
Fall		
Studio Elective		3
Studio Elective		3
ARTE 3096	Art in Elementary and Secondary School	4
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Spring		
ARTE 4003	Inclusive Art Education K-12 Students in the Art Room	3
ARTE 4088	Student Teaching	9
Credit Hours		12
Total Credit Hours		155

1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2

These 3 courses constitute the waiver for the GenEd Human Behavior category if the courses are completed with a C- or better.

3

Students need to complete either a 4-credit Art History 2000+ elective **or** a 4-credit second Mathematics course to reach the minimum 155 credits to earn the BFA degree with Art Education Concentration.

Glass BFA

Overview

The **Bachelor of Fine Arts in Glass**, offered by the Department of Art, is recognized as one of the nation's top programs in the discipline. It offers students access to unparalleled facilities and prepares them as artists and designers who understand the history, chemistry, technical and aesthetic aspects of working with glass.

Glass majors at Tyler join a welcoming, high-energy community of artists and educators who work in expansive studios that provide opportunities to learn the full range of glass processes: glassblowing, hot-casting, kiln-casting, flame-working, performance and more. In addition to learning traditional and innovative techniques, students learn how to think critically and solve problems—all while enjoying Tyler Glass traditions from Blow-a-thons to "Pumpkinferno."

Tyler BFA students take full advantage of the school's location in Philadelphia, a vibrant art center with a strong glass art tradition, and its proximity to New York to find internships and jobs, explore museums and galleries, launch creative practices, start businesses and earn placements in the most competitive graduate programs.

Each student moves from a common foundation curriculum (p. 141) that introduces materials and processes and prepares them for success in a range of fields of study. Those who select Art as their major will work side-by-side with majors in Visual Studies, Art Education and Art Therapy. The dynamic exchange of ideas that result from these interdisciplinary conversations spur intellectual risk and drive research-based creative concepts.

Upon graduation, students have the practical skill sets and honed aesthetic for successful careers in studio art, art education and design, as well as attend top-tier graduate programs.

Campus Location: Main

Program Code: TA-GLSS-BFA

Concentration

Students may complete an **optional** Concentration in Art Education (p. 190).

Admissions

Admission to Tyler's Studio Art (Bachelor of Fine Arts) programs is based on a review of academic credentials and portfolio review. For detailed information on how to apply, please visit Tyler's Studio Art admissions page.

Study Abroad

Students who plan to study abroad should arrange to meet with their academic advisor and the Education Abroad and Overseas Campuses office as early as possible, preferably during the freshman year, in order to explore options and plan the sequence of courses that would be most appropriate.

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational and other art/design-related endeavors.

Contact Information

Jessica Jane Julius, Program Head
Tyler School of Art Building, Room 120C
jessica.julius@temple.edu

Learn more about the Bachelor of Fine Arts in Glass.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Fine Arts degree in Glass may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00. All Glass majors must complete the BFA curriculum (p. 141) and General Education (p. 83) requirements.

- Students must earn a C- or better in ART 2301 and ART 2302 to enter the Glass major.
- The eight required Junior/Senior studio courses and ART 4096 (capstone) must be completed with a C- or better to fulfill major requirements.

The faculty encourages taking Glass courses in excess of the minimum required. These additional courses count towards required studio electives.

Major Requirements for BFA in Glass

Code	Title	Credit Hours
Sophomore Requirements		
ART 2301	Introduction to Glass	3
ART 2302	Intermediate Glass	3
Junior Requirements		
ART 3307	Advanced Glass Seminar	3
ART 3308	Advanced Glass, Topic: Visiting Artist Series	3
Select one of the following Cold Glass courses:		3
ART 3303	Glass Construction, Topic: Kiln Working	
ART 3304	Glass Construction, Topic: Cold Glass	
Select one of the following Hot Glass courses:		3
ART 3301	Hot Glass, Topic: Blowing	

ART 3306	Hot Glass Casting	
Senior Requirements		
ART 4308	Advanced Glass Seminar	3
ART 4307	Advanced Glass Seminar: Visiting Artist Series	3
ART 4096	Professional Practices in Art (Capstone, WI)	3
Select one of the following Cold Glass courses:		3
ART 4303	Glass Construction, Topic: Kiln Working	
ART 4304	Glass Construction, Topic: Cold Glass	
Select one of the following Hot Glass courses:		3
ART 4301	Hot Glass Blowing	
ART 4306	Hot Glass Casting	

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Fine Arts in Glass

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3
FDPR 1503	Woodshop Fundamentals	1
ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 or Honors Arts of the World I: Prehistoric to 1300	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		17
Spring		
FDPR 1512	Foundation Drawing	3
FDPR 1522	2D Foundation Principles	3
FDPR 1532	3D Foundation Principles/C	3
FDPR 1502	Investigations of Art and Design	1
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		16
Year 2		
Fall		
ART 2301	Introduction to Glass	3
ART or GAD 2000-2999 Sophomore Studio Elective		3
ART or GAD 2000-2999 Sophomore Studio Elective		3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Spring		
ART 2302	Intermediate Glass	3
ART or GAD 2000-2999 Sophomore Studio Elective		3
ART or GAD 2000-2999 Sophomore Studio Elective		3
GenEd Breadth Course		3

GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
ART 3307	Advanced Glass Seminar	3
Select one of the following: ²		3
ART 3301	Hot Glass, Topic: Blowing	
ART 3306	Hot Glass Casting	
ART 3303	Glass Construction, Topic: Kiln Working	
ART 3304	Glass Construction, Topic: Cold Glass	
ART or GAD Studio Elective		3
Art History Elective ³		4
GenEd Breadth Course		3
Credit Hours		16
Spring		
ART 3308	Advanced Glass, Topic: Visiting Artist Series	3
Select one of the following not previously taken: ²		3
ART 3301	Hot Glass, Topic: Blowing	
ART 3306	Hot Glass Casting	
ART 3303	Glass Construction, Topic: Kiln Working	
ART 3304	Glass Construction, Topic: Cold Glass	
ART or GAD Studio Elective		3
Art History Elective ^{WI}		4
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
ART 4307	Advanced Glass Seminar: Visiting Artist Series	3
ART 4096	Professional Practices in Art	3
Select one of the following: ⁴		3
ART 4303	Glass Construction, Topic: Kiln Working	
ART 4304	Glass Construction, Topic: Cold Glass	
ART 4301	Hot Glass Blowing	
ART 4306	Hot Glass Casting	
GenEd Breadth Course		3
Non-Studio Elective		3
Credit Hours		15
Spring		
ART 4308	Advanced Glass Seminar	3
Select one of the following not previously taken: ⁴		3
ART 4301	Hot Glass Blowing	
ART 4306	Hot Glass Casting	
ART 4303	Glass Construction, Topic: Kiln Working	
ART 4304	Glass Construction, Topic: Cold Glass	
ART or GAD Studio Elective		3
GenEd Breadth Course		3
Open Elective ³		3
Credit Hours		15
Total Credit Hours		126

1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2

Students need one Hot Glass course (ART 3301 or ART 3306) and one Cold Construction course (ART 3303 or ART 3304) at the Junior level.

3

Students completing a 3 credit Art History 2000+ elective **must** select a 4 credit open elective to reach the minimum 126 credits to earn the BFA degree.

4

Students need one Hot Glass course (ART 4301 or ART 4306) and one Cold Construction course (ART 4303 or ART 4304) at the Senior level.

Please Note: An approved study abroad program waives the GenEd Global/World Society (GG) requirement; however, these credits must be made up with academic coursework taken outside of Tyler departments to be in compliance with BFA accreditation. Glass majors interested in studying abroad should consult with an academic advisor to determine if a semester (generally spring semester of second year) or a summer program would be the best option to remain on track for graduation.

Art Education Concentration

The **Bachelor of Fine Arts with an optional Concentration in Art Education**, offered by the Department of Art, is one of two pathways at the Tyler School of Art and Architecture to earning art teaching certification in Pennsylvania and becoming a teaching artist. Students may also become certified teachers through the Bachelor of Science in Education in Art Education (p. 125).

Tyler offers students seeking a BFA degree an opportunity to earn Pennsylvania Teacher Certification in Art, K-12. The BFA with Art Education Concentration combines Tyler's art curriculum with approved courses in education and the liberal arts—all with Tyler's uniquely urban, community-based approach.

Offering students access to the resources of both a world-class art school and a large, public research university, Tyler's undergraduate Art Education programs prepare students to become thoughtful art teachers with the extensive knowledge and skills to teach kindergarten through twelfth grade.

Tyler students take full advantage of the school's location in Philadelphia and the city's rich array of schools, communities, museums, galleries and artists, opening up opportunities for artistic growth, research, networking and jobs.

The Tyler faculty is committed to urban art education and the power of collaborating with communities. Tyler students don't just learn how to teach art and grow as artists—they learn how to affect positive change in the communities where they work.

Students must complete BFA requirements (p. 141) along with a three-year sequence in Education and Art Education that begins in the sophomore year. Typically five years are necessary to fulfill all requirements. Students work with both the Art Education faculty advisors and the Tyler academic advisors regarding completion of requirements.

Campus Location: Main

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational, and other art/design-related endeavors.

Licensure/Certification

Teacher certification is the process used in the US to ensure that prospective K-12 teachers are qualified and prepared to teach at the levels and in the subjects that they intend to teach. Certification in Art Education prepares graduates to teach art to students from K-12. Certification is not always required by private institutions, but some may prefer to hire certified teachers.

In order to become certified in Art Education, students must complete a bachelor's degree from a regionally accredited institution of higher education, pass the Praxis exams required in their state of employment, and satisfy other state-licensing examinations, as applicable.

Temple University is a Pennsylvania state-approved teacher preparation program for K-12 Art. Completion of Temple University's Bachelor of Science in Education in Art Education or Master of Education in Art Education with Teaching Certification satisfies the necessary requirements for graduates to sit for the Praxis Core Academic Skills for Educators, Praxis Subject Assessments, and Praxis Fundamentals.

For certification in some states, students may need to take the Praxis Principles of Learning and Teaching (PLT) exam for their desired grade levels, which they are prepared for through their field placements, classroom observations, and study of human development and pedagogy.

<https://www.education.pa.gov/Educators/Certification/BecomeAnEducator/Pages/ACPSpecialty.aspx>

Admission

Admission to Tyler's Bachelor of Fine Arts programs is based on a review of academic credentials and portfolio review. For detailed information on how to apply, please visit Tyler's Studio Art admissions page.

Contact Information

Renee Jackson, Program Head for Art Education
Tyler Building, Art Education and Community Arts Practices Suite B090C
215-777-9258
renee.jackson@temple.edu

Summary of Requirements

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

The Bachelor of Fine Arts degree with the Art Education Concentration may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 155 semester hours of credit with a minimum cumulative GPA of 3.0.

University Requirements

All Temple students are required to complete the General Education (GenEd (p. 83)) curriculum.

- Successful completion (minimum C-) of FDPR 1511 and ARTH 1156 satisfies the GenEd Arts (GA) requirement.
- Successful completion (minimum C-) of EDUC 2109, SPED 2231, and TESL 3631 satisfies the GenEd Human Behavior (GB) requirement.
- Summer or semester study abroad will satisfy the GenEd Global/World Society (GG) requirement.

BFA with Art Education Concentration Requirements

ARTE 2001, ARTE 3096, ARTE 4003, ARTE 4088, and ARTE 1001 must be completed with a C or better to fulfill concentration requirements.

Students must earn a minimum grade of C- in required College of Education coursework and additional mathematics requirement to fulfill concentration requirements.

Students in the BFA degree with the Art Education Concentration are required to take a Ceramics studio course and an additional studio course in Glass, Metals/Jewelry/CAD-CAM, or Fibers and Materials Studies; a Painting studio course and an additional studio course in Painting or Sculpture; a Printmaking studio course and an additional studio course in Photography or Graphic Design. These courses may include prerequisite, sophomore, and/or studio courses within the student's chosen BFA major.

Any BFA student who wishes to pursue the Art Education Concentration must arrange to meet with the Art Education faculty advisor to discuss field placement, clearances, and requirements, as the state of Pennsylvania may change requirements after the *Bulletin* information has been posted. It is strongly suggested that students do so during their freshman year.

Code	Title	Credit Hours
Studio Courses		74
Foundation Program (20 credits)		
2000 level Sophomore studios including major prerequisites (18 credits)		
Major studio requirements (24-27 credits, varies depending on major)		
Studio electives (9-12 credits, varies depending on major)		
Art History Courses		12-13
ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 Honors Arts of the World I: Prehistoric to 1300	
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century Honors Arts of the World II: 1300 to the 21st Century	
2000+ ARTH elective		
2000+ ARTH elective		
General Education Courses ¹		29
Education Requirements		19-18
EDUC 2103	Socio-cultural Foundations of Education in the United States	
EDUC 2109	Adolescent Development for Educators	
SPED 2231	Introduction to Special Education	
SPED 3211	Effective Instructional Strategies for Students with Disabilities	
TESL 3631	Principles and Practice for Teaching English Learners	
Mathematics course (1000 level) for PA Certification		

Art Education Courses	21
ARTE 1001	Professional Practices in Art Education and Art Therapy
ARTE 2001	Science and Art of Teaching
ARTE 3096	Art in Elementary and Secondary School
ARTE 4003	Inclusive Art Education K-12 Students in the Art Room
ARTE 4088	Student Teaching

Total Credit Hours **155**

1

Students waived from General Education (p. 83) requirements via placement test (GW) or study abroad (GG) must make up the credits with electives to reach the minimum 155 credits to earn the degree.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

BFA with Art Education Concentration (Five-Year)

Year 1		
Fall		Credit Hours
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3
FDPR 1503	Woodshop Fundamentals	1
ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 or Honors Arts of the World I: Prehistoric to 1300	3
Credit Hours		17
Spring		
ARTE 1001	Professional Practices in Art Education and Art Therapy	1
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
FDPR 1512	Foundation Drawing	3
FDPR 1522	2D Foundation Principles	3
FDPR 1532	3D Foundation Principles/C	3
FDPR 1502	Investigations of Art and Design	1
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
Credit Hours		17
Year 2		
Fall		
Studio		3
Studio		3
Studio		3
EDUC 2103	Socio-cultural Foundations of Education in the United States	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		15
Spring		
Studio		3
Studio		3
Studio		3
EDUC 2109	Adolescent Development for Educators ²	3

GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Year 3		
Fall		
Studio Major Course		3
Studio Major Course		3
Studio Elective		3
Second Mathematics course for certification ³		3-4
GenEd Breadth Course		3
Credit Hours		15-16
Spring		
Studio Major Course		3
Studio Major Course		3
ARTE 2001	Science and Art of Teaching	4
SPED 2231	Introduction to Special Education ²	3
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
Studio Major Course		3
Studio Major Course		3
2000+ ARTH Elective ³		4-3
TESL 3631	Principles and Practice for Teaching English Learners ²	3
GenEd Breadth Course		3
Credit Hours		16-15
Spring		
Studio Major Course		3
Studio Major Course		3
Select one of the following:		3
CRFT (Major Capstone) ^{WI}		
GAD (Major Capstone) ^{WI}		
PDS (Major Capstone) ^{WI}		
2000+ ARTH Elective		3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
Credit Hours		15
Year 5		
Fall		
Studio Elective		3
Studio Elective		3
ARTE 3096	Art in Elementary and Secondary School	4
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Spring		
ARTE 4003	Inclusive Art Education K-12 Students in the Art Room	3
ARTE 4088	Student Teaching	9
Credit Hours		12
Total Credit Hours		155

1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2

These 3 courses constitute the waiver for the GenEd Human Behavior category if the courses are completed with a C- or better.

3

Students need to complete either a 4-credit Art History 2000+ elective **or** a 4-credit second Mathematics course to reach the minimum 155 credits to earn the BFA degree with Art Education Concentration.

Glass with Entrepreneurial Studies BFA

Overview

The **Bachelor of Fine Arts in Glass with Entrepreneurial Studies**, offered by the Department of Art, is recognized as one of the nation's top programs in the discipline. It offers students access to unparalleled facilities and prepares them as artists and designers who understand the history, chemistry, technical and aesthetic aspects of working with glass.

Glass majors at Tyler join a welcoming, high-energy community of artists and educators who work in expansive studios that provide opportunities to learn the full range of glass processes: glassblowing, hot-casting, kiln-casting, flame-working, performance and more. In addition to learning traditional and innovative techniques, students learn how to think critically and solve problems—all while enjoying Tyler Glass traditions from Blow-a-thons to "Pumpkinferno."

Tyler BFA students take full advantage of the school's location in Philadelphia, a vibrant art center with a strong glass art tradition, and its proximity to New York to find internships and jobs, explore museums and galleries, launch creative practices, start businesses and earn placements in the most competitive graduate programs.

Designed to complement the studio experience with tools to support a studio practice or pursue graduate studies, the Entrepreneurship coursework enhances students' career options. Graduates of this degree program will possess requisite business skills to support themselves as visual artists or entrepreneurs in art and related fields.

Each student moves from a common foundation curriculum (p. 141) that introduces materials and processes and prepares them for success in a range of fields of study. Those who select Art as their major will work side-by-side with majors in Visual Studies, Art Education and Art Therapy. The dynamic exchange of ideas that result from these interdisciplinary conversations spur intellectual risk and drive research-based creative concepts.

Upon graduation, students have the practical skill sets and honed aesthetic for successful careers in studio art, art education and design, as well as attend top-tier graduate programs.

Campus Location: Main

Program Code: TA-GLEN-BFA

Admissions

Admission to Tyler's Studio Art (Bachelor of Fine Arts) programs is based on a review of academic credentials and portfolio review. For detailed information on how to apply, please visit Tyler's Studio Art admissions page.

Study Abroad

Students who plan to study abroad should arrange to meet with their academic advisor and the Education Abroad and Overseas Campuses office as early as possible, preferably during the freshman year, in order to explore options and plan the sequence of courses that would be most appropriate.

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational and other art/design-related endeavors.

Contact Information

Jessica Jane Julius, Program Head
Tyler School of Art Building, Room 120C
jessica.julius@temple.edu

Learn more about the Bachelor of Fine Arts in Glass.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Fine Arts degree in Glass with Entrepreneurial Studies may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00. All Glass with Entrepreneurial Studies majors must complete the General Education (p. 83) requirements.

- Students must earn a C- or better in ART 2301 and ART 2302 to enter the Glass with Entrepreneurial Studies major.
- The required Junior/Senior studio courses and ART 4096 (capstone) must be completed with a C- or better to fulfill major requirements.

Major Requirements for the BFA in Glass with Entrepreneurial Studies

Code	Title	Credit Hours
Sophomore Requirements		
ART 2301	Introduction to Glass	3
ART 2302	Intermediate Glass	3
Junior Requirements		
ART 3307	Advanced Glass Seminar	3
ART 3308	Advanced Glass, Topic: Visiting Artist Series	3
Select one of the following Cold Glass courses:		3
ART 3303	Glass Construction, Topic: Kiln Working	
ART 3304	Glass Construction, Topic: Cold Glass	
Select one of the following Hot Glass courses:		3
ART 3301	Hot Glass, Topic: Blowing	
ART 3306	Hot Glass Casting	
Senior Requirements		
ART 4308	Advanced Glass Seminar	3
ART 4307	Advanced Glass Seminar: Visiting Artist Series	3
ART 4096	Professional Practices in Art (Capstone, WI)	3
Select one of the following Cold Glass courses:		3
ART 4303	Glass Construction, Topic: Kiln Working	
ART 4304	Glass Construction, Topic: Cold Glass	
Select one of the following Hot Glass courses:		3
ART 4301	Hot Glass Blowing	
ART 4306	Hot Glass Casting	

Entrepreneurship Courses

Code	Title	Credit Hours
Select three of the following:		9
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
or SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
Select one of the following: ¹		3
ART 3085	Field Internship	
GAD 3053	Art Careers Promotion	
GAD 3096	The Business of Design (WI)	
GAD 3185	Field Internship	
ART 3796	Art Career Workshop (WI)	

TYLE 3211	Creative Cottage Industrialist
TYLE 4285	Rome Internship
Total Credit Hours	12

1

These courses cannot fulfill both a requirement for the major and for this category.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Fine Arts in Glass with Entrepreneurial Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3
FDPR 1503	Woodshop Fundamentals	1
ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 or Honors Arts of the World I: Prehistoric to 1300	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		17
Spring		
FDPR 1512	Foundation Drawing	3
FDPR 1522	2D Foundation Principles	3
FDPR 1532	3D Foundation Principles/C	3
FDPR 1502	Investigations of Art and Design	1
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		16
Year 2		
Fall		
ART 2301	Introduction to Glass	3
ART or GAD 2000-2999	Sophomore Studio Elective	3
ART or GAD 2000-2999	Sophomore Studio Elective	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Spring		
ART 2302	Intermediate Glass	3
ART or GAD 2000-2999	Sophomore Studio Elective	3
Select one of the following:		3
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	

SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
ART 3307	Advanced Glass Seminar	3
Select one of the following: ²		3
ART 3301	Hot Glass, Topic: Blowing	
ART 3306	Hot Glass Casting	
ART 3303	Glass Construction, Topic: Kiln Working	
ART 3304	Glass Construction, Topic: Cold Glass	
Select one of the following (not previously taken):		3
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
Art History Elective WI ^{3,4}		4
GenEd Breadth Course		3
Credit Hours		16
Spring		
ART 3308	Advanced Glass, Topic: Visiting Artist Series	3
Select one of the following (not previously taken): ²		3
ART 3301	Hot Glass, Topic: Blowing	
ART 3306	Hot Glass Casting	
ART 3303	Glass Construction, Topic: Kiln Working	
ART 3304	Glass Construction, Topic: Cold Glass	
Select one of the following (not previously taken):		3
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
Art History Elective ³		4
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
ART 4307	Advanced Glass Seminar: Visiting Artist Series	3
ART 4096	Professional Practices in Art	3
Select one of the following: ⁵		3

ART 4303	Glass Construction, Topic: Kiln Working	
ART 4304	Glass Construction, Topic: Cold Glass	
ART 4301	Hot Glass Blowing	
ART 4306	Hot Glass Casting	
GenEd Breadth Course		3
Open Elective ³		3
Credit Hours		15
Spring		
ART 4308	Advanced Glass Seminar	3
ART or GAD 2000+ Studio Elective		3
Select one of the following (not previously taken): ⁵		3
ART 4303	Glass Construction, Topic: Kiln Working	
ART 4304	Glass Construction, Topic: Cold Glass	
ART 4301	Hot Glass Blowing	
ART 4306	Hot Glass Casting	
Select one of the following: ⁶		3
ART 3085	Field Internship	
GAD 3053	Art Careers Promotion	
GAD 3096	The Business of Design	
GAD 3185	Field Internship	
ART 3796	Art Career Workshop	
TYLE 3211	Creative Cottage Industrialist	
TYLE 4285	Rome Internship	
GenEd Breadth Course		3
Credit Hours		15
Total Credit Hours		126

1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2

Students need one Hot Glass course (ART 3301 or ART 3306) and one Cold Construction course (ART 3303 or ART 3304) at the Junior level.

3

Students completing a 3-credit Art History 2000+ elective must select a 4-credit open elective to reach the minimum 126 credits to earn the BFA degree.

4

Students taking a WI course from the list of Tyler entrepreneurship courses may take a non-WI Art History elective.

5

Students need one Hot Glass course (ART 4301 or ART 4306) and one Cold Construction course (ART 4303 or ART 4304) at the Senior level.

6

These courses cannot fulfill both a requirement for the major and a requirement for this category.

Please Note: An approved study abroad program waives the GenEd Global/World Society (GG) requirement; however, these credits must be made up with academic coursework taken outside of Tyler departments to be in compliance with BFA accreditation. BFA majors interested in studying abroad should consult with an academic advisor to determine if a semester (generally spring semester of second year) or a summer program would be the best option to remain on track for graduation.

Graphic and Interactive Design BFA

Overview

The **Bachelor of Fine Arts in Graphic and Interactive Design** (GAID), offered by the Department of Graphic and Interactive Design, does more than prepare students for careers in print and screen-based design—it teaches them how to create unforgettable experiences that make the world a better place.

Tyler GAID majors join a tight-knit network of students, teachers and alumni that embraces the power of design to open minds, move hearts, shape environments and heal communities. Tyler's faculty help students find their unique voice and wield it to solve complex social challenges that impact

us all, from poster campaigns that spotlight the effects of climate change to apps that address the problem of physical exercise for individuals who are visually impaired. Students are pushed to experiment and create original, research-driven concepts across all platforms, including illustration, typography, packaging, web sites, social media, virtual reality and real-life spaces.

Students at Tyler get the best of both worlds: an intimate community with small classes and personal mentorship; and access to the facilities, academic experts and resources of Temple, a leading public research university based in Philadelphia, with its dynamic arts and culture scene and opportunities for professional advancement.

Each student moves from a common foundation curriculum (p. 141) that introduces materials and processes and prepares them for success in a range of fields of study. Those who select Art as their major will work side-by-side with majors in Visual Studies, Art Education and Art Therapy. The dynamic exchange of ideas that result from these interdisciplinary conversations spur intellectual risk and drive research-based creative concepts.

Upon graduation, students have the practical skill sets and honed aesthetic for successful careers in studio art, art education and design, as well as attend top-tier graduate programs.

Campus Location: Main

Program Code: TA-GID-BFA

Concentration

Students may complete an **optional** Concentration in Art Education (p. 204).

Admissions

Admission to Tyler's Studio Art (Bachelor of Fine Arts) programs is based on a review of academic credentials and portfolio review. For detailed information on how to apply, please visit Tyler's Studio Art admissions page.

Because of the demand for a limited number of spaces in the Graphic and Interactive Design major, all BFA students who are not yet declared majors in Graphic and Interactive Design will have to apply for the Sophomore Portfolio Review in GAID in order to get into the major, regardless of when that student started at Tyler or when they took Graphic Design (GAD 2001) and Computers for Design (GAD 2021).

The review process is required for any Tyler student seeking to enter the major. Because the GAID program follows a strict fall/spring sequence, students may only begin as GAID majors in the fall semester. Students must complete the program in sequence as the capstone courses are offered only in the spring. Admitted students must begin taking required courses in the major at the junior (3xxx) level in the academic year immediately following official admission to the major or their admission to the major will be forfeited.

It is strongly recommended that potential applicants for admission to the GAID major attend one of the official sophomore advising meetings with the GAID Program Head where the application process will be explained. The process will also be explained by the instructors in each section of GAD 2001.

Laptop Requirement for GAID Majors

The Graphic and Interactive Design department is committed to excellence in design and the full integration of technologies within our discipline to best educate and prepare our students to become leaders in this field. A thorough understanding of the changing nature of design and the integral role that technology plays in it is essential for all our students to be active participants in this ever-changing environment.

For full device and software requirements and recommendations, please see the Graphic and Interactive Design Laptop Requirements.

Study Abroad

Students who plan to study abroad should arrange to meet with their academic advisor and the Education Abroad and Overseas Campuses office as early as possible, preferably during the freshman year, in order to explore options and plan the sequence of courses that would be most appropriate.

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational and other art/design-related endeavors.

Contact Information

Dermot Mac Cormack, Chair
Tyler School of Art Building, Rooms 210T and 240L
610-653-8227
dermot@temple.edu

Kelly Holohan, Program Head
Tyler School of Art Building, Room 240M

215-777-9733
kholohan@temple.edu

Learn more about the Bachelor of Fine Arts in Graphic and Interactive Design.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Fine Arts degree in Graphic and Interactive Design may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00. All Graphic and Interactive Design majors must complete the BFA curriculum (p. 141) and General Education (p. 83) requirements.

The required Junior/Senior courses must be completed with a C- or better to fulfill major requirements.

Requirements for BFA in Graphic and Interactive Design

Sophomore Requirements

Code	Title	Credit Hours
GAD 2001	Graphic Design	3
GAD 2021	Computers for Design	3

Note:

- A minimum final grade of C- in GAD 2001 and in GAD 2021 along with the approved portfolio review is required to be accepted to the major.
- Graphic and Interactive Design majors who plan to study abroad should do so in the second semester of their sophomore year if they plan to graduate in four years. These students should see the Area Head for advising prior to leaving.

GAID Protocol for Portfolio Reviews

There will be two portfolio review cycles in Graphic and Interactive Design (GAID) each academic year: the end of the Fall semester (December) and the end of the Spring semester (May). The portfolio reviews will take place in the week after final studio course reviews. Specific dates for the reviews will be announced at the beginning of each semester in the GAD 2001 classes. They will also be posted on Canvas and in the GAID suite. All full-time GAID faculty will serve on the GAID Portfolio Review Admissions Committee.

Applicants must have completed all Tyler Foundations courses (or had approved transfer courses as noted by the Tyler Admissions Office) and the 2 prerequisites for the major: GAD 2001 and GAD 2021 with a C-minus or better.

Application and Notification

The complete policy and application process is detailed on the Graphic and Interactive Design web site at <https://tyler.temple.edu/programs/graphic-interactive-design>.

Application forms will be available for eligible students on Canvas.

Students who have completed or who are currently enrolled in the two prerequisites for the GAID major (GAD 2001 and GAD 2021) and intend to submit an application for the Portfolio Review will be able to obtain an application form, portfolio template and detailed application instructions on Canvas by mid-semester.

Students who fail to submit all of the required materials for the Portfolio Review will be disqualified, but may re-apply at the next review cycle as a first-time submitter. Late submissions will not be reviewed.

Applicants to the GAID major will receive one of the following decisions from the committee after the review is completed: (i) accepted, (ii) not accepted, or (iii) revise and submit. Students who receive a "(iii) revise and submit" evaluation should re-apply in the next portfolio review cycle.

Students who pass the portfolio review for admission to the GAID major will be informed via TUmail. Within 2 weeks of receiving this e-mail, admitted students must reply to the acceptance e-mail to confirm that they definitively want to major in GAID. Students who do not confirm by that deadline will forfeit their admission to the major and will need to re-apply in the next GAID portfolio review cycle as a second-time submitter. Students are limited to no more than two applications to the major.

Junior Requirements

Code	Title	Credit Hours
GAD 3001	Advanced Graphic Design (fall only)	3
GAD 3002	Advanced Graphic Design (spring only)	3

GAD 3011	Typography	3
GAD 3021	Intermediate Computer Graphics	3
Electives strongly recommended		
GAD 3013 or GAD 3015	Advanced Typography	3
GAD 3023 or GAD 3025	Interactive Design	3
GAD 3027	Digital Narratives	3
GAD 3031 or GAD 3033	Illustration	3
GAD 3041	Advertising Design	3
GAD 3096	The Business of Design (WI)	3
GAD 3101	Collaborative Design Workshop in Rome	3

Note:

- In the junior year, *Advanced Graphic Design* must be taken in sequence (GAD 3001 in Fall / GAD 3002 in Spring).
- The prerequisites for Senior level design courses are the four required courses at the junior level: GAD 3001 (Fall), GAD 3002 (Spring), GAD 3011 (Fall or Spring), and GAD 3021 (Fall or Spring). GAD 3023 or GAD 3025 is strongly recommended for students taking GAD 3027. GAD 3023 or GAD 3025 is required for GAD 4007.
- Students who plan to have an interactive portfolio only should take GAD 3023 or GAD 3025. GAD 3021 is the prerequisite for this course.
- GAD 3096 (Fall or Spring) is Writing Intensive and must be passed with a C- or better to be recognized as Writing Intensive credit. It can replace a Writing Intensive requirement in Art History. In that case the Art History requirement can be fulfilled with an Art History course that is not Writing Intensive.

Senior Requirements

Code	Title	Credit Hours
Select two specialized courses in Senior Graphic Design from the following:		6
GAD 3013 or GAD 3015	Advanced Typography	
GAD 3027	Digital Narratives	
GAD 3041	Advertising Design	
GAD 4000 or GAD 4010	Senior Design: Special Topics	
GAD 4001	Senior Graphic Design: Senior Design Workshop	
GAD 4002	Senior Graphic Design: Hybrid Design	
GAD 4003	Senior Graphic Design: Art Direction	
GAD 4004	Senior Graphic Design: Packaging	
GAD 4005	Senior Graphic Design: Publishing	
GAD 4006	Senior Graphic Design: Brand Identity	
GAD 4007	Senior Interactive Design	
GAD 4008	Senior Graphic Design: Projects in Authorship	
GAD 4011	Senior Graphic Design: Design for the Public Good	
GAD 4111 or GAD 4112	Senior Illustration	
Select one specialized course from the Senior Graphic Design list or one of the following:		3
GAD 3031 or GAD 3033	Illustration	
GAD 3023 or GAD 3025	Interactive Design	
GAD 3096	The Business of Design (WI)	
GAD 3101	Collaborative Design Workshop in Rome	
Specialized Course Requirement		
GAD 4009	Senior Graphic Design: Projects in Authorship (spring only)	3

Capstone Requirement

GAD 4196	Senior Portfolio (WI, Capstone, spring only)	3
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Note:

- Additional 3xxx and 4xxx level GAD courses may be taken as studio electives.
- The capstone GAD 4196 Senior Portfolio and GAD 4009 Senior Graphic Design: Projects in Authorship are offered in spring semesters only. These two courses must be taken in addition to the three required senior (or equivalent) GAD courses listed above.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Fine Arts in Graphic and Interactive Design**Suggested Plan for New Students Starting in the 2023-2024 Academic Year**

Year 1		Credit Hours
Fall		
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3
FDPR 1503	Woodshop Fundamentals	1
ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 or Honors Arts of the World I: Prehistoric to 1300	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		17
Spring		
FDPR 1512	Foundation Drawing	3
FDPR 1522	2D Foundation Principles	3
FDPR 1532	3D Foundation Principles/C	3
FDPR 1502	Investigations of Art and Design	1
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		16
Year 2		
Fall		
GAD 2001	Graphic Design	3
GAD 2021	Computers for Design	3
ART 2000-2999	Sophomore Studio Elective	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Spring		
ART 2000-2999	Sophomore Studio Elective	3
ART 2000-2999	Sophomore Studio Elective	3
ART 2000-2999	Sophomore Studio Elective	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15

Year 3		
Fall		
GAD 3001	Advanced Graphic Design ²	3
GAD 3011	Typography	3
GAD 3021	Intermediate Computer Graphics	3
Art History Elective ³		4
GenEd Breadth Course		3
Credit Hours		16
Spring		
GAD 3002	Advanced Graphic Design ⁴	3
ART or GAD Studio Elective		3
ART or GAD Studio Elective		3
Art History Elective ^{WI 5}		4
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
Senior Graphic Design Course ⁶		3
Senior Graphic Design Course ⁶		3
GAD 3xxx/4xxx (Specialized or Advanced GAD course, as per senior requirements)		3
Non-Studio Elective		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
GAD 4009	Senior Graphic Design: Projects in Authorship ⁴	3
GAD 4196	Senior Portfolio ^{4,6}	3
ART or GAD Studio Elective		3
GenEd Breadth Course		3
Open Elective ³		3
Credit Hours		15
Total Credit Hours		126

1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2

Courses offered in Fall only.

3

Students completing a 3 credit Art History 2000+ elective **must** select a 4 credit open elective to reach the minimum 126 credits to earn the BFA degree.

4

Courses offered in Spring only.

5

OR GAD 3096 to fulfill the Writing Intensive requirement. If taken, a *non*-Writing Intensive Art History course will fulfill the Art History requirement.

6

A minimum of 2 senior studios must be successfully completed before taking GAD 4196. Senior studios are GAD 3013 (if taken in the senior year), GAD 3015 (if taken in the senior year), GAD 3027 (if taken in the senior year), GAD 3041 (if taken in the senior year), GAD 4000, GAD 4001, GAD 4002, GAD 4003, GAD 4004, GAD 4005, GAD 4006, GAD 4007, GAD 4008, GAD 4009, GAD 4010, GAD 4011, GAD 4111 and GAD 4112.

Please Note: An approved study abroad program waives the GenEd Global/World Society (GG) requirement; however, these credits must be made up with academic coursework taken outside of Tyler departments to be in compliance with BFA accreditation. Graphic and Interactive Design majors interested in studying abroad should plan to spend either spring semester of their second year, after completing the sophomore prerequisites for the major in the fall, or a summer semester to remain on track with required courses. Please see an academic advisor for more details.

Art Education Concentration

The **Bachelor of Fine Arts with an optional Concentration in Art Education**, offered by the Department of Art, is one of two pathways at the Tyler School of Art and Architecture to earning art teaching certification in Pennsylvania and becoming a teaching artist. Students may also become certified teachers through the Bachelor of Science in Education in Art Education (p. 125).

Tyler offers students seeking a BFA degree an opportunity to earn Pennsylvania Teacher Certification in Art, K-12. The BFA with Art Education Concentration combines Tyler's art curriculum with approved courses in education and the liberal arts—all with Tyler's uniquely urban, community-based approach.

Offering students access to the resources of both a world-class art school and a large, public research university, Tyler's undergraduate Art Education programs prepare students to become thoughtful art teachers with the extensive knowledge and skills to teach kindergarten through twelfth grade.

Tyler students take full advantage of the school's location in Philadelphia and the city's rich array of schools, communities, museums, galleries and artists, opening up opportunities for artistic growth, research, networking and jobs.

The Tyler faculty is committed to urban art education and the power of collaborating with communities. Tyler students don't just learn how to teach art and grow as artists—they learn how to affect positive change in the communities where they work.

Students must complete BFA requirements (p. 141) along with a three-year sequence in Education and Art Education that begins in the sophomore year. Typically five years are necessary to fulfill all requirements. Students work with both the Art Education faculty advisors and the Tyler academic advisors regarding completion of requirements.

Campus Location: Main

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational, and other art/design-related endeavors.

Licensure/Certification

Teacher certification is the process used in the US to ensure that prospective K-12 teachers are qualified and prepared to teach at the levels and in the subjects that they intend to teach. Certification in Art Education prepares graduates to teach art to students from K-12. Certification is not always required by private institutions, but some may prefer to hire certified teachers.

In order to become certified in Art Education, students must complete a bachelor's degree from a regionally accredited institution of higher education, pass the Praxis exams required in their state of employment, and satisfy other state-licensing examinations, as applicable.

Temple University is a Pennsylvania state-approved teacher preparation program for K-12 Art. Completion of Temple University's Bachelor of Science in Education in Art Education or Master of Education in Art Education with Teaching Certification satisfies the necessary requirements for graduates to sit for the Praxis Core Academic Skills for Educators, Praxis Subject Assessments, and Praxis Fundamentals.

For certification in some states, students may need to take the Praxis Principles of Learning and Teaching (PLT) exam for their desired grade levels, which they are prepared for through their field placements, classroom observations, and study of human development and pedagogy.

<https://www.education.pa.gov/Educators/Certification/BecomeAnEducator/Pages/ACPSpecialty.aspx>

Admission

Admission to Tyler's Bachelor of Fine Arts programs is based on a review of academic credentials and portfolio review. For detailed information on how to apply, please visit Tyler's Studio Art admissions page.

Contact Information

Renee Jackson, Program Head for Art Education
Tyler Building, Art Education and Community Arts Practices Suite B090C
215-777-9258
renee.jackson@temple.edu

Summary of Requirements

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

The Bachelor of Fine Arts degree with the Art Education Concentration may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 155 semester hours of credit with a minimum cumulative GPA of 3.0.

University Requirements

All Temple students are required to complete the General Education (GenEd (p. 83)) curriculum.

- Successful completion (minimum C-) of FDPR 1511 and ARTH 1156 satisfies the GenEd Arts (GA) requirement.
- Successful completion (minimum C-) of EDUC 2109, SPED 2231, and TESL 3631 satisfies the GenEd Human Behavior (GB) requirement.
- Summer or semester study abroad will satisfy the GenEd Global/World Society (GG) requirement.

BFA with Art Education Concentration Requirements

ARTE 2001, ARTE 3096, ARTE 4003, ARTE 4088, and ARTE 1001 must be completed with a C or better to fulfill concentration requirements.

Students must earn a minimum grade of C- in required College of Education coursework and additional mathematics requirement to fulfill concentration requirements.

Students in the BFA degree with the Art Education Concentration are required to take a Ceramics studio course and an additional studio course in Glass, Metals/Jewelry/CAD-CAM, or Fibers and Materials Studies; a Painting studio course and an additional studio course in Painting or Sculpture; a Printmaking studio course and an additional studio course in Photography or Graphic Design. These courses may include prerequisite, sophomore, and/or studio courses within the student's chosen BFA major.

Any BFA student who wishes to pursue the Art Education Concentration must arrange to meet with the Art Education faculty advisor to discuss field placement, clearances, and requirements, as the state of Pennsylvania may change requirements after the *Bulletin* information has been posted. It is strongly suggested that students do so during their freshman year.

Code	Title	Credit Hours
Studio Courses		74
Foundation Program (20 credits)		
2000 level Sophomore studios including major prerequisites (18 credits)		
Major studio requirements (24-27 credits, varies depending on major)		
Studio electives (9-12 credits, varies depending on major)		
Art History Courses		12-13
ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 Honors Arts of the World I: Prehistoric to 1300	
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century Honors Arts of the World II: 1300 to the 21st Century	
2000+ ARTH elective		
2000+ ARTH elective		
General Education Courses ¹		29
Education Requirements		19-18
EDUC 2103	Socio-cultural Foundations of Education in the United States	
EDUC 2109	Adolescent Development for Educators	
SPED 2231	Introduction to Special Education	
SPED 3211	Effective Instructional Strategies for Students with Disabilities	
TESL 3631	Principles and Practice for Teaching English Learners	
Mathematics course (1000 level) for PA Certification		
Art Education Courses		21
ARTE 1001	Professional Practices in Art Education and Art Therapy	
ARTE 2001	Science and Art of Teaching	
ARTE 3096	Art in Elementary and Secondary School	
ARTE 4003	Inclusive Art Education K-12 Students in the Art Room	
ARTE 4088	Student Teaching	
Total Credit Hours		155

1

Students waived from General Education (p. 83) requirements via placement test (GW) or study abroad (GG) must make up the credits with electives to reach the minimum 155 credits to earn the degree.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

BFA with Art Education Concentration (Five-Year)

Year 1		Credit Hours
Fall		
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3
FDPR 1503	Woodshop Fundamentals	1
ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 or Honors Arts of the World I: Prehistoric to 1300	3
Credit Hours		17
Spring		
ARTE 1001	Professional Practices in Art Education and Art Therapy	1
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
FDPR 1512	Foundation Drawing	3
FDPR 1522	2D Foundation Principles	3
FDPR 1532	3D Foundation Principles/C	3
FDPR 1502	Investigations of Art and Design	1
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
Credit Hours		17
Year 2		
Fall		
Studio		3
Studio		3
Studio		3
EDUC 2103	Socio-cultural Foundations of Education in the United States	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		15
Spring		
Studio		3
Studio		3
Studio		3
EDUC 2109	Adolescent Development for Educators ²	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Year 3		
Fall		
Studio Major Course		3
Studio Major Course		3
Studio Elective		3
Second Mathematics course for certification ³		3-4

GenEd Breadth Course		3
Credit Hours		15-16
Spring		
Studio Major Course		3
Studio Major Course		3
ARTE 2001	Science and Art of Teaching	4
SPED 2231	Introduction to Special Education ²	3
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
Studio Major Course		3
Studio Major Course		3
2000+ ARTH Elective ³		4-3
TESL 3631	Principles and Practice for Teaching English Learners ²	3
GenEd Breadth Course		3
Credit Hours		16-15
Spring		
Studio Major Course		3
Studio Major Course		3
Select one of the following:		3
CRFT (Major Capstone) ^{WI}		
GAD (Major Capstone) ^{WI}		
PDS (Major Capstone) ^{WI}		
2000+ ARTH Elective		3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
Credit Hours		15
Year 5		
Fall		
Studio Elective		3
Studio Elective		3
ARTE 3096	Art in Elementary and Secondary School	4
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Spring		
ARTE 4003	Inclusive Art Education K-12 Students in the Art Room	3
ARTE 4088	Student Teaching	9
Credit Hours		12
Total Credit Hours		155

1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2

These 3 courses constitute the waiver for the GenEd Human Behavior category if the courses are completed with a C- or better.

3

Students need to complete either a 4-credit Art History 2000+ elective **or** a 4-credit second Mathematics course to reach the minimum 155 credits to earn the BFA degree with Art Education Concentration.

Graphic and Interactive Design with Entrepreneurial Studies BFA

Overview

The **Bachelor of Fine Arts in Graphic and Interactive Design with Entrepreneurial Studies**, offered by the Department of Graphic and Interactive Design (GAID), does more than prepare students for careers in print and screen-based design—it teaches them how to create unforgettable experiences that make the world a better place.

Tyler GAID majors join a tight-knit network of students, teachers and alumni that embraces the power of design to open minds, move hearts, shape environments and heal communities. Tyler's faculty help students find their unique voice and wield it to solve complex social challenges that impact us all, from poster campaigns that spotlight the effects of climate change to apps that address the problem of physical exercise for individuals who are visually impaired. Students are pushed to experiment and create original, research-driven concepts across all platforms, including illustration, typography, packaging, web sites, social media, virtual reality and real-life spaces.

Students at Tyler get the best of both worlds: an intimate community with small classes and personal mentorship; and access to the facilities, academic experts and resources of Temple, a leading public research university based in Philadelphia, with its dynamic arts and culture scene and opportunities for professional advancement.

Designed to complement the studio experience with tools to support a studio practice or pursue graduate studies, the Entrepreneurship coursework enhances students' career options. Graduates of this degree program will possess requisite business skills to support themselves as visual artists or entrepreneurs in art and related fields.

Each student moves from a common foundation curriculum (p. 141) that introduces materials and processes and prepares them for success in a range of fields of study. Those who select Art as their major will work side-by-side with majors in Visual Studies, Art Education and Art Therapy. The dynamic exchange of ideas that result from these interdisciplinary conversations spur intellectual risk and drive research-based creative concepts.

Upon graduation, students have the practical skill sets and honed aesthetic for successful careers in studio art, art education and design, as well as attend top-tier graduate programs.

Campus Location: Main

Program Code: TA-GIDE-BFA

Admissions

Admission to Tyler's Studio Art (Bachelor of Fine Arts) programs is based on a review of academic credentials and portfolio review. For detailed information on how to apply, please visit Tyler's Studio Art admissions page.

Because of the demand for a limited number of spaces in the Graphic and Interactive Design major, all BFA students who are not yet declared majors in Graphic and Interactive Design will have to apply for the Sophomore Portfolio Review in GAID in order to get into the major, regardless of when that student started at Tyler or when they took Graphic Design (GAD 2001) and Computers for Design (GAD 2021).

The review process is required for any Tyler student seeking to enter the major. Because the GAID program follows a strict fall/spring sequence, students may only begin as GAID majors in the fall semester. Students must complete the program in sequence as the capstone courses are offered only in the spring. Admitted students must begin taking required courses in the major at the junior (3xxx) level in the academic year immediately following official admission to the major or their admission to the major will be forfeited.

It is strongly recommended that potential applicants for admission to the GAID major attend one of the official sophomore advising meetings with the GAID Program Head where the application process will be explained. The process will also be explained by the instructors in each section of GAD 2001.

Laptop Requirement for GAID Majors

The Graphic and Interactive Design department is committed to excellence in design and the full integration of technologies within our discipline to best educate and prepare our students to become leaders in this field. A thorough understanding of the changing nature of design and the integral role that technology plays in it is essential for all our students to be active participants in this ever-changing environment.

For full device and software requirements and recommendations, please see the Graphic and Interactive Design Laptop Requirements.

Study Abroad

Students who plan to study abroad should arrange to meet with their academic advisor and the Education Abroad and Overseas Campuses office as early as possible, preferably during the freshman year, in order to explore options and plan the sequence of courses that would be most appropriate.

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational and other art/design-related endeavors.

Contact Information

Dermot Mac Cormack, Chair
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610-653-8227
dermot@temple.edu

Kelly Holohan, Program Head
Tyler School of Art Building, Room 240M
215-777-9733
kholohan@temple.edu

Learn more about the Bachelor of Fine Arts in Graphic and Interactive Design.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Fine Arts degree in Graphic and Interactive Design with Entrepreneurial Studies may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00. All Graphic and Interactive Design with Entrepreneurial Studies majors must complete the General Education (p. 83) requirements.

The required Junior/Senior courses must be completed with a C- or better to fulfill major requirements.

Major Requirements for BFA in Graphic and Interactive Design with Entrepreneurial Studies

Sophomore Requirements

Code	Title	Credit Hours
GAD 2001	Graphic Design	3
GAD 2021	Computers for Design	3

Note:

- A minimum final grade of C- in GAD 2001 and in GAD 2021 along with the approved portfolio review is required to be accepted to the major.
- Graphic and Interactive Design majors who plan to study abroad should do so in the second semester of their sophomore year if they plan to graduate in four years. These students should see the Area Head for advising prior to leaving.

GAID Protocol for Portfolio Reviews

There will be two portfolio review cycles in Graphic and Interactive Design (GAID) each academic year: the end of the Fall semester (December) and the end of the Spring semester (May). The portfolio reviews will take place in the week after final studio course reviews. Specific dates for the reviews will be announced at the beginning of each semester in the GAD 2001 classes. They will also be posted on Canvas and in the GAID suite. All full-time GAID faculty will serve on the GAID Portfolio Review Admissions Committee.

Applicants must have completed all Tyler Foundations courses (or had approved transfer courses as noted by the Tyler Admissions Office) and the 2 prerequisites for the major: GAD 2001 and GAD 2021 with a C-minus or better.

Application and Notification

The complete policy and application process is detailed on the Graphic and Interactive Design web site at <https://tyler.temple.edu/programs/graphic-interactive-design>.

Application forms will be available for eligible students on Canvas.

Students who have completed or who are currently enrolled in the two prerequisites for the GAID major (GAD 2001 and GAD 2021) and intend to submit an application for the Portfolio Review will be able to obtain an application form, portfolio template and detailed application instructions on Canvas by mid-semester.

Students who fail to submit all of the required materials for the Portfolio Review will be disqualified, but may re-apply at the next review cycle as a first-time submitter. Late submissions will not be reviewed.

Applicants to the GAID major will receive one of the following decisions from the committee after the review is completed: (i) accepted; (ii) not accepted; or (iii) revise and submit. Students who receive a "(iii) revise and submit" evaluation should re-apply in the next portfolio review cycle.

Students who pass the portfolio review for admission to the GAID major will be informed via TUmail. Within 2 weeks of receiving this e-mail, admitted students must reply to the acceptance e-mail to confirm that they definitively want to major in GAID. Students who do not confirm by that deadline will forfeit their admission to the major and will need to re-apply in the next GAID portfolio review cycle as a second-time submitter. Students are limited to no more than two applications to the major.

Junior Requirements

Code	Title	Credit Hours
GAD 3001	Advanced Graphic Design (fall only)	3
GAD 3002	Advanced Graphic Design (spring only)	3
GAD 3011	Typography	3
GAD 3021	Intermediate Computer Graphics	3
Electives strongly recommended		
GAD 3013 or GAD 3015	Advanced Typography	3
GAD 3023 or GAD 3025	Interactive Design	3
GAD 3027	Digital Narratives	3
GAD 3031 or GAD 3033	Illustration	3
GAD 3041	Advertising Design	3
GAD 3096	The Business of Design (WI)	3
GAD 3101	Collaborative Design Workshop in Rome	3

Note:

- In the junior year, *Advanced Graphic Design* must be taken in sequence (GAD 3001 in Fall / GAD 3002 in Spring).
- The prerequisites for Senior level design courses are the four required courses at the junior level: GAD 3001 (Fall), GAD 3002 (Spring), GAD 3011 (Fall or Spring), and GAD 3021 (Fall or Spring). GAD 3023 or GAD 3025 is strongly recommended for students taking GAD 3027. GAD 3023 or GAD 3025 is required for GAD 4007.
- Students who plan to have an interactive portfolio only should take GAD 3023 or GAD 3025. GAD 3021 is the prerequisite for this course.
- GAD 3096 (Fall or Spring) is Writing Intensive and must be passed with a C- or better to be recognized as Writing Intensive credit. It can replace a Writing Intensive requirement in Art History. In that case the Art History requirement can be fulfilled with an Art History course that is not Writing Intensive.

Senior Requirements

Code	Title	Credit Hours
Select two specialized courses in Senior Graphic Design from the following:		6
GAD 3013 or GAD 3015	Advanced Typography	
GAD 3027	Digital Narratives	
GAD 3041	Advertising Design	
GAD 4000 or GAD 4010	Senior Design: Special Topics	
GAD 4001	Senior Graphic Design: Senior Design Workshop	
GAD 4002	Senior Graphic Design: Hybrid Design	
GAD 4003	Senior Graphic Design: Art Direction	
GAD 4004	Senior Graphic Design: Packaging	
GAD 4005	Senior Graphic Design: Publishing	
GAD 4006	Senior Graphic Design: Brand Identity	

GAD 4007	Senior Interactive Design	
GAD 4008	Senior Graphic Design: Projects in Authorship	
GAD 4011	Senior Graphic Design: Design for the Public Good	
GAD 4111	Senior Illustration	
or GAD 4112	Senior Illustration	
Select one specialized course from the Senior Graphic Design list or one of the following:		3
GAD 3031	Illustration	
or GAD 3033	Illustration	
GAD 3023	Interactive Design	
or GAD 3025	Interactive Design	
GAD 3096	The Business of Design (WI)	
GAD 3101	Collaborative Design Workshop in Rome	
Specialized Course Requirement		
GAD 4009	Senior Graphic Design: Projects in Authorship (spring only)	3
Capstone Requirement		
GAD 4196	Senior Portfolio (Capstone, WI, spring only)	3

Note:

- An additional 3xxx or 4xxx level GAD course may be taken as studio elective.
- The capstone GAD 4196 Senior Portfolio and GAD 4009 Senior Graphic Design: Projects in Authorship are offered in spring semesters only. These two courses must be taken in addition to the three required senior (or equivalent) GAD courses listed above.

Entrepreneurship Courses

Code	Title	Credit Hours
Select three of the following:		9
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
or SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
Select one of the following: ¹		3
ART 3085	Field Internship	
ART 4096	Professional Practices in Art (WI)	
GAD 3053	Art Careers Promotion	
GAD 3096	The Business of Design (WI)	
GAD 3185	Field Internship	
ART 3796	Art Career Workshop (WI)	
TYLE 3211	Creative Cottage Industrialist	
TYLE 4285	Rome Internship	

Total Credit Hours**12**

1

These courses cannot fulfill both a requirement for the major and for this category.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Fine Arts in Graphic and Interactive Design with Entrepreneurial Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3
FDPR 1503	Woodshop Fundamentals	1
ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 or Honors Arts of the World I: Prehistoric to 1300	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		17
Spring		
FDPR 1512	Foundation Drawing	3
FDPR 1522	2D Foundation Principles	3
FDPR 1532	3D Foundation Principles/C	3
FDPR 1502	Investigations of Art and Design	1
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		16
Year 2		
Fall		
GAD 2001	Graphic Design	3
GAD 2021	Computers for Design	3
ART or GAD Sophomore Studio Elective		3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Spring		
ART or GAD Sophomore Studio Elective		3
ART or GAD Sophomore Studio Elective		3
Select one of the following:		3
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
GAD 3001	Advanced Graphic Design ²	3

GAD 3011	Typography	3
GAD 3021	Intermediate Computer Graphics	3
Art History Elective ³		4
GenEd Breadth Course		3
Credit Hours		16
Spring		
GAD 3002	Advanced Graphic Design ⁴	3
ART or GAD Studio Elective		3
Select one of the following (not previously chosen):		3
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
Art History Elective WI ⁵		4
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
Senior Graphic Design Course ⁶		3
Senior Graphic Design Course ⁶		3
GAD 3xxx/4xxx (Specialized or Advanced GAD course, as per senior requirements)		3
Select one of the following (not previously chosen):		3
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
GenEd Breadth Course		3
Credit Hours		15
Spring		
GAD 4009	Senior Graphic Design: Projects in Authorship ⁴	3
GAD 4196	Senior Portfolio ^{4,6}	3
Select one of the following: ⁷		3
ART 3085	Field Internship	
ART 4096	Professional Practices in Art	
GAD 3053	Art Careers Promotion	
GAD 3096	The Business of Design	
GAD 3185	Field Internship	
ART 3796	Art Career Workshop	
TYLE 3211	Creative Cottage Industrialist	
TYLE 4285	Rome Internship	
GenEd Breadth Course		3

Open Elective ³	3
Credit Hours	15
Total Credit Hours	126

1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2

Course offered in fall only.

3

Students completing a 3-credit Art History 2000+ elective must select a 4-credit open elective to reach the minimum 126 credits to earn the BFA degree.

4

Courses offered in spring only.

5

Students who complete GAD 3096 or another WI entrepreneurship course from the approved list may take a non-WI Art History elective.

6

A minimum of 2 senior studios must be successfully completed before taking GAD 4196. Senior studios are GAD 3013 (if taken in the senior year), GAD 3015 (if taken in the senior year), GAD 3027 (if taken in the senior year), GAD 3041 (if taken in the senior year), GAD 4000, GAD 4001, GAD 4002, GAD 4003, GAD 4004, GAD 4005, GAD 4006, GAD 4007, GAD 4008, GAD 4009, GAD 4010, GAD 4011, GAD 4111 and GAD 4112.

7

These courses cannot fulfill both a requirement for the major and a requirement for this category.

Please Note: An approved study abroad program waives the GenEd Global/World Society (GG) requirement; however, these credits must be made up with academic coursework taken outside of Tyler departments to be in compliance with BFA accreditation. BFA majors interested in studying abroad should consult with an academic advisor to determine if a semester (generally spring semester of second year) or a summer program would be the best option to remain on track for graduation.

Historic Preservation BS

Overview

The **Bachelor of Science in Historic Preservation**, offered by the Department of Architecture and Environmental Design (AED), centers on current practices related to cultural heritage and community based preservation. Students take courses in the architecture foundation program for the first two years of study then focus on preservation theory and practice in the third and fourth year. This program is well suited for students interested in research and application of architectural and historical knowledge. The program offers an introduction to historic preservation and the agencies and frameworks within which preservation is carried out locally, nationally and internationally. Coursework examines a number of global, national and local case studies. Students undertake an in-depth capstone research investigation of a selected case study to employ research methods utilized in preservation. Dedicated group work areas, woodshop, digital fabrication, and digital lab spaces allow for in-house research drawing, modeling, and digital visualization.

Campus Location: Main

Program Code: TA-HIPR-BS

Admissions

For more information on how to apply, please visit Tyler's Architecture and Environmental Design admissions page.

Study Abroad

All AED Department students have the opportunity to study abroad for a semester at Temple Rome or Temple Japan. Admission to these programs is competitive. Applications are made through the Temple Education Abroad and Overseas Campuses office.

Students who plan to study abroad should arrange to meet with an academic advisor as early as possible, preferably during the freshman year, in order to plan the sequence of courses that would be most appropriate. Because of program requirements in the fall semesters of junior and senior years, Historic Preservation and Facilities Management majors should consider attending the Rome or Japan program only during the spring semester of the junior year.

Career Opportunities

Graduates of the program will be equipped to work under the supervision of an architect or an architectural historian to document historical buildings, undertake archival research or other more general aspects of architectural practice not requiring licensure. Graduates are prepared to apply for graduate studies in architecture, historic preservation or a related discipline.

Continuing Studies

All of Tyler's undergraduate architecture programs prepare students for continued study in the National Architectural Accrediting Board (NAAB) accredited Master of Architecture (MArch) professional program which has the following tracks to accommodate students from different undergraduate majors:

- A 2-year track for students with a 4-year pre-professional bachelor's degree program in architecture.
- A 3-year track for students with a bachelor's degree in other disciplines or in a non-pre-professional architecture program.

For more information on NAAB accreditation, please visit our NAAB Professional Program Information page.

Architecture Laptop Policy

Laptops are required for all students entering Architecture, Facilities Management, and Historic Preservation programs. The computer and its corresponding digital tools, such as laser cutters, 3D printers, and digital fabrication machines, have become an integral part of architectural pedagogy and the design studio environment. All architecture, facilities management, and historic preservation students begin working digitally in their freshman representation courses within the Architecture Foundations program. This Laptop Policy has been implemented to provide advantageous learning environments that guide students towards the acquisition of tools and skillsets that are most appropriate for the furthering of both their academic and professional journeys. Students should purchase a Windows-compatible laptop.

For full device and software requirements and recommendations, please see the Architecture Program Laptop Policy.

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Learn more about the Bachelor of Science in Historic Preservation.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All students are required to complete the General Education (GenEd) requirements. Go to the General Education (p. 83) section for more information.

Summer or semester study abroad will satisfy the GenEd Global/World Society requirement.

All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses required for this major are ARCH 3296 and ARCH 4596.

Program Requirements

A total of 122 s.h. is required for completion of the Bachelor of Science in Historic Preservation.

Code	Title	Credit Hours
MATH 1031	Differential and Integral Calculus	4
Select one of the following:		4
PHYS 1021	Introduction to General Physics I	
ECE 2142	Engineering Principles for Building Science ¹	
Select one of the following:		3
CHEM 1021	Introduction to Chemistry I	
CHEM 1031	General Chemistry I	
CHEM 1035	Chemistry for Engineers	
CHEM 1951	Honors General Chemical Science I	
Freshman Requirements		
ARCH 1011	Visual Literacy for Architects 1	3
ARCH 1001	Introduction to Design and the Environment	3
ARCH 1012	Visual Literacy for Architects 2	3
Sophomore Requirements		
ARCH 2121	Foundation Architectural Design 1	4
ARCH 2141	Architectural History: Ancient through Renaissance	3
ARCH 2151	Architecture, Technology, and the Environment	3
ARCH 2122	Foundation Architectural Design 2	4
ARCH 2142	Architectural History: 17th Century through 20th Century	3
Junior Requirements		
ARCH 3111	Introduction to Historic Preservation	3
ARCH 3152	Materials and Methods	4
ARCH 3296	Movements in Modern Architecture	3
ARCH 3251	Structural Analysis for Architects	3
ARCH 4141	Global Preservation Practice	3
ARCH 4145	Research Methods for Historic Preservation	3
Senior Requirements		
ARCH 3354	Sustainability and Architecture	3
ARCH 4199	Capstone Research Seminar for Historic Preservation	4
ARCH 4596	Seminar in Architectural Theory	3
ARCH Elective		3
ARCH Elective		3

1

If ECE 2142 is selected, students will need two GenEd Science and Technology (GS) courses to satisfy the GenEd requirement.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Historic Preservation

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Architecture Foundation Studies Courses (Year 1 & 2)

Year 1		Credit Hours
Fall		
ARCH 1011	Visual Literacy for Architects 1 ¹	3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
MATH 1031	Differential and Integral Calculus	4
GenEd Breadth Course		3
Credit Hours		14

Spring		
ARCH 1001	Introduction to Design and the Environment	3
ARCH 1012	Visual Literacy for Architects 2 (spring only)	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Select one of the following:		4
PHYS 1021	Introduction to General Physics I	
ECE 2142	Engineering Principles for Building Science ²	
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
ARCH 2121	Foundation Architectural Design 1 (fall only) ³	4
ARCH 2141	Architectural History: Ancient through Renaissance (fall only)	3
ARCH 2151	Architecture, Technology, and the Environment	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Credit Hours		16
Spring		
ARCH 2122	Foundation Architectural Design 2 ((spring only)) ⁴	4
ARCH 2142	Architectural History: 17th Century through 20th Century	3
GenEd Breadth Course		3
Free Elective ⁵		3
Free Elective ⁵		3
Credit Hours		16
Total Credit Hours		62

1

Although not required, freshman students registered for ARCH 1011 should also take ARCH 1502.

2

If ECE 2142 is selected, students will need two GenEd Science and Technology (GS) courses to satisfy the GenEd requirement.

3

Option to take ARCH 2123 / ARCH 2153 instead of ARCH 2121 for BS in Facilities Management.

4

Option to take ARCH 2124 / ARCH 2154 instead of ARCH 2122 for BS in Facilities Management.

5

Students planning to study abroad should substitute the Free Elective for a required course available only on main campus. For more information, please see your advisor.

Note: The Architecture Foundation is common to all three undergraduate degrees. In the spring of the sophomore year, students declare a major in one of the degrees offered. A place in the BS in Facilities Management or the BS in Historic Preservation is guaranteed for all students in good standing with the University. Admission to the Bachelor of Science in Architecture is competitive. Typically, students have a cumulative GPA of 3.0 or higher and an excellent portfolio. Students in all three programs can apply to the Master of Architecture program. Bachelor of Science in Architecture students are eligible for the 2-year, 60 credit track. BS in Historic Preservation and BS in Facilities Management students may be required to take additional coursework (between 60-90 credits) at the graduate level. Students can meet with an advisor to plan ahead and can refer to the Temple University Graduate Bulletin.

Bachelor of Science in Historic Preservation (Year 3 & 4)

Year 3		Credit Hours
Fall		
ARCH 3111	Introduction to Historic Preservation	3
ARCH 3152	Materials and Methods	4
ARCH 3296	Movements in Modern Architecture	3

Select one of the following: ¹		3
CHEM 1021	Introduction to Chemistry I	
CHEM 1031	General Chemistry I	
CHEM 1035	Chemistry for Engineers	
CHEM 1951	Honors General Chemical Science I	
Free Elective		4
Credit Hours		17
Spring		
ARCH 3251	Structural Analysis for Architects	3
ARCH 4141	Global Preservation Practice	3
ARCH 4145	Research Methods for Historic Preservation	3
GenEd Breadth Course		3
Free Elective		3
Credit Hours		15
Year 4		
Fall		
ARCH 3354	Sustainability and Architecture	3
Architecture Elective		3
Elective		3
GenEd Breadth Course		3
Free Elective		3
Credit Hours		15
Spring		
ARCH 4199	Capstone Research Seminar for Historic Preservation	4
ARCH 4596	Seminar in Architectural Theory	3
Architecture Elective		3
Free Elective		3
Credit Hours		13
Total Credit Hours		60
Code	Title	Credit Hours
Total Credits for the BS in Historic Preservation:		122

1

Students may opt to take the lab course (CHEM 1023, CHEM 1033, or CHEM 1953) that complements the lecture course (if available) and select a 3 credit elective course to reach the minimum number of credits for graduation.

Rome Option

Students who plan to study abroad are encouraged to meet with an advisor as early as the freshman year. While the plan below suggests appropriate coursework, a semester abroad would require using free electives that ordinarily would be taken in other semesters. For a historic preservation major, the best time to study abroad is fall of the fourth year. It will take careful planning with an advisor to ensure that the degree is completed as efficiently as possible, and that courses normally taken in the fall of fourth year on Main campus are completed before the semester abroad. ARCH 3234 and ARTH 2005 can be taken in place of free electives and ARCH 3241 counts as an Architecture elective.

Code	Title	Credit Hours
ARCH 3241	Seminar Analysis of Urban Structure in Rome (Arch Elective)	3
ARCH 3234	Architectural Design Studio in Rome (or Free Electives)	6
ARTH 2005	Cultural Heritage Preservation (or Free Elective)	4
Free Elective or GenEd		3
Total Credit Hours		16

Japan Option

Students who plan to study abroad are encouraged to meet with an advisor as early as the freshman year. While the grid below suggests appropriate coursework, a semester abroad would require using free electives that ordinarily would be taken in other semesters. It will take careful planning with an advisor to ensure that the degree is completed as efficiently as possible, and that courses normally taken in the spring of junior year on Main campus are completed before the semester abroad.

GenEd courses are offered at the Japan campus and can be substituted where appropriate for Free electives. ARCH 3242 counts as an Architecture elective (spring only). Note that students can study abroad in Japan in either fall or spring semester.

Code	Title	Credit Hours
ARCH 3242	Urban Seminar in Tokyo (Undergraduate) (for students attending in spring only)	3
Free Elective or GenEd		3
Free Elective or GenEd		3
Free Elective		3
Free Elective		3
Total Credit Hours		15

Historic Preservation Certificate

Overview

The **Certificate in Historic Preservation**, offered by the Department of Architecture and Environmental Design (AED), creates an opportunity for students from many disciplines who are interested in increasing their knowledge about architectural history and knowing more about how this knowledge can be applied in historical contexts in the built environment. This certificate is available to all undergraduate degree students, except students pursuing the Architecture major or the Historic Preservation major. Students majoring in disciplines such as community development where students learn to work with communities and public policy, art history where students are educated to understand the broad scope of art and architectural historical knowledge, or public history where students focus on the cultural dimension of history, may find the certificate's coursework is a valuable complement to their degree programs.

The Certificate in Historic Preservation requires 15 credits of coursework that includes the Architectural History survey sequence and core Preservation courses. The certificate gives students an overview of the preservation field and an opportunity to work on projects that address current issues of historic preservation in contextual settings.

Campus Location: Main

Program Code: TA-HIPR-CERT

Contact Information

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Learn more about the undergraduate certificate in Historic Preservation.

Requirements

This credit certificate may be conferred upon a student by recommendation of the faculty and upon satisfactory completion of the required credits with a minimum cumulative GPA of 2.0.

At least half of the courses required for the certificate must be completed at Temple University.

Code	Title	Credit Hours
Note: The symbol after the course title indicates that the class is offered ONLY in the semester indicated. (F) = offered fall only (S) = offered spring only		
Code	Title	Credit Hours
Required Courses		
ARCH 1001	Introduction to Design and the Environment	3
ARCH 2141	Architectural History: Ancient through Renaissance (F)	3
ARCH 2142	Architectural History: 17th Century through 20th Century (S)	3
ARCH 3111	Introduction to Historic Preservation (F) ¹	3
ARCH 4145	Research Methods for Historic Preservation (F) ²	3
Total Credit Hours		15

1

Students must declare the certificate prior to taking ARCH 3111.

2

This course has a prerequisite.

Horticultural Therapy Certificate

Overview

The **Certificate in Horticultural Therapy**, offered by the Department of Architecture and Environmental Design (AED), is available to all undergraduate degree students and non-degree-seeking students. Consult an academic advisor about how the required courses fit into academic and career plans.

The majority of courses are offered on the Ambler Campus.

Campus Location: Ambler

Program Code: TA-HOTH-CERT

Licensure/Certification

Registration as a Horticultural Therapist serves as a voluntary indicator of commitment to the professional standards of horticultural therapy. The registration process is administered by the American Horticultural Therapy Association (AHTA). Registration ensures that professional competencies have been achieved based on the verification of standardized academic requirements, professional training, and commitment to a professional code of ethics.

Temple University's Undergraduate Certificate in Horticultural Therapy meets the educational requirements for registration with the AHTA. In addition to the program's coursework, graduates must also become a member of AHTA at the Associate level; have a baccalaureate degree in horticulture with a concentration in horticultural therapy or an equivalent degree; complete horticulture coursework as outlined by AHTA; and successfully complete a 480-hour internship in horticultural therapy or meet the work experience criteria defined by AHTA.

Learn more about AHTA Professional Registration Policies and Procedures.

Contact Information

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Learn more about the undergraduate certificate in Horticultural Therapy.

Requirements

Credit certificates may be conferred upon a student by recommendation of the faculty and upon satisfactory completion of the required credits for the specific topic area with a minimum cumulative GPA of 2.0 overall.

All courses for the certificate must be taken at Temple University.

Code	Title	Credit Hours
Required Courses		
HORT 2324	Plant Propagation	3
HORT 2753	Introduction to Horticultural Therapy	3
HORT 2754	Horticultural Therapy Skills	3
HORT 2755	Horticultural Therapy Program Management	3
Total Credit Hours		12

Horticulture AS

Overview

The **Associate in Science in Horticulture** is offered by the department of Architecture and Environmental Design (AED). The majority of courses for the Associate in Science in Horticulture are offered on the Ambler Campus.

Students pursuing the Associate's degree in Horticulture learn core organismal and horticultural science, landscape plant material, and installation and management techniques. The curriculum is designed to prepare students for entry into the rapidly expanding horticultural industry and the coursework allows students to participate in valuable hands-on experience.

Campus Location: Ambler

Program Code: TA-HORT-AS

Study Paths

General Horticulture Option

This option is for students interested in developing a well-rounded background in all areas of horticulture or specializing in a particular area of interest such as floral design, integrated pest management or arboriculture.

Horticulture Business Option

This option is for students interested in developing a background in landscape horticulture and in business.

Admissions

For information on how to apply, please visit Tyler's Landscape Architecture and Horticulture admissions page.

Study Abroad

Students who plan to study abroad should arrange to meet with their academic advisor and the Education Abroad and Overseas Campuses office as early as possible, preferably during the freshman year, in order to explore options and plan the sequence of courses that would be most appropriate.

Career Opportunities

Careers in horticulture are available in both the public and private sector. Graduates with a degree in horticulture could be involved in the production, use, installation and management of plants. They may:

- Work in public horticulture in arboreta, botanic gardens, parks or golf courses;
- Teach in a high school, community college or at the university level;
- Pursue an advanced degree and conduct research in plant propagation or stormwater management;
- Produce plants in greenhouses and nurseries for sale and landscape use;
- Design, install and/or maintain residential, commercial or public landscapes;
- Research new technologies and plants in private and public institutions;
- Work toward registration as a horticultural therapist;
- Write about plants and horticulture for articles, books and copy on web sites;

- Work as an extension agent or specialist helping residential and commercial clients;
- Work in interior landscaping or floral design;
- Work as a sales representative for horticultural or allied industries; and/or
- Own and operate their own business.

Continuing Studies

The Department of Architecture and Environmental Design offers a variety of credit courses and certificate programs. These courses and certificates are available to degree-seeking students as well as others interested in horticulture. For many, these courses are a means of advancing careers; for others, they are a source of personal enrichment. It is also possible, over a period of years, to complete all of the requirements for some credit certificate programs and for the associate's and the bachelor's degrees in Horticulture by attending late afternoon, evening and weekend classes.

Contact Information

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Learn more about the Associate in Science in Horticulture.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The degree of Associate in Science in Horticulture may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 60 semester hours with a minimum cumulative GPA of 2.0 overall and in the major.

No more than one grade below a C- is allowed in any course in either Landscape Architecture or Horticulture.

Program Requirements for General Horticulture Option

Code	Title	Credit Hours
BOT 1111	General Botany (fall only)	4
BOT 1112	Plant Ecology (spring only)	3
HORT 1001	Fundamentals of Horticulture	2
HORT 1211	Woody Plants I (fall only)	3
HORT 1212	Woody Plants II (spring only)	3
HORT 2334	Food Crops I (spring only)	3
HORT 2221	Herbaceous Plants I (fall only)	3
HORT 2323	Greenhouse Management (fall only)	3
HORT 3423	Applied Entomology (fall only)	3
HORT 3523	Landscape Management (fall only)	3
HORT 2114	Soils (spring only)	3
HORT 2222	Herbaceous Plants II (spring only)	3
HORT 2324	Plant Propagation (spring only)	3
HORT 3424	Applied Plant Pathology (spring only)	3
Select four of the following:		11-12
Landscape Architecture Elective (LARC 1000-level or higher)		
Horticulture Elective (HORT 1000-level or higher)		
Botany Elective (BOT 1000-level or higher)		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	Analytical Reading and Writing: ESL	
or ENG 0902	Honors Writing About Literature	
Select one of the following:		3-4

MATH 0701	Basic Mathematics for Today's World	
GenEd Quantitative Literacy (GQ)		
STAT 1001	Quantitative Methods for Business I	
Total Credit Hours		60

Program Requirements for Horticulture Business Option

Code	Title	Credit Hours
HORT 1211	Woody Plants I (fall only)	3
BOT 1112	Plant Ecology (spring only)	3
HORT 2221	Herbaceous Plants I (fall only)	3
HORT 3423	Applied Entomology (fall only)	3
HORT 1212	Woody Plants II (spring only)	3
HORT 2114	Soils (spring only)	3
HORT 3424	Applied Plant Pathology (spring only)	3
Select two of the following:		6
HORT 2323	Greenhouse Management (fall only)	
HORT 2366	Nursery Operation, Management, and Production Techniques (offered occasionally)	
HORT 3523	Landscape Management (fall only)	
Select one of the following:		3
HORT 2222	Herbaceous Plants II (offered occasionally)	
HORT 2555	Arboriculture (spring only)	
HORT 2565	Turf Management (offered occasionally)	
HORT 3514	Landscape Restoration (spring only)	
Additional Academic Requirements		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	Analytical Reading and Writing: ESL	
or ENG 0902	Honors Writing About Literature	
ENG 2007	Writing for Business and Industry	3
ACCT 2501	Survey of Accounting	3
ECON 1101	Macroeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
LGLS 0856	Law and American Society	3
or LGLS 1112	Law for Business	
or LGLS 1102	Law of Contracts	
or BA 1103	Legal and Ethical Reasoning in Business	
MKTG 2101	Marketing Management ¹	3
RMI 2101	Introduction to Risk Management	3
STAT 1001	Quantitative Methods for Business I	3
Elective ²		3
Total Credit Hours		61

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ECON 1101 is required prerequisite for this course.

2

ECON 1102 is strongly recommended to fulfill this elective credit.

Suggested Academic Plans

Please note that these are suggested academic plans. Depending on your situation, your academic plan may look different.

Associate in Science in Horticulture - General Horticulture Option

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Code	Title	Credit Hours
Note: The symbol after the course title indicates that the class is offered ONLY in that semester		
(F) = offered fall only		
(S) = offered spring only		
Year 1		
Fall		Credit Hours
BOT 1111	General Botany (F)	4
HORT 1001	Fundamentals of Horticulture	2
HORT 1211	Woody Plants I (F)	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Select one of the following:		3-4
MATH 0701	Basic Mathematics for Today's World	
GenEd Quantitative Literacy Course ^{GQ}		
STAT 1001	Quantitative Methods for Business I	
Credit Hours		16
Spring		
BOT 1112	Plant Ecology (S)	3
HORT 1212	Woody Plants II (S)	3
HORT 2334	Food Crops I (S)	3
Select two from the following:		5-6
Landscape Architecture Electives (LARC 1000-level or higher)		
Horticulture Electives (HORT 1000-level or higher)		
Botany Electives (BOT 1000-level or higher)		
Credit Hours		14
Year 2		
Fall		
HORT 2221	Herbaceous Plants I (F)	3
HORT 2323	Greenhouse Management (F)	3
HORT 3423	Applied Entomology (F)	3
HORT 3523	Landscape Management (F)	3
Select one of the following:		3
Landscape Architecture Elective (LARC 1000-level or higher)		
Horticulture Elective (HORT 1000-level or higher)		
Botany Elective (BOT 1000-level or higher)		
Credit Hours		15
Spring		
HORT 2114	Soils (S)	3
HORT 2222	Herbaceous Plants II (S)	3
HORT 2324	Plant Propagation (S)	3
HORT 3424	Applied Plant Pathology (S)	3
Select one of the following:		3
Landscape Architecture Elective (LARC 1000-level or higher)		
Horticulture Elective (HORT 1000-level or higher)		

Botany Elective (BOT 1000-level or higher)	
Credit Hours	15
Total Credit Hours	60

Associate in Science in Horticulture - Horticulture Business Option

Code	Title	Credit Hours
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Note: The symbol after the course title indicates that the class is offered ONLY in that semester

(F) = offered only in fall semester

(S) = offered only in spring semester

(O) = offered occasionally

Year 1

Fall		Credit Hours
HORT 1211	Woody Plants I (F)	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
ECON 1101	Macroeconomic Principles	3
STAT 1001	Quantitative Methods for Business I	3
Select one of the following:		3
LGLS 0856	Law and American Society	
LGLS 1112	Law for Business	
LGLS 1102	Law of Contracts	
BA 1103	Legal and Ethical Reasoning in Business	
Credit Hours		16

Spring

BOT 1112	Plant Ecology (S)	3
HORT 1212	Woody Plants II (S)	3
HRM 1101	Leadership and Organizational Management	3
ENG 2007 Elective ¹	Writing for Business and Industry	3
Credit Hours		15

Year 2

Fall		Credit Hours
HORT 2221	Herbaceous Plants I (F)	3
HORT 3423	Applied Entomology (F)	3
ACCT 2501	Survey of Accounting	3
Select two of the following:		6
HORT 2323	Greenhouse Management (F)	
HORT 2366	Nursery Operation, Management, and Production Techniques (O)	
HORT 3523	Landscape Management (F)	
Credit Hours		15

Spring

HORT 2114	Soils (S)	3
HORT 3424	Applied Plant Pathology (S)	3
MKTG 2101	Marketing Management	3
RMI 2101	Introduction to Risk Management	3
Select one of the following:		3
HORT 2222	Herbaceous Plants II (S)	
HORT 2555	Arboriculture (S)	
HORT 2565	Turf Management (O)	

HORT 3514	Landscape Restoration (S)	
	Credit Hours	15
	Total Credit Hours	61

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ECON 1102 Microeconomic Principles strongly recommended.

Horticulture BS

Overview

The **Bachelor of Science in Horticulture** is offered by the Department of Architecture and Environmental Design (AED). Courses for the BS in Horticulture are offered at the Ambler Campus with a portion of the coursework also available on Temple's Main and Center City campuses. The Horticulture program has access to the Ambler Arboretum of Temple University, Temple Ambler Field Station, and the Temple University Ambler Campus Greenhouse Education and Research Complex. Faculty and students use these resources in coursework and research.

Horticulture is a broad discipline that encompasses the science, art, technology and business of plant cultivation. Careers in the field of horticulture can be in the built landscape or in natural environments and encompasses a myriad of different occupational opportunities. The Temple horticulture curriculum includes both technical coursework and hands-on learning experiences and is designed to educate students using a broad array of courses that encompasses the breadth of the discipline. In order to further broaden and deepen knowledge and understanding of the natural and cultural world, students also receive solid education in the liberal arts.

Students learn the relationships between horticulture, technology and natural ecological processes, and develop a responsible horticultural approach toward the environment. The department encourages students to consider ways to eliminate many outmoded, environmentally damaging practices.

Campus Location: Ambler

Program Code: TA-HORT-BS

Admissions

For information on how to apply, please visit Tyler's Landscape Architecture and Horticulture admissions page.

Study Abroad

Students who plan to study abroad should arrange to meet with their academic advisor and the Education Abroad and Overseas Campuses office as early as possible, preferably during the freshman year, in order to explore options and plan the sequence of courses that would be most appropriate.

Career Opportunities

Careers in horticulture are available in both the public and private sector. Graduates with a degree in horticulture could be involved in the production, use, installation and management of plants. They may:

- Work in public horticulture in arboreta, botanic gardens, parks or golf courses;
- Teach in a high school, community college or at the university level;
- Pursue an advanced degree and conduct research in plant propagation or stormwater management;
- Produce plants in greenhouses and nurseries for sale and landscape use;
- Design, install and/or maintain residential, commercial or public landscapes;
- Research new technologies and plants in private and public institutions;
- Work toward registration as a horticultural therapist;
- Write about plants and horticulture for articles, books and copy on web sites;
- Work as an extension agent or specialist helping residential and commercial clients;
- Work in interior landscaping or floral design;
- Work as a sales representative for horticultural or allied industries; and/or
- Own and operate their own business.

Continuing Studies

The Department of Architecture and Environmental Design offers a variety of credit courses and certificate programs. These courses and certificates are available to degree-seeking students as well as others interested in horticulture. For many, these courses are a means of advancing careers; for others, they are a source of personal enrichment. It is also possible, over a period of years, to complete all of the requirements for some credit certificate programs and for the associate's and the bachelor's degrees in Horticulture by attending late afternoon, evening and weekend classes.

The Certificate in Horticultural Therapy (p. 220) can be completed as part of the Bachelor of Science in Horticulture. Consult an academic advisor about how the required courses fit into specific academic and career plans.

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Learn more about the Bachelor of Science in Horticulture.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements for the Degree

The degree of Bachelor of Science in Horticulture may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124 semester hours of credit with a minimum cumulative GPA of 2.0 overall and in the major.

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement assessment.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. LARC 2496 and HORT 4896 are the specific writing-intensive courses required for Horticulture majors.
- Students must complete the requirements of the General Education (GenEd (p. 83)) program (29-30 s.h.)
 - Earning a minimum grade of C- in CHEM 1021 & CHEM 1023 and CHEM 1022 & CHEM 1024 will waive both GenEd Science & Technology (GS) requirements.
 - Summer or semester study abroad will satisfy the GenEd Global/World Society (GG) requirement.

Major Requirements

No more than one grade below a C- is allowed in any course in either Landscape Architecture or Horticulture.

Code	Title	Credit Hours
BOT 1111	General Botany (fall only)	4
BOT 1112	Plant Ecology (spring only)	3
BOT 2121	Plant Physiology (spring only)	4
BOT 3122	Applied Plant Physiology (fall only)	3
CHEM 1021 & CHEM 1023	Introduction to Chemistry I and Introduction to Chemistry Laboratory I (fall only)	4
CHEM 1022 & CHEM 1024	Introduction to Chemistry II and Introduction to Chemistry Laboratory II (spring only)	4
HORT 1211	Woody Plants I (fall only)	3
HORT 1212	Woody Plants II (spring only)	3
HORT 1566	Horticulture Business Management	3
HORT 2114	Soils (spring only)	3
HORT 2221	Herbaceous Plants I (fall only)	3
HORT 2222	Herbaceous Plants II (spring only)	3
HORT 2323	Greenhouse Management (fall only)	3
HORT 2324	Plant Propagation (spring only)	3
HORT 2334	Food Crops I (spring only)	3
HORT 2575	Introduction to Public Horticulture	3
HORT 3423	Applied Entomology (fall only)	3
HORT 3424	Applied Plant Pathology (spring only)	3
HORT 3514	Landscape Restoration (spring only)	3

HORT 3523	Landscape Management (fall only)	3
HORT 4896	Senior Seminar (Capstone (WI), fall only)	3
LARC 2496	Landscape Traditions (WI)	3
Select four of the following:		12
Landscape Architecture Elective (LARC 1000-level or higher)		
Horticulture Elective (HORT 1000-level or higher)		
Botany Elective (BOT 1000-level or higher)		
Total Credit Hours		82

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Horticulture

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Code	Title	Credit Hours
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Note: The symbol after the course number indicates that the class is offered ONLY in the semester indicated.

(F) = offered only in fall semester

(S) = offered only in spring semester

Year 1

Fall	Credit Hours	
BOT 1111	General Botany (F)	4
CHEM 1021 & CHEM 1023	Introduction to Chemistry I and Introduction to Chemistry Laboratory I (F) ¹	4
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
Credit Hours		15
Spring	Credit Hours	
BOT 1112	Plant Ecology (S)	3
CHEM 1022 & CHEM 1024	Introduction to Chemistry II and Introduction to Chemistry Laboratory II (S) ¹	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Quantitative Literacy Course ^{GQ}		4
GenEd Breadth Course		3
Credit Hours		17

Year 2

Fall	Credit Hours	
HORT 1211	Woody Plants I (F)	3
HORT 2323	Greenhouse Management (F)	3
GenEd Breadth Course		3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Select one of the following:		3
Horticulture Elective (HORT 1000-level or higher)		
Landscape Architecture Elective (LARC 1000-level or higher)		
Botany Elective (BOT 1000-level or higher)		
Credit Hours		15
Spring	Credit Hours	
BOT 2121	Plant Physiology (S)	4

HORT 1212	Woody Plants II (S)	3
HORT 2114	Soils (S)	3
HORT 2324	Plant Propagation (S)	3
HORT 2575	Introduction to Public Horticulture	3
Credit Hours		16
Year 3		
Fall		
GenEd Breadth Course		3
HORT 2221	Herbaceous Plants I (F)	3
HORT 3523	Landscape Management (F)	3
LARC 2496	Landscape Traditions (F)	3
Select one of the following:		3
Horticulture Elective (HORT 1000-level or higher)		
Landscape Architecture Elective (LARC 1000-level or higher)		
Botany Elective (BOT 1000-level or higher)		
Credit Hours		15
Spring		
HORT 2222	Herbaceous Plants II (S)	3
HORT 2334	Food Crops I (S)	3
HORT 3514	Landscape Restoration (S)	3
GenEd Breadth Course		3
HORT 1566	Horticulture Business Management	3
Credit Hours		15
Year 4		
Fall		
BOT 3122	Applied Plant Physiology (F)	3
HORT 3423	Applied Entomology (F)	3
HORT 4896	Senior Seminar (Capstone, F)	3
Select one of the following:		3
Horticulture Elective (HORT 1000-level or higher)		
Landscape Architecture Elective (LARC 1000-level or higher)		
Botany Elective (BOT 1000-level or higher)		
Elective		4
Credit Hours		16
Spring		
HORT 3424	Applied Plant Pathology (S)	3
Select one of the following:		3
Horticulture Elective (HORT 1000-level or higher)		
Landscape Architecture Elective (LARC 1000-level or higher)		
Botany Elective (BOT 1000-level or higher)		
Electives		9
Credit Hours		15
Total Credit Hours		124

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Satisfactory completion of CHEM 1021, CHEM 1022, CHEM 1023, and CHEM 1024 will waive the two-course GenEd Science (GS) requirement.

Landscape Architecture BS

Overview

The **Bachelor of Science in Landscape Architecture** is offered by the Department of Architecture and Environmental Design (AED). Courses for the BS in Landscape Architecture are offered at the Ambler Campus with a portion of the coursework also available on Temple's Main campus. The

Landscape Architecture Program has access to the Ambler Arboretum of Temple University, Temple Ambler Field Station, and the Temple University Ambler Campus Greenhouse Education and Research Complex. Faculty and students use these resources in coursework and research.

Landscape Architecture is the art of planning the appropriate use of land and designing the built environment based on an understanding of natural and cultural site characteristics, human need, and sound artistic and technical competence.

The scope of landscape architecture includes site design, land use and urban planning at all scales. A landscape architect is responsible for the organization and placement of buildings, recreational facilities, roads, grading, and planting design. Temple's curriculum focuses on appropriate functional and ecological "fit," by using a design approach and techniques that work with and protect the natural environment.

Campus Location: Ambler

Program Code: TA-LARC-BS

Concentration

Landscape Architecture students may pursue the optional Concentration in Horticulture (p. 233).

Admissions

For information on how to apply, please visit Tyler's Landscape Architecture and Horticulture admissions page.

Study Abroad

Students who plan to study abroad should arrange to meet with their academic advisor and the Education Abroad and Overseas Campuses office as early as possible, preferably during the freshman year, in order to explore options and plan the sequence of courses that would be most appropriate.

Career Opportunities

Careers in landscape architecture are available in both the public and private sector. For landscape architecture graduates, there are a variety of employment options including:

- Careers in the public sector in landscape architecture design and management positions. These might be affiliated with regional, county or city planning commissions.
- Careers in private practice including the design of open space in relation to recreational, residential, commercial, institutional and industrial projects, as well as the overall planning of new communities.
- Work on parks, recreation, trails, and open space planning and design.
- Work in environmental protection, historic preservation, landscape restoration, land reclamation and green infrastructure.

Continuing Studies

The AED department offers a variety of credit courses and certificate programs. These courses and certificates are available to degree-seeking students as well as others interested in horticulture. For many, these courses are a means of advancing careers; for others, they are a source of personal enrichment. It is also possible, over a period of years, to complete all of the requirements for some credit certificate programs and for the associate's and the bachelor's degrees in Horticulture by attending late afternoon, evening and weekend classes.

Licensure/Certification

Licensure in Landscape Architecture is required to use the title "landscape architect" in all 50 U.S. states and the District of Columbia. Licensure for landscape architects is state regulated and must be obtained through achievement of three necessary components: (i) education; (ii) professional practice experience; and (iii) examination requirements. To obtain licensure, all states require candidates to pass the Landscape Architectural Registration Exam, which is administered by the Council of Landscape Architectural Registration Boards (CLARB). Additionally, a majority of states require a degree that is accredited by the Landscape Architectural Accrediting Board (LAAB). Temple University's Bachelor of Science in Landscape Architecture and Master of Landscape Architecture are accredited by LAAB, and prepares students to sit for the Landscape Architectural Registration Exam.

Additional requirements (such as exams, questionnaires or training) may be required based on the individual requirements of the state in which you intend to become licensed.

<https://www.asla.org/StateGovtAffairsLicensure.aspx>

Landscape Architecture Laptop Policy

Laptops are required for all students entering Landscape Architecture programs. The computer and its corresponding digital tools, such as laser cutters, 3D printers, and digital fabrication machines, have become an integral part of architectural pedagogy and the design studio environment. All landscape architecture students begin working digitally in their freshman representation courses. This Laptop Policy has been implemented to provide

advantageous learning environments that guide students towards the acquisition of tools and skillsets that are most appropriate for the furthering of both their academic and professional journeys. Students should purchase a Windows-compatible laptop.

For full device and software requirements and recommendations, please see the Landscape Architecture Laptop Policy.

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Learn more about the Bachelor of Science in Landscape Architecture.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements for the Degree

The degree of Bachelor of Science in Landscape Architecture may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124 semester hours of credit with a minimum cumulative GPA of 2.0 overall and in the major.

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement assessment.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. LARC 2496 and LARC 4198 are the specific writing-intensive courses that are required for Landscape Architecture majors.
- Students must complete the requirements of the university General Education (GenEd (p. 83)) program.
 - Summer or semester study abroad will satisfy the GenEd Global/World Society (GG) requirement.

Major Requirements

No more than one grade below a C- is allowed in any course in either Landscape Architecture or Horticulture.

Code	Title	Credit Hours
HORT 1211	Woody Plants I (fall only)	3
HORT 1212	Woody Plants II (spring only)	3
HORT 2114	Soils (spring only)	3
HORT 2221	Herbaceous Plants I	3
LARC 1044	Landscape Architecture Foundation I	3
LARC 1144	Landscape Architecture Foundation II	3
LARC 1111	Introduction to Green Careers in Landscape Architecture	1
LARC 1544	Landscape Architecture Computer Technology I (spring only)	3
LARC 2143	Landscape Architecture Design Studio I (fall only)	6
LARC 2144	Landscape Architecture Design Studio II (spring only)	6
LARC 2241	Landscape Engineering I (fall only)	3
LARC 2243	Landscape Engineering II	3
LARC 2496	Landscape Traditions	3
LARC 2551	Landscape Architecture Computer Technology II (fall only)	3
LARC 3145	Landscape Architecture Design Studio III (fall only)	6

LARC 3146	Landscape Architecture Design Studio IV: Design/Build (spring only)	6
LARC 3345	Planting Design	3
LARC 3644	Professional Practice (spring only)	3
LARC 4147	Landscape Architecture Design Studio V: Fall Senior Studio (fall only)	6
LARC 4198	Landscape Architecture Design Studio VI: Spring Senior Studio (spring only)	6
Total Credit Hours		76

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Landscape Architecture

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Code	Title	Credit Hours
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Note: The symbol after the course number indicates that the class is offered ONLY in the semester indicated

(F) = offered only in fall semester

(S) = offered only in spring semester

Year 1

Fall		Credit Hours
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
LARC 1111	Introduction to Green Careers in Landscape Architecture	1
LARC 1044	Landscape Architecture Foundation I	3
GenEd Quantitative Literacy Course ^{GQ}		4
GenEd Breadth Course ¹		3
Credit Hours		15

Spring

LARC 1544	Landscape Architecture Computer Technology I (S)	3
LARC 1144	Landscape Architecture Foundation II	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15

Year 2

Fall		Credit Hours
LARC 2143	Landscape Architecture Design Studio I (F)	6
LARC 2241	Landscape Engineering I (F)	3
LARC 2551	Landscape Architecture Computer Technology II (F)	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		15
Spring		Credit Hours
LARC 2144	Landscape Architecture Design Studio II (S)	6
LARC 2496	Landscape Traditions	3
Elective		3
GenEd Breadth Course		3
Credit Hours		15

Year 3

Fall		Credit Hours
LARC 3145	Landscape Architecture Design Studio III (F)	6

LARC 2243	Landscape Engineering II	3
HORT 1211	Woody Plants I	3
HORT 2221	Herbaceous Plants I	3
Elective		3
Credit Hours		18
Spring		
LARC 3146	Landscape Architecture Design Studio IV: Design/Build (S)	6
HORT 1212	Woody Plants II	3
HORT 2114	Soils ¹	3
GenEd Breadth Course		3
Credit Hours		15
Year 4		
Fall		
LARC 4147	Landscape Architecture Design Studio V: Fall Senior Studio (F)	6
GenEd Breadth Course ²		3
Elective		3
Elective		4
Credit Hours		16
Spring		
LARC 3345	Planting Design	3
LARC 3644	Professional Practice (S)	3
LARC 4198	Landscape Architecture Design Studio VI: Spring Senior Studio (Capstone, S)	6
Elective		3
Credit Hours		15
Total Credit Hours		124

1

Satisfactory completion of one GenEd Science (GS) course and HORT 2114 will waive the two-course GenEd Science (GS) requirement.

2

The GenEd Global/World Society (GG) requirement (p. 92) may be waived with an approved study abroad program.

Rome Option

Bachelor of Science in Landscape Architecture students may study abroad in the fall semester of their fourth year. Students who plan to study abroad are encouraged to meet with an advisor as early as the freshman year. It takes careful planning with an advisor to ensure that the degree is completed as efficiently as possible. Spending a semester studying abroad in Rome will waive the GenEd Global/World Society (GG) requirement.

Code	Title	Credit Hours
Year 4 Fall semester- Rome option		
Electives		10
ARCH 3234	Architectural Design Studio in Rome	6
Total Credit Hours		16

Landscape Architecture BS with Horticulture Concentration

Overview

The **Bachelor of Science in Landscape Architecture with an optional Concentration in Horticulture** is offered by the Department of Architecture and Environmental Design (AED). Courses for the BS in Landscape Architecture with an optional Concentration in Horticulture are offered at the Ambler Campus with a portion of the coursework also available on Temple's Main campus. The Landscape Architecture Program has access to the Ambler Arboretum of Temple University, Temple Ambler Field Station, and the Temple University Ambler Campus Greenhouse Education and Research Complex. Faculty and students use these resources in coursework and research.

Landscape Architecture is the art of planning the appropriate use of land and designing the built environment based on an understanding of natural and cultural site characteristics, human need, and sound artistic and technical competence. The BS in Landscape Architecture with Horticulture concentration allows students the opportunity to more fully integrate horticultural knowledge into the landscape architecture professional degree.

The scope of landscape architecture includes site design, land use and urban planning at all scales. A landscape architect normally is responsible for the organization and placement of buildings, recreational facilities, roads, grading and planting design. Temple's curriculum focuses on appropriate functional and ecological "fit," by using a design approach and techniques that work with and protect the natural environment.

Campus Location: Ambler

Program Code: TA-LARC-BS

Admissions

For more information on how to apply, please visit Tyler's Landscape Architecture and Horticulture admissions page.

Study Abroad

Students who plan to study abroad should arrange to meet with their academic advisor and the Education Abroad and Overseas Campuses office as early as possible, preferably during the freshman year, in order to explore options and plan the sequence of courses that would be most appropriate.

Career Opportunities

Careers in landscape architecture are available in both the public and private sector. For landscape architecture graduates, there are a variety of employment options including:

- Careers in the public sector in landscape architecture design and management positions. These might be affiliated with regional, county or city planning commissions.
- Careers in private practice including the design of open space in relation to recreational, residential, commercial, institutional and industrial projects, as well as the overall planning of new communities.
- Work on parks, recreation, trails, and open space planning and design.
- Work in environmental protection, historic preservation, landscape restoration, land reclamation and green infrastructure.

Continuing Studies

The AED department offers a variety of credit courses and certificate programs. These courses and certificates are available to degree-seeking students as well as others interested in horticulture. For many, these courses are a means of advancing careers; for others, they are a source of personal enrichment. It is also possible, over a period of years, to complete all of the requirements for some credit certificate programs and for the associate's and the bachelor's degrees in Horticulture by attending late afternoon, evening and weekend classes.

Licensure/Certification

Licensure in Landscape Architecture is required to use the title "landscape architect" in all 50 U.S. states and the District of Columbia. Licensure for landscape architects is state regulated and must be obtained through achievement of three necessary components: (i) education; (ii) professional practice experience; and (iii) examination requirements. To obtain licensure, all states require candidates to pass the Landscape Architectural Registration Exam, which is administered by the Council of Landscape Architectural Registration Boards (CLARB). Additionally, a majority of states require a degree that is accredited by the Landscape Architectural Accrediting Board (LAAB). Temple University's Bachelor of Science in Landscape Architecture and Master of Landscape Architecture are accredited by LAAB, and prepares students to sit for the Landscape Architectural Registration Exam.

Additional requirements (such as exams, questionnaires, or training) may be required based on the individual requirements of the state in which you intend to become licensed.

<https://www.asla.org/StateGovtAffairsLicensure.aspx>

Landscape Architecture Laptop Policy

Laptops are required for all students entering Landscape Architecture programs. The computer and its corresponding digital tools, such as laser cutters, 3D printers, and digital fabrication machines, have become an integral part of architectural pedagogy and the design studio environment. All landscape architecture students begin working digitally in their freshman representation courses. This Laptop Policy has been implemented to provide advantageous learning environments that guide students towards the acquisition of tools and skillsets that are most appropriate for the furthering of both their academic and professional journeys. Students should purchase a Windows-compatible laptop.

For full device and software requirements and recommendations, please see the Landscape Architecture Laptop Policy.

Contact Information

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Learn more about the Bachelor of Science in Landscape Architecture.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements for the Degree

The degree of Bachelor of Science in Landscape Architecture with a concentration in Horticulture may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124 semester hours of credit with a minimum cumulative GPA of 2.0 overall and in the major.

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement assessment.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. LARC 2496 and LARC 4198 are the specific writing-intensive courses that are required for Landscape Architecture majors.
- Students must complete the requirements of the General Education (GenEd (p. 83)) program (29-20 s.h.).
 - Satisfactory completion of BOT 1111 and HORT 2114 will waive the two-course GenEd Science & Technology (GS) requirements.
 - Summer or semester study abroad will satisfy the GenEd Global/World Society (GG) requirement.

Major Requirements

No more than one grade below a C- is allowed in any course in either Landscape Architecture or Horticulture.

Code	Title	Credit Hours
BOT 1111	General Botany	4
BOT 1112	Plant Ecology	3
HORT 1211	Woody Plants I	3
HORT 1212	Woody Plants II	3
HORT 2114	Soils	3
HORT 2221	Herbaceous Plants I	3
HORT 3514	Landscape Restoration	3
LARC 1044	Landscape Architecture Foundation I	3
LARC 1111	Introduction to Green Careers in Landscape Architecture	1
LARC 1144	Landscape Architecture Foundation II	3
LARC 1544	Landscape Architecture Computer Technology I	3
LARC 2143	Landscape Architecture Design Studio I	6
LARC 2144	Landscape Architecture Design Studio II	6
LARC 2241	Landscape Engineering I	3
LARC 2243	Landscape Engineering II	3
LARC 2496	Landscape Traditions	3
LARC 2551	Landscape Architecture Computer Technology II	3
LARC 3145	Landscape Architecture Design Studio III	6
LARC 3146	Landscape Architecture Design Studio IV: Design/Build	6

LARC 3345	Planting Design	3
LARC 3644	Professional Practice	3
LARC 4147	Landscape Architecture Design Studio V: Fall Senior Studio	6
LARC 4198	Landscape Architecture Design Studio VI: Spring Senior Studio	6
Select one of the following:		3
Landscape Architecture Elective (LARC 1000-level or higher)		
Botany Elective (BOT 1000-level or higher)		
Horticulture Elective (HORT 1000-level or higher)		
Total Credit Hours		89

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Landscape Architecture with Concentration in Horticulture Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
BOT 1111	General Botany ¹	4
LARC 1044	Landscape Architecture Foundation I	3
LARC 1111	Introduction to Green Careers in Landscape Architecture	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Spring		
BOT 1112	Plant Ecology	3
LARC 1144	Landscape Architecture Foundation II	3
LARC 1544	Landscape Architecture Computer Technology I	3
GenEd Breadth Course		3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		15
Year 2		
Fall		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
HORT 1211	Woody Plants I	3
LARC 2143	Landscape Architecture Design Studio I	6
LARC 2241	Landscape Engineering I	3
LARC 2551	Landscape Architecture Computer Technology II	3
Credit Hours		18
Spring		
HORT 1212	Woody Plants II	3
HORT 2114	Soils ¹	3
LARC 2144	Landscape Architecture Design Studio II	6
LARC 2496	Landscape Traditions	3
Credit Hours		15
Year 3		
Fall		
LARC 3145	Landscape Architecture Design Studio III	6

LARC 2243	Landscape Engineering II	3
HORT 2221	Herbaceous Plants I	3
Select one of the following:		3
Landscape Architecture Elective (LARC 1000-level or higher)		
Botany Elective (BOT 1000-level or higher)		
Horticulture Elective (HORT 1000-level or higher)		
Credit Hours		15
Spring		
LARC 3146	Landscape Architecture Design Studio IV: Design/Build	6
Elective		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 4		
Fall		
Elective		3
GenEd Breadth Course		3
GenEd Breadth Course		3
LARC 4147	Landscape Architecture Design Studio V: Fall Senior Studio	6
Credit Hours		15
Spring		
LARC 3644	Professional Practice	3
LARC 4198	Landscape Architecture Design Studio VI: Spring Senior Studio	6
LARC 3345	Planting Design	3
HORT 3514	Landscape Restoration	3
Credit Hours		15
Total Credit Hours		124

1

Satisfactory completion of BOT 1111 and HORT 2114 will waive the two-course GenEd Science & Technology (GS) requirement.

Landscape Plants Certificate

Overview

The **Certificate in Landscape Plants**, offered by the Department of Architecture and Environmental Design (AED), provides a brief introduction to the areas of horticulture and an intensive learning experience in both woody and herbaceous landscape plants. Learning the names and usage of plants provides a deeper understanding for anyone interested in gardening and landscaping. For the professional, it provides the essential knowledge of plants needed to design high-quality landscapes for clients. For the hobbyist, it provides information that enriches the gardening experience.

This certificate is available to all undergraduate degree students and non-degree-seeking students. Consult an academic advisor about how the required courses fit into academic and career plans.

The majority of courses are offered on the Ambler Campus.

Campus Location: Ambler

Program Code: TA-LAPL-CERT

Contact Information

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Learn more about the undergraduate certificate in Landscape Plants.

Requirements

Credit certificates may be conferred upon a student by recommendation of the faculty and upon satisfactory completion of the required credits for the specific topic area with a minimum cumulative GPA of 2.0 overall.

At least half of the courses required for the certificate must be completed at Temple University.

Code	Title	Credit Hours
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Note: The symbol after the course title indicates that the class is offered ONLY in the semester indicated.

(F) = offered only in fall semester

(S) = offered only in spring semester

Code	Title	Credit Hours
Required Courses		
HORT 1001	Fundamentals of Horticulture	2
HORT 1211	Woody Plants I (F)	3
HORT 1212	Woody Plants II (S)	3
HORT 2221	Herbaceous Plants I (F)	3
HORT 2222	Herbaceous Plants II (S)	3
Total Credit Hours		14

Landscape Studies Minor

Overview

The **Minor in Landscape Studies**, offered by the Department of Architecture and Environmental Design (AED), is available to all undergraduate matriculating Temple University students. Through this minor, students complete courses that deepen their understanding of the relationship between the natural landscape and the human-made environment, but without the professional focus of the bachelor's degree in Landscape Architecture. The minor prepares students for lifelong contributions as informed, civically engaged, and environmentally conscious citizens.

The curriculum for the Minor in Landscape Studies involves 18 credits, with one required course and at least five elective courses. The required course ensures that all students have a solid understanding of the fundamentals of Landscape Studies, including history, theory, and the relationship between the natural and built environments. The electives allow students to explore their own interests in different facets of Landscape Studies. The majority of courses are offered on the Ambler Campus.

The coursework completed for the minor allows students the opportunity to consider majoring in Landscape Architecture.

Campus Location: Ambler

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Requirements

Students must earn a minimum grade of C- in courses satisfying minor requirements and must have a minimum 2.0 grade point average in the required 18 credits to earn the minor.

- A student may not double count any course for the Minor in Landscape Studies toward any other major, minor, or certificate.
- At least half of the courses for the minor must be taken at Temple University.
- Courses for the minor must be completed prior to graduation.

Code	Title	Credit Hours
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Note: The symbol after the course title indicates that the class is offered ONLY in the semester indicated.

(F) = offered fall only

(S) = offered spring only

(O) = offered occasionally

Code	Title	Credit Hours
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Required Course

LARC 2496	Landscape Traditions (F)	3
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Electives

Select a minimum of five of the following: 15

BOT 1112	Plant Ecology (S)	
CTRP 2524	Fundamentals of Geographic Information Systems (GIS) (F)	
HORT 1211	Woody Plants I (F)	
HORT 1212	Woody Plants II (S)	
HORT 2552	Trees in the Urban Landscape (S)	
LARC 1142		
LARC 1244	Surveying (S)	
LARC 1544	Landscape Architecture Computer Technology I (S)	
LARC 2457	American Traditions of Landscape Architecture (O)	
LARC 2758	Summer Field Ecology ¹	

Total Credit Hours 18

1

This course has a prerequisite.

Metals/Jewelry/CAD-CAM BFA

Overview

The **Bachelor of Fine Arts in Metals/Jewelry/CAD-CAM**, offered by the Department of Art, is recognized as a national leader in the discipline, offering students access to world-class facilities, emergent technology and mentorship.

Students learn both traditional techniques and cutting-edge digital practice and theory in jewelry, metals and computer-aided design and computer-aided manufacturing (CAD-CAM, one of several technologies pioneered for use in metals at Tyler).

Students have access to the resources of Temple, a large, public research university, and Philadelphia, a premier center of jewelry making and a home base for exploring museums and galleries. Leveraging the expertise and professional networks of Tyler faculty—all practicing artists and leaders in the field—students find internships and connect with the regional and national metals and jewelry community.

Tyler students graduate with a broad base of knowledge, critical thinking skills and the technological proficiency needed for success in the jewelry industry, artistic practice or top graduate schools. The proof is in the long list of Tyler MJCC alumni who are thriving at employers ranging from David Yurman to Tiffany & Co.

Each student moves from a common foundation curriculum (p. 141) that introduces materials and processes and prepares them for success in a range of fields of study. Those who select Art as their major will work side-by-side with majors in Visual Studies, Art Education and Art Therapy. The dynamic exchange of ideas that result from these interdisciplinary conversations spur intellectual risk and drive research-based creative concepts.

Upon graduation, students have the practical skill sets and honed aesthetic for successful careers in studio art, art education and design, as well as attend top-tier graduate programs.

Campus Location: Main

Program Code: TA-METL-BFA

Concentration

Students may complete an **optional** Concentration in Art Education (p. 243).

Admissions

Admission to Tyler's Studio Art (Bachelor of Fine Arts) programs is based on a review of academic credentials and portfolio review. For detailed information on how to apply, please visit Tyler's Studio Art admissions page.

Study Abroad

Students who plan to study abroad should arrange to meet with their academic advisor and the Education Abroad and Overseas Campuses office as early as possible, preferably during the freshman year, in order to explore options and plan the sequence of courses that would be most appropriate.

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational and other art/design-related endeavors.

Contact Information

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Learn more about the Bachelor of Fine Arts in Metals/Jewelry/CAD-CAM.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Fine Arts degree in Metals/Jewelry/CAD-CAM may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00. All Metals/Jewelry/CAD-CAM majors must complete the BFA curriculum (p. 141) and General Education (p. 83) requirements.

- Students must earn a C- or better in ART 2401, and ART 2402 or ART 3402 to enter the Metals/Jewelry/CAD-CAM major.
- The seven required Junior/Senior studio courses and ART 4096 (capstone) must be completed with a C- or better to fulfill major requirements.

The faculty encourages taking Metals/Jewelry/CAD-CAM courses in excess of the minimum required. These additional courses count towards required studio electives.

Major Requirements for BFA in Metals/Jewelry/CAD-CAM

Code	Title	Credit Hours
Sophomore Prerequisite		
ART 2401	Jewelry	3
ART 2402 or ART 3402	CAD-CAM I: Introduction to 3D Modeling	3

Junior Requirements

ART 3406	Junior Metalsmithing (fall only)	3
ART 3407	Junior Metalsmithing (spring only)	3
One specialized Metals course (see list below)		3
ART 2404	Intermediate 3D Modeling	3
or ART 3404	CAD-CAM II: Intermediate 3D Modeling	

Senior Requirements

ART 4401	Senior Metals and Plastics (fall only)	3
ART 4402	Senior Metals and Plastics (spring only)	3
One specialized Metals course (see list below)		3
ART 4096	Professional Practices in Art (Capstone, WI)	3

Specialized Metals/Jewelry/CAD-CAM (MJC-C) Courses

Code	Title	Credit Hours
ART 2408	Electroforming Workshop	3
ART 3408	Electroforming Workshop	3
ART 2412	Color in Metals	3
ART 3412	Color in Metals	3
ART 2409	Plastics for Jewelry and Objects	3
ART 3409	Plastics for Jewelry and Objects	3
ART 2405	Machine Tool Processes	3
ART 3405	Advanced 3D Modeling	3
ART 2411	Production Processes	3
ART 3411	Production Processes	3
ART 2407	Casting	3
ART 2414	Casting	3
ART 3417	Metalsmithing	3
ART 3413	Enameling	3
ART 3414	Plastics for Jewelry	3
ART 3415	Lapidary and Stone Setting	3
ART 3416	Photo Processes and Etching Jewelry	3
ART 4404	Rapid Prototyping: 3D Sculpting	3
ART 4403	Senior Seminar in Metals	3
ART 3085	Field Internship	3

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Fine Arts in Metals/Jewelry/CAD-CAM**Suggested Plan for New Students Starting in the 2023-2024 Academic Year**

Year 1		Credit Hours
Fall		
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3
FDPR 1503	Woodshop Fundamentals	1
ARTH 1155	Arts of the World I: Prehistoric to 1300	3
or ARTH 1955	or Honors Arts of the World I: Prehistoric to 1300	
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	

Credit Hours**17**

Spring		
FDPR 1512	Foundation Drawing	3
FDPR 1522	2D Foundation Principles	3
FDPR 1532	3D Foundation Principles/C	3
FDPR 1502	Investigations of Art and Design	1
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		16
Year 2		
Fall		
ART 2401	Jewelry	3
ART or GAD 2000-2999 Sophomore Studio Electives		3
ART or GAD 2000-2999 Sophomore Studio Electives		3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Spring		
ART 2402 or ART 3402	CAD-CAM I: Introduction to 3D Modeling or CAD-CAM I: Introduction to 3D Modeling	3
ART or GAD 2000-2999 Sophomore Studio Electives		3
ART or GAD 2000-2999 Sophomore Studio Electives		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
ART 3406	Junior Metalsmithing	3
Specialized MJC-C Course		3
ART or GAD Studio Elective		3
GenEd Breadth Course		3
Art History Elective ²		4
Credit Hours		16
Spring		
ART 3407	Junior Metalsmithing	3
ART 2404 or ART 3404	Intermediate 3D Modeling or CAD-CAM II: Intermediate 3D Modeling	3
ART or GAD Studio Elective		3
Art History Elective ^{WI}		4
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
ART 4401	Senior Metals and Plastics	3
ART 4096	Professional Practices in Art	3
Specialized MJC-C Course		3
GenEd Breadth Course		3
Non-Studio Elective		3
Credit Hours		15
Spring		
ART 4402	Senior Metals and Plastics	3

ART or GAD Studio Elective	3
ART or GAD Studio Elective	3
Open Elective ²	3
GenEd Breadth Course	3
Credit Hours	15
Total Credit Hours	126

1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2

Students completing a 3 credit Art History 2000+ elective **must** select a 4 credit open elective to reach the minimum 126 credits to earn the BFA degree.

Please Note: An approved study abroad program waives the GenEd Global/World Society (GG) requirement; however, these credits must be made up with academic coursework taken outside of Tyler departments to be in compliance with BFA accreditation. MJC-C majors interested in studying abroad should consult with an academic advisor to determine if a semester (generally spring semester of second year) or a summer program would be the best option to remain on track for graduation.

Art Education Concentration

The **Bachelor of Fine Arts with an optional Concentration in Art Education**, offered by the Department of Art, is one of two pathways at the Tyler School of Art and Architecture to earning art teaching certification in Pennsylvania and becoming a teaching artist. Students may also become certified teachers through the Bachelor of Science in Education in Art Education (p. 125).

Tyler offers students seeking a BFA degree an opportunity to earn Pennsylvania Teacher Certification in Art, K-12. The BFA with Art Education Concentration combines Tyler's art curriculum with approved courses in education and the liberal arts—all with Tyler's uniquely urban, community-based approach.

Offering students access to the resources of both a world-class art school and a large, public research university, Tyler's undergraduate Art Education programs prepare students to become thoughtful art teachers with the extensive knowledge and skills to teach kindergarten through twelfth grade.

Tyler students take full advantage of the school's location in Philadelphia and the city's rich array of schools, communities, museums, galleries and artists, opening up opportunities for artistic growth, research, networking and jobs.

The Tyler faculty is committed to urban art education and the power of collaborating with communities. Tyler students don't just learn how to teach art and grow as artists—they learn how to affect positive change in the communities where they work.

Students must complete BFA requirements (p. 141) along with a three-year sequence in Education and Art Education that begins in the sophomore year. Typically five years are necessary to fulfill all requirements. Students work with both the Art Education faculty advisors and the Tyler academic advisors regarding completion of requirements.

Campus Location: Main

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational, and other art/design-related endeavors.

Licensure/Certification

Teacher certification is the process used in the US to ensure that prospective K-12 teachers are qualified and prepared to teach at the levels and in the subjects that they intend to teach. Certification in Art Education prepares graduates to teach art to students from K-12. Certification is not always required by private institutions, but some may prefer to hire certified teachers.

In order to become certified in Art Education, students must complete a bachelor's degree from a regionally accredited institution of higher education, pass the Praxis exams required in their state of employment, and satisfy other state-licensing examinations, as applicable.

Temple University is a Pennsylvania state-approved teacher preparation program for K-12 Art. Completion of Temple University's Bachelor of Science in Education in Art Education or Master of Education in Art Education with Teaching Certification satisfies the necessary requirements for graduates to sit for the Praxis Core Academic Skills for Educators, Praxis Subject Assessments, and Praxis Fundamentals.

For certification in some states, students may need to take the Praxis Principles of Learning and Teaching (PLT) exam for their desired grade levels, which they are prepared for through their field placements, classroom observations, and study of human development and pedagogy.

<https://www.education.pa.gov/Educators/Certification/BecomeAnEducator/Pages/ACPSpecialty.aspx>

Admission

Admission to Tyler's Bachelor of Fine Arts programs is based on a review of academic credentials and portfolio review. For detailed information on how to apply, please visit Tyler's Studio Art admissions page.

Contact Information

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Summary of Requirements

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

The Bachelor of Fine Arts degree with the Art Education Concentration may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 155 semester hours of credit with a minimum cumulative GPA of 3.0.

University Requirements

All Temple students are required to complete the General Education (GenEd (p. 83)) curriculum.

- Successful completion (minimum C-) of FDPR 1511 and ARTH 1156 satisfies the GenEd Arts (GA) requirement.
- Successful completion (minimum C-) of EDUC 2109, SPED 2231, and TESL 3631 satisfies the GenEd Human Behavior (GB) requirement.
- Summer or semester study abroad will satisfy the GenEd Global/World Society (GG) requirement.

BFA with Art Education Concentration Requirements

ARTE 2001, ARTE 3096, ARTE 4003, ARTE 4088, and ARTE 1001 must be completed with a C or better to fulfill concentration requirements.

Students must earn a minimum grade of C- in required College of Education coursework and additional mathematics requirement to fulfill concentration requirements.

Students in the BFA degree with the Art Education Concentration are required to take a Ceramics studio course and an additional studio course in Glass, Metals/Jewelry/CAD-CAM, or Fibers and Materials Studies; a Painting studio course and an additional studio course in Painting or Sculpture; a Printmaking studio course and an additional studio course in Photography or Graphic Design. These courses may include prerequisite, sophomore, and/or studio courses within the student's chosen BFA major.

Any BFA student who wishes to pursue the Art Education Concentration must arrange to meet with the Art Education faculty advisor to discuss field placement, clearances, and requirements, as the state of Pennsylvania may change requirements after the *Bulletin* information has been posted. It is strongly suggested that students do so during their freshman year.

Code	Title	Credit Hours
Studio Courses		74
Foundation Program (20 credits)		
2000 level Sophomore studios including major prerequisites (18 credits)		
Major studio requirements (24-27 credits, varies depending on major)		
Studio electives (9-12 credits, varies depending on major)		
Art History Courses		12-13
ARTH 1155	Arts of the World I: Prehistoric to 1300	
or ARTH 1955	Honors Arts of the World I: Prehistoric to 1300	
ARTH 1156	Arts of the World II: 1300 to the 21st Century	
or ARTH 1956	Honors Arts of the World II: 1300 to the 21st Century	
2000+ ARTH elective		
2000+ ARTH elective		
General Education Courses ¹		29
Education Requirements		19-18

EDUC 2103	Socio-cultural Foundations of Education in the United States	
EDUC 2109	Adolescent Development for Educators	
SPED 2231	Introduction to Special Education	
SPED 3211	Effective Instructional Strategies for Students with Disabilities	
TESL 3631	Principles and Practice for Teaching English Learners	
Mathematics course (1000 level) for PA Certification		
Art Education Courses		21
ARTE 1001	Professional Practices in Art Education and Art Therapy	
ARTE 2001	Science and Art of Teaching	
ARTE 3096	Art in Elementary and Secondary School	
ARTE 4003	Inclusive Art Education K-12 Students in the Art Room	
ARTE 4088	Student Teaching	
Total Credit Hours		155

1

Students waived from General Education (p. 83) requirements via placement test (GW) or study abroad (GG) must make up the credits with electives to reach the minimum 155 credits to earn the degree.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

BFA with Art Education Concentration (Five-Year)

Year 1		
Fall		Credit Hours
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3
FDPR 1503	Woodshop Fundamentals	1
ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 or Honors Arts of the World I: Prehistoric to 1300	3
Credit Hours		17
Spring		
ARTE 1001	Professional Practices in Art Education and Art Therapy	1
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
FDPR 1512	Foundation Drawing	3
FDPR 1522	2D Foundation Principles	3
FDPR 1532	3D Foundation Principles/C	3
FDPR 1502	Investigations of Art and Design	1
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
Credit Hours		17
Year 2		
Fall		
Studio		3
Studio		3
Studio		3
EDUC 2103	Socio-cultural Foundations of Education in the United States	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		15

Spring		
Studio		3
Studio		3
Studio		3
EDUC 2109	Adolescent Development for Educators ²	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Year 3		
Fall		
Studio Major Course		3
Studio Major Course		3
Studio Elective		3
Second Mathematics course for certification ³		3-4
GenEd Breadth Course		3
Credit Hours		15-16
Spring		
Studio Major Course		3
Studio Major Course		3
ARTE 2001	Science and Art of Teaching	4
SPED 2231	Introduction to Special Education ²	3
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
Studio Major Course		3
Studio Major Course		3
2000+ ARTH Elective ³		4-3
TESL 3631	Principles and Practice for Teaching English Learners ²	3
GenEd Breadth Course		3
Credit Hours		16-15
Spring		
Studio Major Course		3
Studio Major Course		3
Select one of the following:		3
CRFT (Major Capstone) ^{WI}		
GAD (Major Capstone) ^{WI}		
PDS (Major Capstone) ^{WI}		
2000+ ARTH Elective		3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
Credit Hours		15
Year 5		
Fall		
Studio Elective		3
Studio Elective		3
ARTE 3096	Art in Elementary and Secondary School	4
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Spring		
ARTE 4003	Inclusive Art Education K-12 Students in the Art Room	3

ARTE 4088	Student Teaching	9
	Credit Hours	12
	Total Credit Hours	155

1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2

These 3 courses constitute the waiver for the GenEd Human Behavior category if the courses are completed with a C- or better.

3

Students need to complete either a 4-credit Art History 2000+ elective **or** a 4-credit second Mathematics course to reach the minimum 155 credits to earn the BFA degree with Art Education Concentration.

Metals/Jewelry/CAD-CAM with Entrepreneurial Studies BFA

Overview

The **Bachelor of Fine Arts in Metals/Jewelry/CAD-CAM with Entrepreneurial Studies**, offered by the Department of Art, is recognized as a national leader in the discipline, offering students access to world-class facilities, emergent technology and mentorship.

Students learn both traditional techniques and cutting-edge digital practice and theory in jewelry, metals and computer-aided design and computer-aided manufacturing (CAD-CAM, one of several technologies pioneered for use in metals at Tyler).

Students have access to the resources of Temple, a large, public research university, and Philadelphia, a premier center of jewelry making and a home base for exploring museums and galleries. Leveraging the expertise and professional networks of Tyler faculty—all practicing artists and leaders in the field—students find internships and connect with the regional and national metals and jewelry community.

Tyler students graduate with a broad base of knowledge, critical thinking skills and the technological proficiency needed for success in the jewelry industry, artistic practice or top graduate schools. The proof is in the long list of Tyler MJCC alumni who are thriving at employers ranging from David Yurman to Tiffany & Co.

Designed to complement the studio experience with tools to support a studio practice or pursue graduate studies, the Entrepreneurship coursework enhances students' career options. Graduates of this degree program will possess requisite business skills to support themselves as visual artists or entrepreneurs in art and related fields.

Each student moves from a common foundation curriculum (p. 141) that introduces materials and processes and prepares them for success in a range of fields of study. Those who select Art as their major will work side-by-side with majors in Visual Studies, Art Education and Art Therapy. The dynamic exchange of ideas that result from these interdisciplinary conversations spur intellectual risk and drive research-based creative concepts.

Upon graduation, students have the practical skill sets and honed aesthetic for successful careers in studio art, art education and design, as well as attend top-tier graduate programs.

Campus Location: Main

Program Code: TA-MJCE-BFA

Admissions

Admission to Tyler's Studio Art (Bachelor of Fine Arts) programs is based on a review of academic credentials and portfolio review. For detailed information on how to apply, please visit Tyler's Studio Art admissions page.

Study Abroad

Students who plan to study abroad should arrange to meet with their academic advisor and the Education Abroad and Overseas Campuses office as early as possible, preferably during the freshman year, in order to explore options and plan the sequence of courses that would be most appropriate.

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational and other art/design-related endeavors.

Contact Information

Douglas Bucci, Program Head
Tyler Art Building, Room 220

215-777-9129
dbucci@temple.edu

Learn more about the Bachelor of Fine Arts in Metals/Jewelry/CAD-CAM.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Fine Arts degree in Metals/Jewelry/CAD-CAM with Entrepreneurial Studies may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00. All Metals/Jewelry/CAD-CAM with Entrepreneurial Studies majors must complete the General Education (p. 83) requirements.

- Students must earn a C- or better in ART 2401, and ART 2402 or ART 3402 to enter the Metals/Jewelry/CAD-CAM with Entrepreneurial Studies major.
- The required Junior/Senior studio courses and ART 4096 (capstone) must be completed with a C- or better to fulfill major requirements.

The faculty encourages taking Metals/Jewelry/CAD-CAM courses in excess of the minimum required. These additional courses count towards required studio electives.

Major Requirements for BFA in Metals/Jewelry/CAD-CAM with Entrepreneurial Studies

Code	Title	Credit Hours
Sophomore Prerequisite		
ART 2401	Jewelry	3
ART 2402 or ART 3402	CAD-CAM I: Introduction to 3D Modeling CAD-CAM I: Introduction to 3D Modeling	3
Junior Requirements		
ART 3406	Junior Metalsmithing (fall only)	3
ART 3407	Junior Metalsmithing (spring only)	3
One specialized Metals course (see list below)		3
ART 2404 or ART 3404	Intermediate 3D Modeling CAD-CAM II: Intermediate 3D Modeling	3
Senior Requirements		
ART 4401	Senior Metals and Plastics (fall only)	3
ART 4402	Senior Metals and Plastics (spring only)	3
One specialized Metals course (see list below)		3
ART 4096	Professional Practices in Art (Capstone, WI)	3

Specialized Metals/Jewelry/CAD-CAM (MJC-C) Courses

Code	Title	Credit Hours
ART 2408	Electroforming Workshop	3
ART 3408	Electroforming Workshop	3
ART 2412	Color in Metals	3
ART 3412	Color in Metals	3
ART 2405	Machine Tool Processes	3
ART 2411	Production Processes	3
ART 3411	Production Processes	3
ART 2407	Casting	3
ART 2414	Casting	3
ART 3414	Plastics for Jewelry	3
ART 3405	Advanced 3D Modeling	3
ART 2409	Plastics for Jewelry and Objects	3
ART 3409	Plastics for Jewelry and Objects	3
ART 3417	Metalsmithing	3

ART 3413	Enameling	3
ART 3415	Lapidary and Stone Setting	3
ART 3416	Photo Processes and Etching Jewelry	3
ART 4404	Rapid Prototyping: 3D Sculpting	3
ART 4403	Senior Seminar in Metals	3
ART 3085	Field Internship	3

Entrepreneurship Requirements

Code	Title	Credit Hours
Select three of the following:		9
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
or SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
Select one of the following: ¹		3
ART 3085	Field Internship	
ART 3796	Art Career Workshop	
GAD 3053	Art Careers Promotion	
GAD 3096	The Business of Design (WI)	
GAD 3185	Field Internship	
TYLE 3211	Creative Cottage Industrialist	
TYLE 4285	Rome Internship	

Total Credit Hours **12**

1

These courses cannot fulfill both a requirement for the major and for this category.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Fine Arts in Metals/Jewelry/CAD-CAM with Entrepreneurial Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3
FDPR 1503	Woodshop Fundamentals	1
ARTH 1155	Arts of the World I: Prehistoric to 1300	3
or ARTH 1955	or Honors Arts of the World I: Prehistoric to 1300	
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
Credit Hours		17
Spring		
FDPR 1512	Foundation Drawing	3
FDPR 1522	2D Foundation Principles	3

FDPR 1532	3D Foundation Principles/C	3
FDPR 1502	Investigations of Art and Design	1
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		16
Year 2		
Fall		
ART 2401	Jewelry	3
ART or GAD 2000-2999 Sophomore Studio Elective		3
ART or GAD 2000-2999 Sophomore Studio Elective		3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Spring		
ART 2402 or ART 3402	CAD-CAM I: Introduction to 3D Modeling or CAD-CAM I: Introduction to 3D Modeling	3
ART or GAD 2000-2999 Sophomore Studio Elective		3
Select one of the following:		3
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
ART 3406	Junior Metalsmithing (fall only)	3
Specialized MJC-C Course		3
Select one of the following (not previously chosen):		3
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
Art History Elective ²		4
GenEd Breadth Course		3
Credit Hours		16
Spring		
ART 3407	Junior Metalsmithing	3

ART 2404 or ART 3404	Intermediate 3D Modeling or CAD-CAM II: Intermediate 3D Modeling	3
Select one of the following (not previously chosen):		3
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
Art History Elective WI ³		4
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
ART 4401	Senior Metals and Plastics	3
ART 4096	Professional Practices in Art	3
Specialized MJC-C Course		3
GenEd Breadth Course		3
Open Elective ²		3
Credit Hours		15
Spring		
ART 4402	Senior Metals and Plastics	3
ART or GAD 2000+ Studio Elective		3
ART or GAD 2000+ Studio Elective		3
Select one of the following: ⁴		3
ART 3085	Field Internship	
ART 3796	Art Career Workshop	
GAD 3053	Art Careers Promotion	
GAD 3096	The Business of Design	
GAD 3185	Field Internship	
TYLE 3211	Creative Cottage Industrialist	
TYLE 4285	Rome Internship	
GenEd Breadth Course		3
Credit Hours		15
Total Credit Hours		126

1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2

Students completing a 3-credit Art History 2000+ elective must select a 4-credit open elective to reach the minimum 126 credits to earn the BFA degree.

3

Students completing a Tyler WI entrepreneurship course may elect a non-WI Art History course.

4

These courses cannot fulfill both a requirement for the major and a requirement for this category.

Please Note: An approved study abroad program waives the GenEd Global/World Society (GG) requirement; however, these credits must be made up with academic coursework taken outside of Tyler departments to be in compliance with BFA accreditation. BFA majors interested in studying abroad should consult with an academic advisor to determine if a semester (generally spring semester of second year) or a summer program would be the best option to remain on track for graduation.

Native Perennial Garden Design Certificate

Overview

The **Certificate in Native Perennial Garden Design**, offered by the Department of Architecture and Environmental Design (AED), provides information that enriches the residential planting design experience. Certificate courses provide learning experiences with fundamentals of horticulture, herbaceous plants, and planting design. The skills necessary for a well designed and maintained residential perennial garden will be gained from learning plant identification, cultural conditions, and appropriate use of plants and planting design.

This certificate is available to all undergraduate degree students and non-degree-seeking students. Consult an academic advisor about how the required courses fit into academic and career plans. The majority of courses are offered on the Ambler Campus.

Campus Location: Ambler

Program Code: TA-NPG-CERT

Contact Information

Sasha W. Eisenman, PhD, Architecture and Environmental Design Department Chair
Tyler School of Art and Architecture
Dixon Hall, Room 201
580 Meetinghouse Road
Ambler, PA 19002
267-468-8168
eisenman@temple.edu

Kate Benisek, MALD, MLA, ASLA, Landscape Architecture Program Head
Tyler School of Art and Architecture
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Ambler, PA 19002
267-468-8186
kate.benisek@temple.edu

Learn more about the undergraduate certificate in Native Perennial Garden Design.

Requirements

Credit certificates may be conferred upon a student by recommendation of the faculty and upon satisfactory completion of the required credits for the specific topic area with a minimum cumulative GPA of 2.0 overall.

At least half of the courses required for the certificate must be completed at Temple University.

Code	Title	Credit Hours
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Note: The symbol after the course title indicates that the class is offered ONLY in the semester indicated.

(F) = offered only in fall semester

(S) = offered only in spring semester

Code	Title	Credit Hours
Required Courses		
HORT 1001	Fundamentals of Horticulture	2
LARC 1142		3
HORT 2221	Herbaceous Plants I (F)	3
HORT 2222	Herbaceous Plants II (S)	3
HORT 2666	Designing with Perennials (S) ¹	3
Total Credit Hours		14

1

This course has a prerequisite(s).

Painting BFA

Overview

The **Bachelor of Fine Arts in Painting**, offered by the Department of Art, is recognized as one of the nation's top programs in the discipline, offering students access to world-class facilities and teaching.

Tyler Painting majors are pushed to grow as artists and critical thinkers by a diverse faculty—all of whom are practicing artists themselves—with a broad range of expertise and a commitment to being engaged, passionate mentors. Students learn technique, theory and perhaps the most powerful tool of all: how to teach themselves to be self-critical.

Tyler BFA students take full advantage of the school's location in Philadelphia, a vibrant art center, to explore museums and galleries, find internships, earn placements in competitive graduate programs and launch creative practices. When they graduate, they join an alumni community that includes some of the most influential artists, thought leaders and teachers of their time.

Each student moves from a common foundation curriculum (p. 141) that introduces materials and processes and prepares them for success in a range of fields of study. Those who select Art as their major will work side-by-side with majors in Visual Studies, Art Education and Art Therapy. The dynamic exchange of ideas that result from these interdisciplinary conversations spur intellectual risk and drive research-based creative concepts.

Upon graduation, students have the practical skill sets and honed aesthetic for successful careers in studio art, art education and design, as well as attend top-tier graduate programs.

Campus Location: Main

Program Code: TA-PNTG-BFA

Concentration

Students may complete an **optional** Concentration in Art Education (p. 258).

Admissions

Admission to Tyler's Studio Art (Bachelor of Fine Arts) programs is based on a review of academic credentials and portfolio review. For detailed information on how to apply, please visit Tyler's Studio Art admissions page.

Study Abroad

Students who plan to study abroad should arrange to meet with their academic advisor and the Education Abroad and Overseas Campuses office as early as possible, preferably during the freshman year, in order to explore options and plan the sequence of courses that would be most appropriate.

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational and other art/design-related endeavors.

Contact Information

Philip Glahn, Program Head
Tyler School of Art Building, Room 300B
215-777-9176
philip.glahn@temple.edu

Learn more about the Bachelor of Fine Arts in Painting.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Fine Arts degree in Painting may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00. All Painting majors must complete the BFA curriculum (p. 141) and General Education (p. 83) requirements.

- Students must earn a C- or better in Painting (ART 2501 or ART 2503) and Intermediate or Digital Drawing (ART 2502, ART 2504, ART 2507, ART 2508 or ART 3511) to enter the Painting major.
- The eight required Junior/Senior courses and ART 3896 must be completed with a C- or better to fulfill major requirements.

Major Requirements for BFA in Painting

Sophomore Requirements

Code	Title	Credit Hours
Painting		
ART 2501	Painting	3
or ART 2503	Painting	
Drawing		
Select one of the following:		3
ART 2502	Intermediate Drawing	
ART 2504	Intermediate Drawing	
ART 2507	Intermediate Figure Drawing	
ART 2508	Digital Drawing	
ART 3511	Digital Drawing	

Notes:

- ART 2505 is suggested, but not required, for those interested in becoming a Painting major.
- ART 2806 is strongly recommended for students interested in Painting or Sculpture as a major.
- Students may only take 3 Painting/Drawing courses in the sophomore year; other 2500-level ART courses may be used as electives for the junior/senior year.

Junior and Senior Requirements

Code	Title	Credit Hours
Four (4) Advanced Level Painting courses (see Painting list below)		12
Two (2) Advanced Level Drawing courses (see Drawing list below)		6
Two (2) Advanced Level Painting or Drawing courses (see Painting/Drawing list below)		6
ART 3896	PDS Seminar (Capstone, WI) ¹	3

1

ART 3896 counts as one of the two required writing intensive courses. The other writing intensive course must be an Art History course.

Advanced Level Painting Courses

Code	Title	Credit Hours
ART 2505	Painting Materials and Techniques	3
ART 3503	Landscape ¹	3
or ART 4503	Landscape	
ART 3505	Color	3
or ART 3506	Color	
or ART 4505	Color	
ART 3504	Figure Painting	3
or ART 4504	Figure Painting	
ART 3507	Painting on Paper	3
or ART 3508	Painting on Paper	
ART 3501	Advanced Painting	3
or ART 3502	Advanced Painting	
or ART 3519	Advanced Painting: Rome	
or ART 4501	Advanced Painting	
or ART 4502	Advanced Painting	
ART 4506	Senior Painting Studio ²	3
ART 4507	Senior Painting Studio ²	3

1

ART 3503 and ART 4503 may be taken for Painting and/or Drawing Credit.

2

Students wishing to enroll in ART 4506 or ART 4507 must be jury-selected by the faculty and special approval is needed to register.

Advanced Level Drawing Courses

Code	Title	Credit Hours
ART 3503 or ART 4503	Landscape ¹ Landscape	3
ART 3511	Digital Drawing	3
ART 3512	Rome Sketchbook	3
ART 3514 or ART 3515 or ART 3516 or ART 4514	Advanced Drawing Advanced Drawing: Rome Advanced Drawing Advanced Drawing	3
ART 3517 or ART 3518 or ART 4517 or ART 4518	Figure Drawing Figure Drawing Figure Drawing Figure Drawing	3
ART 3011	Interactive Projects	3

1

ART 3503 and ART 4503 may be taken for Painting and/or Drawing Credit.

Additional Advanced Level Painting/Drawing Courses

Code	Title	Credit Hours
ART 2505	Painting Materials and Techniques	3
ART 3501 or ART 3502 or ART 3519 or ART 4501 or ART 4502	Advanced Painting Advanced Painting Advanced Painting: Rome Advanced Painting Advanced Painting	3
ART 3504 or ART 3517 or ART 3518 or ART 4504	Figure Painting Figure Drawing Figure Drawing Figure Painting	3
ART 3512	Rome Sketchbook	3
ART 3521	Fresco Painting	3
ART 3514 or ART 3515 or ART 3516 or ART 4514	Advanced Drawing Advanced Drawing: Rome Advanced Drawing Advanced Drawing	3
ART 4506	Senior Painting Studio ¹	3
ART 4507	Senior Painting Studio ¹	3

1

Students wishing to enroll in ART 4506 or ART 4507 must be jury-selected by the faculty and special approval is needed to register.

Notes:

- Do not duplicate any courses previously taken for Drawing or Painting credit.
- Painting or Drawing courses taken in excess of the required eight courses will count as studio electives. This is a common practice encouraged by the Painting Faculty.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Fine Arts in Painting**Suggested Plan for New Students Starting in the 2023-2024 Academic Year**

Year 1		Credit Hours
Fall		
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3
FDPR 1503	Woodshop Fundamentals	1
ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 or Honors Arts of the World I: Prehistoric to 1300	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		17
Spring		
FDPR 1512	Foundation Drawing	3
FDPR 1522	2D Foundation Principles	3
FDPR 1532	3D Foundation Principles/C	3
FDPR 1502	Investigations of Art and Design	1
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		16
Year 2		
Fall		
ART 2501 or ART 2503	Painting or Painting	3
Select one of the following:		3
ART 2502	Intermediate Drawing ²	
ART 2504	Intermediate Drawing	
ART 2507	Intermediate Figure Drawing	
ART 2508	Digital Drawing ²	
ART 3511	Digital Drawing	
ART or GAD 2000+	Sophomore Studio Elective	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Spring		
ART or GAD 2000+	Sophomore Studio Elective	3
ART or GAD 2000+	Sophomore Studio Elective	3
ART or GAD 2000+	Sophomore Studio Elective	3
GenEd Breadth Course		3

GenEd Breadth Course	3
Credit Hours	15
Year 3	
Fall	
Advanced Level Painting Course	3
Advanced Level Painting Course	3
ART or GAD Studio Elective	3
Art History Elective ^{3,4}	4
GenEd Breadth Course	3
Credit Hours	16
Spring	
Advanced Level Painting Course	3
Advanced Level Drawing Course	3
ART or GAD Studio Elective	3
Art History Elective ^{WI 4}	4
GenEd Breadth Course	3
Credit Hours	16
Year 4	
Fall	
Advanced Level Painting Course	3
Advanced Level Drawing Course	3
ART 3896 PDS Seminar ⁵	3
GenEd Breadth Course	3
Non-Studio Elective	3
Credit Hours	15
Spring	
Advanced Level Painting or Drawing Course	3
Advanced Level Painting or Drawing Course	3
ART or GAD Studio Elective	3
Open Elective ³	3
GenEd Breadth Course	3
Credit Hours	15
Total Credit Hours	126

1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2

ART 2502 can be taken in either fall or spring. ART 2508 is offered in fall only.

3

Students completing a 3 credit Art History 2000+ elective **must** select a 4 credit open elective to reach the minimum 126 credits to earn the BFA degree.

4

Art History WI Elective may be taken either fall or spring semester.

5

ART 3896 PDS Seminar can be taken either fall or spring semester.

Please Note: An approved study abroad program waives the GenEd Global/World Society (GG) requirement; however, these credits must be made up with academic coursework taken outside of Tyler departments to be in compliance with BFA accreditation. Painting majors interested in studying abroad may elect to study abroad in a summer program, for a semester or an entire academic year. Please see an academic advisor for more details.

Art Education Concentration

The **Bachelor of Fine Arts with an optional Concentration in Art Education**, offered by the Department of Art, is one of two pathways at the Tyler School of Art and Architecture to earning art teaching certification in Pennsylvania and becoming a teaching artist. Students may also become certified teachers through the Bachelor of Science in Education in Art Education (p. 125).

Tyler offers students seeking a BFA degree an opportunity to earn Pennsylvania Teacher Certification in Art, K-12. The BFA with Art Education Concentration combines Tyler's art curriculum with approved courses in education and the liberal arts—all with Tyler's uniquely urban, community-based approach.

Offering students access to the resources of both a world-class art school and a large, public research university, Tyler's undergraduate Art Education programs prepare students to become thoughtful art teachers with the extensive knowledge and skills to teach kindergarten through twelfth grade.

Tyler students take full advantage of the school's location in Philadelphia and the city's rich array of schools, communities, museums, galleries and artists, opening up opportunities for artistic growth, research, networking and jobs.

The Tyler faculty is committed to urban art education and the power of collaborating with communities. Tyler students don't just learn how to teach art and grow as artists—they learn how to affect positive change in the communities where they work.

Students must complete BFA requirements (p. 141) along with a three-year sequence in Education and Art Education that begins in the sophomore year. Typically five years are necessary to fulfill all requirements. Students work with both the Art Education faculty advisors and the Tyler academic advisors regarding completion of requirements.

Campus Location: Main

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational, and other art/design-related endeavors.

Licensure/Certification

Teacher certification is the process used in the US to ensure that prospective K-12 teachers are qualified and prepared to teach at the levels and in the subjects that they intend to teach. Certification in Art Education prepares graduates to teach art to students from K-12. Certification is not always required by private institutions, but some may prefer to hire certified teachers.

In order to become certified in Art Education, students must complete a bachelor's degree from a regionally accredited institution of higher education, pass the Praxis exams required in their state of employment, and satisfy other state-licensing examinations, as applicable.

Temple University is a Pennsylvania state-approved teacher preparation program for K-12 Art. Completion of Temple University's Bachelor of Science in Education in Art Education or Master of Education in Art Education with Teaching Certification satisfies the necessary requirements for graduates to sit for the Praxis Core Academic Skills for Educators, Praxis Subject Assessments, and Praxis Fundamentals.

For certification in some states, students may need to take the Praxis Principles of Learning and Teaching (PLT) exam for their desired grade levels, which they are prepared for through their field placements, classroom observations, and study of human development and pedagogy.

<https://www.education.pa.gov/Educators/Certification/BecomeAnEducator/Pages/ACPSpecialty.aspx>

Admission

Admission to Tyler's Bachelor of Fine Arts programs is based on a review of academic credentials and portfolio review. For detailed information on how to apply, please visit Tyler's Studio Art admissions page.

Contact Information

Renee Jackson, Program Head for Art Education
Tyler Building, Art Education and Community Arts Practices Suite B090C
215-777-9258
renee.jackson@temple.edu

Summary of Requirements

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

The Bachelor of Fine Arts degree with the Art Education Concentration may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 155 semester hours of credit with a minimum cumulative GPA of 3.0.

University Requirements

All Temple students are required to complete the General Education (GenEd (p. 83)) curriculum.

- Successful completion (minimum C-) of FDPR 1511 and ARTH 1156 satisfies the GenEd Arts (GA) requirement.
- Successful completion (minimum C-) of EDUC 2109, SPED 2231, and TESL 3631 satisfies the GenEd Human Behavior (GB) requirement.
- Summer or semester study abroad will satisfy the GenEd Global/World Society (GG) requirement.

BFA with Art Education Concentration Requirements

ARTE 2001, ARTE 3096, ARTE 4003, ARTE 4088, and ARTE 1001 must be completed with a C or better to fulfill concentration requirements.

Students must earn a minimum grade of C- in required College of Education coursework and additional mathematics requirement to fulfill concentration requirements.

Students in the BFA degree with the Art Education Concentration are required to take a Ceramics studio course and an additional studio course in Glass, Metals/Jewelry/CAD-CAM, or Fibers and Materials Studies; a Painting studio course and an additional studio course in Painting or Sculpture; a Printmaking studio course and an additional studio course in Photography or Graphic Design. These courses may include prerequisite, sophomore, and/or studio courses within the student's chosen BFA major.

Any BFA student who wishes to pursue the Art Education Concentration must arrange to meet with the Art Education faculty advisor to discuss field placement, clearances, and requirements, as the state of Pennsylvania may change requirements after the *Bulletin* information has been posted. It is strongly suggested that students do so during their freshman year.

Code	Title	Credit Hours
Studio Courses		74
Foundation Program (20 credits)		
2000 level Sophomore studios including major prerequisites (18 credits)		
Major studio requirements (24-27 credits, varies depending on major)		
Studio electives (9-12 credits, varies depending on major)		
Art History Courses		12-13
ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 Honors Arts of the World I: Prehistoric to 1300	
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century Honors Arts of the World II: 1300 to the 21st Century	
2000+ ARTH elective		
2000+ ARTH elective		
General Education Courses ¹		29
Education Requirements		19-18
EDUC 2103	Socio-cultural Foundations of Education in the United States	
EDUC 2109	Adolescent Development for Educators	
SPED 2231	Introduction to Special Education	
SPED 3211	Effective Instructional Strategies for Students with Disabilities	
TESL 3631	Principles and Practice for Teaching English Learners	
Mathematics course (1000 level) for PA Certification		
Art Education Courses		21
ARTE 1001	Professional Practices in Art Education and Art Therapy	
ARTE 2001	Science and Art of Teaching	
ARTE 3096	Art in Elementary and Secondary School	
ARTE 4003	Inclusive Art Education K-12 Students in the Art Room	
ARTE 4088	Student Teaching	
Total Credit Hours		155

1

Students waived from General Education (p. 83) requirements via placement test (GW) or study abroad (GG) must make up the credits with electives to reach the minimum 155 credits to earn the degree.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

BFA with Art Education Concentration (Five-Year)

Year 1		Credit Hours
Fall		
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3
FDPR 1503	Woodshop Fundamentals	1
ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 or Honors Arts of the World I: Prehistoric to 1300	3
Credit Hours		17
Spring		
ARTE 1001	Professional Practices in Art Education and Art Therapy	1
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
FDPR 1512	Foundation Drawing	3
FDPR 1522	2D Foundation Principles	3
FDPR 1532	3D Foundation Principles/C	3
FDPR 1502	Investigations of Art and Design	1
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
Credit Hours		17
Year 2		
Fall		
Studio		3
Studio		3
Studio		3
EDUC 2103	Socio-cultural Foundations of Education in the United States	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		15
Spring		
Studio		3
Studio		3
Studio		3
EDUC 2109	Adolescent Development for Educators ²	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Year 3		
Fall		
Studio Major Course		3
Studio Major Course		3
Studio Elective		3
Second Mathematics course for certification ³		3-4

GenEd Breadth Course		3
Credit Hours		15-16
Spring		
Studio Major Course		3
Studio Major Course		3
ARTE 2001	Science and Art of Teaching	4
SPED 2231	Introduction to Special Education ²	3
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
Studio Major Course		3
Studio Major Course		3
2000+ ARTH Elective ³		4-3
TESL 3631	Principles and Practice for Teaching English Learners ²	3
GenEd Breadth Course		3
Credit Hours		16-15
Spring		
Studio Major Course		3
Studio Major Course		3
Select one of the following:		3
CRFT (Major Capstone) ^{WI}		
GAD (Major Capstone) ^{WI}		
PDS (Major Capstone) ^{WI}		
2000+ ARTH Elective		3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
Credit Hours		15
Year 5		
Fall		
Studio Elective		3
Studio Elective		3
ARTE 3096	Art in Elementary and Secondary School	4
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Spring		
ARTE 4003	Inclusive Art Education K-12 Students in the Art Room	3
ARTE 4088	Student Teaching	9
Credit Hours		12
Total Credit Hours		155

¹
These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

²
These 3 courses constitute the waiver for the GenEd Human Behavior category if the courses are completed with a C- or better.

³
Students need to complete either a 4-credit Art History 2000+ elective **or** a 4-credit second Mathematics course to reach the minimum 155 credits to earn the BFA degree with Art Education Concentration.

Painting with Entrepreneurial Studies BFA

Overview

The **Bachelor of Fine Arts in Painting with Entrepreneurial Studies**, offered by the Department of Art, is recognized as one of the nation's top programs in the discipline, offering students access to world-class facilities and teaching.

Tyler Painting majors are pushed to grow as artists and critical thinkers by a diverse faculty—all of whom are practicing artists themselves—with a broad range of expertise and a commitment to being engaged, passionate mentors. Students learn technique, theory and perhaps the most powerful tool of all: how to teach themselves to be self-critical.

Tyler BFA students take full advantage of the school's location in Philadelphia, a vibrant art center, to explore museums and galleries, find internships, earn placements in competitive graduate programs and launch creative practices. When they graduate, they join an alumni community that includes some of the most influential artists, thought leaders and teachers of their time.

Designed to complement the studio experience with tools to support a studio practice or pursue graduate studies, the Entrepreneurship coursework enhances students' career options. Graduates of this degree program will possess requisite business skills to support themselves as visual artists or entrepreneurs in art and related fields.

Each student moves from a common foundation curriculum (p. 141) that introduces materials and processes and prepares them for success in a range of fields of study. Those who select Art as their major will work side-by-side with majors in Visual Studies, Art Education and Art Therapy. The dynamic exchange of ideas that result from these interdisciplinary conversations spur intellectual risk and drive research-based creative concepts.

Upon graduation, students have the practical skill sets and honed aesthetic for successful careers in studio art, art education and design, as well as attend top-tier graduate programs.

Campus Location: Main

Program Code: TA-PNTE-BFA

Admissions

Admission to Tyler's Studio Art (Bachelor of Fine Arts) programs is based on a review of academic credentials and portfolio review. For detailed information on how to apply, please visit Tyler's Studio Art admissions page.

Study Abroad

Students who plan to study abroad should arrange to meet with their academic advisor and the Education Abroad and Overseas Campuses office as early as possible, preferably during the freshman year, in order to explore options and plan the sequence of courses that would be most appropriate.

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational and other art/design-related endeavors.

Contact Information

Philip Glahn, Program Head
Tyler School of Art Building, Room 300B
215-777-9176
philip.glahn@temple.edu

Learn more about the Bachelor of Fine Arts in Painting.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Fine Arts degree in Painting with Entrepreneurial Studies may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00. All Painting with Entrepreneurial Studies majors must complete the General Education (p. 83) requirements.

- Students must earn a C- or better in Painting (ART 2501 or ART 2503) and Intermediate or Digital Drawing (ART 2502, ART 2504, ART 2507, ART 2508 or ART 3511) to enter the Painting with Entrepreneurial Studies major.
- The required Junior/Senior studio courses and ART 3896 must be completed with a C- or better to fulfill major requirements.

Major Requirements for BFA in Painting with Entrepreneurial Studies

Sophomore Requirements

Code	Title	Credit Hours
Painting		
ART 2501	Painting	3
or ART 2503	Painting	
Drawing		
Select one of the following:		3
ART 2502	Intermediate Drawing	
ART 2504	Intermediate Drawing	
ART 2507	Intermediate Figure Drawing	
ART 2508	Digital Drawing	
ART 3511	Digital Drawing	

Notes:

- ART 2505 is suggested, but not required, for those interested in becoming a Painting major.
- ART 2806 is strongly recommended for students interested in Painting or Sculpture as a major.
- Students may only take 3 Painting/Drawing courses in the sophomore year; other 2500-level ART courses may be used as electives for the junior/senior year.

Junior and Senior Requirements

Code	Title	Credit Hours
Four (4) Advanced Level Painting courses (see Painting list below)		12
Two (2) Advanced Level Drawing courses (see Drawing list below)		6
Two (2) Advanced Level Painting or Drawing courses (see Painting/Drawing list below)		6
ART 3896	PDS Seminar (Capstone) ¹	3

1

ART 3896 counts as one of the two required writing intensive courses. The other writing intensive course must be an Art History course.

Advanced Level Painting Courses

Code	Title	Credit Hours
ART 2505	Painting Materials and Techniques	3
ART 3503	Landscape ¹	3
or ART 4503	Landscape	
ART 3505	Color	3
or ART 3506	Color	
or ART 4505	Color	
ART 3504	Figure Painting	3
or ART 4504	Figure Painting	
ART 3507	Painting on Paper	3
or ART 3508	Painting on Paper	
ART 3501	Advanced Painting	3
or ART 3502	Advanced Painting	
or ART 3519	Advanced Painting: Rome	
or ART 4501	Advanced Painting	
or ART 4502	Advanced Painting	

ART 4506	Senior Painting Studio ²	3
ART 4507	Senior Painting Studio ²	3

1

ART 3503 and ART 4503 may be taken for Painting and/or Drawing Credit.

2

Students wishing to enroll in ART 4506 or ART 4507 must be jury-selected by the faculty and special approval is needed to register.

Advanced Level Drawing Courses

Code	Title	Credit Hours
ART 3503	Landscape ¹	3
or ART 4503	Landscape	
ART 3511	Digital Drawing	3
ART 3512	Rome Sketchbook	3
ART 3514	Advanced Drawing	3
or ART 3515	Advanced Drawing: Rome	
or ART 3516	Advanced Drawing	
or ART 4514	Advanced Drawing	
ART 3517	Figure Drawing	3
or ART 3518	Figure Drawing	
or ART 4517	Figure Drawing	
or ART 4518	Figure Drawing	
ART 3011	Interactive Projects	3

1

ART 3503 and ART 4503 may be taken for Painting and/or Drawing Credit.

Additional Advanced Level Painting/Drawing Courses

Code	Title	Credit Hours
ART 2505	Painting Materials and Techniques	3
ART 3501	Advanced Painting	3
or ART 3502	Advanced Painting	
or ART 3519	Advanced Painting: Rome	
or ART 4501	Advanced Painting	
or ART 4502	Advanced Painting	
ART 3504	Figure Painting	3
or ART 3517	Figure Drawing	
or ART 3518	Figure Drawing	
or ART 4504	Figure Painting	
ART 3512	Rome Sketchbook	3
ART 3514	Advanced Drawing	3
or ART 3515	Advanced Drawing: Rome	
or ART 3516	Advanced Drawing	
or ART 4514	Advanced Drawing	
ART 3521	Fresco Painting	3
ART 4506	Senior Painting Studio ¹	3
ART 4507	Senior Painting Studio ¹	3

1

Students wishing to enroll in ART 4506 or ART 4507 must be jury-selected by the faculty and special approval is needed to register.

Notes:

- Do not duplicate any courses previously taken for Drawing or Painting credit.
- Painting or Drawing courses taken in excess of the required eight courses will count as studio electives. This is a common practice encouraged by the Painting Faculty.

Entrepreneurship Requirements

Code	Title	Credit Hours
Select three of the following:		9
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
or SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
Select one of the following: ¹		3
ART 3085	Field Internship	
ART 4096	Professional Practices in Art	
GAD 3053	Art Careers Promotion	
GAD 3096	The Business of Design (WI)	
GAD 3185	Field Internship	
ART 3796	Art Career Workshop	
TYLE 3211	Creative Cottage Industrialist	
TYLE 4285	Rome Internship	
Total Credit Hours		12

1

These courses cannot fulfill both a requirement for the major and for this category.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Fine Arts in Painting with Entrepreneurial Studies**Suggested Plan for New Students Starting in the 2023-2024 Academic Year**

Year 1		Credit Hours
Fall		
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3
FDPR 1503	Woodshop Fundamentals	1
ARTH 1155	Arts of the World I: Prehistoric to 1300	3
or ARTH 1955	or Honors Arts of the World I: Prehistoric to 1300	
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
Credit Hours		17
Spring		
FDPR 1512	Foundation Drawing	3
FDPR 1522	2D Foundation Principles	3

FDPR 1532	3D Foundation Principles/C	3
FDPR 1502	Investigations of Art and Design	1
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		16
Year 2		
Fall		
ART 2501 or ART 2503	Painting or Painting	3
Select one of the following:		3
ART 2502	Intermediate Drawing ²	
ART 2504	Intermediate Drawing	
ART 2507	Intermediate Figure Drawing	
ART 2508	Digital Drawing ²	
ART 3511	Digital Drawing	
ART or GAD 2000-2999 Sophomore Studio Elective ³		3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Spring		
ART or GAD 2000-2999 Sophomore Studio Elective ³		3
ART or GAD 2000-2999 Sophomore Studio Elective ³		3
Select one of the following:		3
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
Advanced Level Painting Course		3
Advanced Level Painting Course		3
Select one of the following (not previously chosen):		3
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
Art History Elective ⁴		4

GenEd Breadth Course		3
Credit Hours		16
Spring		
Advanced Level Painting Course		3
Advanced Level Drawing Course		3
ART or GAD 2000+ Studio Elective		3
Art History Elective WI ⁵		4
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
Advanced Level Painting Course		3
Advanced Level Drawing Course		3
ART 3896	PDS Seminar ⁶	3
Select one of the following (not previously chosen):		3
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
GenEd Breadth Course		3
Credit Hours		15
Spring		
Advanced Level Painting or Drawing Course		3
Advanced Level Painting or Drawing Course		3
Open Elective ⁴		3
Select one of the following: ⁷		3
ART 3085	Field Internship	
ART 4096	Professional Practices in Art	
GAD 3053	Art Careers Promotion	
GAD 3096	The Business of Design	
GAD 3185	Field Internship	
ART 3796	Art Career Workshop	
TYLE 3211	Creative Cottage Industrialist	
TYLE 4285	Rome Internship	
GenEd Breadth Course		3
Credit Hours		15
Total Credit Hours		126

1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2

ART 2502 can be taken in either fall or spring. ART 2508 is offered in fall only.

3

Only three 2xxx level courses can be taken in any one subject area in order to count for sophomore studio credit.

4

Students completing a 3-credit Art History 2000+ elective must select a 4-credit open elective to reach the minimum 126 credits to earn the BFA degree.

5

Students taking a WI course from the list of Tyler entrepreneurship courses may take a non-WI Art History elective.

6

ART 3896 PDS Seminar can be taken either fall or spring semester.

7

These courses cannot fulfill both a requirement for the major and a requirement for this category.

Please Note: An approved study abroad program waives the GenEd Global/World Society (GG) requirement; however, these credits must be made up with academic coursework taken outside of Tyler departments to be in compliance with BFA accreditation. BFA majors interested in studying abroad should consult with an academic advisor to determine if a semester (generally spring semester of second year) or a summer program would be the best option to remain on track for graduation.

Photography BFA

Overview

The **Bachelor of Fine Arts in Photography**, offered by the Department of Art, provides students access to state-of-the-art facilities and prepares them to find their voices as artists, photojournalists and image-makers in traditional and emerging technologies.

Tyler Photography provides access to a wide range of faculty expertise, generously equipped photography studios and an interdisciplinary spirit, making it possible for all types of undergraduates to develop their skills as problem solvers and find pathways to meaningful expression and success. Whether students are interested in deep exploration of cutting-edge digital techniques, historic darkroom processes or incorporating methods from other artistic disciplines, Tyler's faculty offer personal guidance.

Tyler BFA students can take advantage of the school's location at a large research university in Philadelphia, a vibrant art center with a pioneering photography tradition, to find internships and jobs, explore museums and galleries, launch creative practices, start businesses and earn placements in competitive graduate programs.

Each student moves from a common foundation curriculum (p. 141) that introduces materials and processes and prepares them for success in a range of fields of study. Those who select Art as their major will work side-by-side with majors in Visual Studies, Art Education and Art Therapy. The dynamic exchange of ideas that result from these interdisciplinary conversations spur intellectual risk and drive research-based creative concepts.

Upon graduation, students have the practical skill sets and honed aesthetic for successful careers in studio art, art education and design, as well as attend top-tier graduate programs.

Campus Location: Main

Program Code: TA-PHOT-BFA

Concentration

Students may complete an **optional** Concentration in Art Education (p. 271).

Admissions

Admission to Tyler's Studio Art (Bachelor of Fine Arts) programs is based on a review of academic credentials and portfolio review. For detailed information on how to apply, please visit Tyler's Studio Art admissions page.

Study Abroad

Students who plan to study abroad should arrange to meet with their academic advisor and the Education Abroad and Overseas Campuses office as early as possible, preferably during the freshman year, in order to explore options and plan the sequence of courses that would be most appropriate.

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational and other art/design-related endeavors.

Contact Information

Rebecca Michaels, Program Head
Tyler School of Art Building, Room B030X
215-777-9226

rebeccam@temple.edu

Learn more about the Bachelor of Fine Arts in Photography.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Fine Arts degree in Photography may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00. All Photography majors must complete the BFA curriculum (p. 141) and General Education (p. 83) requirements.

- Students must earn a C- or better in ART 2601 or ART 2603, and ART 2602 to enter the Photography major.
- The nine required Junior/Senior Photography courses must be completed with a C- or better to fulfill major requirements.

The faculty encourages taking Photography courses in excess of the minimum required. These additional courses count towards required studio credits.

Major Requirements for BFA in Photography

Code	Title	Credit Hours
Sophomore Prerequisite ¹		
ART 2601 or ART 2603	Photo I: Digital Photo I: Digital	3
ART 2602 or ART 2901	Digital Imaging Honors Digital Imaging: Seeing Photographically	3
Junior and Senior Requirements ¹		
ART 3601 or ART 3608	Color Photography I Color Photography I	3
ART 3603 or ART 3605	Darkroom Photography Darkroom Photography	3
ART 3604	Photographic Lighting	3
ART 3611	Advanced Photo Workshop	3
ART 3612	Photo Process Workshop	3
ART 3613	Digital Photography	3
ART 4601	Senior Photography	3
ART 4696	Senior Seminar in Photography	3
Specialized Photo Course		
Select one of the following:		3
ART 3085	Field Internship	
ART 3602	View Camera	
ART 3606	Digital Projects	
ART 3607	Contemporary Photography	
ART 3610	Special Topics in Photography	
ART 3796	Art Career Workshop	

¹

The schedule of courses that are required for the Photography major is posted each semester on the Tyler Photography web site at <https://tyler.temple.edu/programs/photography>.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Fine Arts in Photography

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3
FDPR 1503	Woodshop Fundamentals	1
ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 or Honors Arts of the World I: Prehistoric to 1300	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		17
Spring		
FDPR 1512	Foundation Drawing	3
FDPR 1522	2D Foundation Principles	3
FDPR 1532	3D Foundation Principles/C	3
FDPR 1502	Investigations of Art and Design	1
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		16
Year 2		
Fall		
ART 2601 or ART 2603	Photo I: Digital or Photo I: Digital	3
ART or GAD 2000-2999 Sophomore Studio Elective		3
ART or GAD 2000-2999 Sophomore Studio Elective		3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Spring		
ART 2602 or ART 2901	Digital Imaging or Honors Digital Imaging: Seeing Photographically	3
ART or GAD 2000-2999 Sophomore Studio Elective		3
ART or GAD 2000-2999 Sophomore Studio Elective		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
ART 3601 or ART 3608	Color Photography I or Color Photography I	3
ART 3603 or ART 3605	Darkroom Photography or Darkroom Photography	3
ART 3604	Photographic Lighting	3
Art History Elective ^{WI}		4
GenEd Breadth Course		3
Credit Hours		16

Spring		
ART 3611	Advanced Photo Workshop	3
ART 3613	Digital Photography	3
ART or GAD Studio Elective		3
Art History Elective ²		4
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
ART 4696	Senior Seminar in Photography	3
Specialized Photography Course ³		3
ART or GAD Studio Elective		3
GenEd Breadth Course		3
Non-Studio Elective		3
Credit Hours		15
Spring		
ART 4601	Senior Photography	3
ART 3612	Photo Process Workshop	3
ART or GAD Studio Elective		3
GenEd Breadth Course		3
Open Elective ²		3
Credit Hours		15
Total Credit Hours		126

1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2

Students completing a 3 credit Art History 2000+ elective **must** select a 4 credit open elective to reach the minimum 126 credits to earn the BFA degree.

3

Choose from: ART 3085, ART 3602, ART 3606, ART 3607, ART 3610, ART 3796.

Please Note: An approved study abroad program waives the GenEd Global/World Society (GG) requirement; however, these credits must be made up with academic coursework taken outside of Tyler departments to be in compliance with BFA accreditation. Photography majors interested in studying abroad should consult with an academic advisor to determine if a semester (generally spring semester of second year) or a summer program would be the best option to remain on track for graduation.

Art Education Concentration

The **Bachelor of Fine Arts with an optional Concentration in Art Education**, offered by the Department of Art, is one of two pathways at the Tyler School of Art and Architecture to earning art teaching certification in Pennsylvania and becoming a teaching artist. Students may also become certified teachers through the Bachelor of Science in Education in Art Education (p. 125).

Tyler offers students seeking a BFA degree an opportunity to earn Pennsylvania Teacher Certification in Art, K-12. The BFA with Art Education Concentration combines Tyler's art curriculum with approved courses in education and the liberal arts—all with Tyler's uniquely urban, community-based approach.

Offering students access to the resources of both a world-class art school and a large, public research university, Tyler's undergraduate Art Education programs prepare students to become thoughtful art teachers with the extensive knowledge and skills to teach kindergarten through twelfth grade.

Tyler students take full advantage of the school's location in Philadelphia and the city's rich array of schools, communities, museums, galleries and artists, opening up opportunities for artistic growth, research, networking and jobs.

The Tyler faculty is committed to urban art education and the power of collaborating with communities. Tyler students don't just learn how to teach art and grow as artists—they learn how to affect positive change in the communities where they work.

Students must complete BFA requirements (p. 141) along with a three-year sequence in Education and Art Education that begins in the sophomore year. Typically five years are necessary to fulfill all requirements. Students work with both the Art Education faculty advisors and the Tyler academic advisors regarding completion of requirements.

Campus Location: Main

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational, and other art/design-related endeavors.

Licensure/Certification

Teacher certification is the process used in the US to ensure that prospective K-12 teachers are qualified and prepared to teach at the levels and in the subjects that they intend to teach. Certification in Art Education prepares graduates to teach art to students from K-12. Certification is not always required by private institutions, but some may prefer to hire certified teachers.

In order to become certified in Art Education, students must complete a bachelor's degree from a regionally accredited institution of higher education, pass the Praxis exams required in their state of employment, and satisfy other state-licensing examinations, as applicable.

Temple University is a Pennsylvania state-approved teacher preparation program for K-12 Art. Completion of Temple University's Bachelor of Science in Education in Art Education or Master of Education in Art Education with Teaching Certification satisfies the necessary requirements for graduates to sit for the Praxis Core Academic Skills for Educators, Praxis Subject Assessments, and Praxis Fundamentals.

For certification in some states, students may need to take the Praxis Principles of Learning and Teaching (PLT) exam for their desired grade levels, which they are prepared for through their field placements, classroom observations, and study of human development and pedagogy.

<https://www.education.pa.gov/Educators/Certification/BecomeAnEducator/Pages/ACPSpecialty.aspx>

Admission

Admission to Tyler's Bachelor of Fine Arts programs is based on a review of academic credentials and portfolio review. For detailed information on how to apply, please visit Tyler's Studio Art admissions page.

Contact Information

Renee Jackson, Program Head for Art Education
Tyler Building, Art Education and Community Arts Practices Suite B090C
215-777-9258
renee.jackson@temple.edu

Summary of Requirements

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

The Bachelor of Fine Arts degree with the Art Education Concentration may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 155 semester hours of credit with a minimum cumulative GPA of 3.0.

University Requirements

All Temple students are required to complete the General Education (GenEd (p. 83)) curriculum.

- Successful completion (minimum C-) of FDPR 1511 and ARTH 1156 satisfies the GenEd Arts (GA) requirement.
- Successful completion (minimum C-) of EDUC 2109, SPED 2231, and TESL 3631 satisfies the GenEd Human Behavior (GB) requirement.
- Summer or semester study abroad will satisfy the GenEd Global/World Society (GG) requirement.

BFA with Art Education Concentration Requirements

ARTE 2001, ARTE 3096, ARTE 4003, ARTE 4088, and ARTE 1001 must be completed with a C or better to fulfill concentration requirements.

Students must earn a minimum grade of C- in required College of Education coursework and additional mathematics requirement to fulfill concentration requirements.

Students in the BFA degree with the Art Education Concentration are required to take a Ceramics studio course and an additional studio course in Glass, Metals/Jewelry/CAD-CAM, or Fibers and Materials Studies; a Painting studio course and an additional studio course in Painting or Sculpture; a Printmaking studio course and an additional studio course in Photography or Graphic Design. These courses may include prerequisite, sophomore, and/or studio courses within the student's chosen BFA major.

Any BFA student who wishes to pursue the Art Education Concentration must arrange to meet with the Art Education faculty advisor to discuss field placement, clearances, and requirements, as the state of Pennsylvania may change requirements after the *Bulletin* information has been posted. It is strongly suggested that students do so during their freshman year.

Code	Title	Credit Hours
Studio Courses		74
Foundation Program (20 credits)		
2000 level Sophomore studios including major prerequisites (18 credits)		
Major studio requirements (24-27 credits, varies depending on major)		
Studio electives (9-12 credits, varies depending on major)		
Art History Courses		12-13
ARTH 1155	Arts of the World I: Prehistoric to 1300	
or ARTH 1955	Honors Arts of the World I: Prehistoric to 1300	
ARTH 1156	Arts of the World II: 1300 to the 21st Century	
or ARTH 1956	Honors Arts of the World II: 1300 to the 21st Century	
2000+ ARTH elective		
2000+ ARTH elective		
General Education Courses ¹		29
Education Requirements		19-18
EDUC 2103	Socio-cultural Foundations of Education in the United States	
EDUC 2109	Adolescent Development for Educators	
SPED 2231	Introduction to Special Education	
SPED 3211	Effective Instructional Strategies for Students with Disabilities	
TESL 3631	Principles and Practice for Teaching English Learners	
Mathematics course (1000 level) for PA Certification		
Art Education Courses		21
ARTE 1001	Professional Practices in Art Education and Art Therapy	
ARTE 2001	Science and Art of Teaching	
ARTE 3096	Art in Elementary and Secondary School	
ARTE 4003	Inclusive Art Education K-12 Students in the Art Room	
ARTE 4088	Student Teaching	
Total Credit Hours		155

1

Students waived from General Education (p. 83) requirements via placement test (GW) or study abroad (GG) must make up the credits with electives to reach the minimum 155 credits to earn the degree.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

BFA with Art Education Concentration (Five-Year)

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3
FDPR 1503	Woodshop Fundamentals	1
ARTH 1155	Arts of the World I: Prehistoric to 1300	3
or ARTH 1955	or Honors Arts of the World I: Prehistoric to 1300	
Credit Hours		17

Spring		
ARTE 1001	Professional Practices in Art Education and Art Therapy	1
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
FDPR 1512	Foundation Drawing	3
FDPR 1522	2D Foundation Principles	3
FDPR 1532	3D Foundation Principles/C	3
FDPR 1502	Investigations of Art and Design	1
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
Credit Hours		17
Year 2		
Fall		
Studio		3
Studio		3
Studio		3
EDUC 2103	Socio-cultural Foundations of Education in the United States	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		15
Spring		
Studio		3
Studio		3
Studio		3
EDUC 2109	Adolescent Development for Educators ²	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Year 3		
Fall		
Studio Major Course		3
Studio Major Course		3
Studio Elective		3
Second Mathematics course for certification ³		3-4
GenEd Breadth Course		3
Credit Hours		15-16
Spring		
Studio Major Course		3
Studio Major Course		3
ARTE 2001	Science and Art of Teaching	4
SPED 2231	Introduction to Special Education ²	3
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
Studio Major Course		3
Studio Major Course		3
2000+ ARTH Elective ³		4-3
TESL 3631	Principles and Practice for Teaching English Learners ²	3
GenEd Breadth Course		3
Credit Hours		16-15
Spring		
Studio Major Course		3

Studio Major Course		3
Select one of the following:		3
CRFT (Major Capstone) ^{WI}		
GAD (Major Capstone) ^{WI}		
PDS (Major Capstone) ^{WI}		
2000+ ARTH Elective		3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
Credit Hours		15
Year 5		
Fall		
Studio Elective		3
Studio Elective		3
ARTE 3096	Art in Elementary and Secondary School	4
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Spring		
ARTE 4003	Inclusive Art Education K-12 Students in the Art Room	3
ARTE 4088	Student Teaching	9
Credit Hours		12
Total Credit Hours		155

1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2

These 3 courses constitute the waiver for the GenEd Human Behavior category if the courses are completed with a C- or better.

3

Students need to complete either a 4-credit Art History 2000+ elective **or** a 4-credit second Mathematics course to reach the minimum 155 credits to earn the BFA degree with Art Education Concentration.

Photography with Entrepreneurial Studies BFA

Overview

The **Bachelor of Fine Arts in Photography with Entrepreneurial Studies**, offered by the Department of Art, provides students access to state-of-the-art facilities and prepares them to find their voices as artists, photojournalists and image-makers in traditional and emerging technologies.

Tyler Photography provides access to a wide range of faculty expertise, generously equipped photography studios and an interdisciplinary spirit, making it possible for all types of undergraduates to develop their skills as problem solvers and find pathways to meaningful expression and success. Whether students are interested in deep exploration of cutting-edge digital techniques, historic darkroom processes or incorporating methods from other artistic disciplines, Tyler's faculty offer personal guidance.

Tyler BFA students can take advantage of the school's location at a large research university in Philadelphia, a vibrant art center with a pioneering photography tradition, to find internships and jobs, explore museums and galleries, launch creative practices, start businesses and earn placements in competitive graduate programs.

Designed to complement the studio experience with tools to support a studio practice or pursue graduate studies, the Entrepreneurship coursework enhances students' career options. Graduates of this degree program will possess requisite business skills to support themselves as visual artists or entrepreneurs in art and related fields.

Each student moves from a common foundation curriculum (p. 141) that introduces materials and processes and prepares them for success in a range of fields of study. Those who select Art as their major will work side-by-side with majors in Visual Studies, Art Education and Art Therapy. The dynamic exchange of ideas that result from these interdisciplinary conversations spur intellectual risk and drive research-based creative concepts.

Upon graduation, students have the practical skill sets and honed aesthetic for successful careers in studio art, art education and design, as well as attend top-tier graduate programs.

Campus Location: Main

Program Code: TA-PHOE-BFA

Admissions

Admission to Tyler's Studio Art (Bachelor of Fine Arts) programs is based on a review of academic credentials and portfolio review. For detailed information on how to apply, please visit Tyler's Studio Art admissions page.

Study Abroad

Students who plan to study abroad should arrange to meet with their academic advisor and the Education Abroad and Overseas Campuses office as early as possible, preferably during the freshman year, in order to explore options and plan the sequence of courses that would be most appropriate.

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational and other art/design-related endeavors.

Contact Information

Rebecca Michaels, Program Head
Tyler School of Art Building, Room B030X
215-777-9226
rebeccam@temple.edu

Learn more about the Bachelor of Fine Arts in Photography.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Fine Arts degree in Photography with Entrepreneurial Studies may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00. All Photography with Entrepreneurial Studies majors must complete the General Education (p. 83) requirements.

- Students must earn a C- or better in ART 2601 or ART 2603, and ART 2602 to enter the Photography with Entrepreneurial Studies major.
- The required Junior/Senior Photography courses must be completed with a C- or better to fulfill major requirements.

The faculty encourages taking Photography courses in excess of the minimum required. These additional courses count towards required studio credits.

Major Requirements for BFA in Photography with Entrepreneurial Studies

Code	Title	Credit Hours
Sophomore Prerequisite ¹		
ART 2601 or ART 2603	Photo I: Digital Photo I: Digital	3
ART 2602 or ART 2901	Digital Imaging Honors Digital Imaging: Seeing Photographically	3
Junior and Senior Requirements ¹		
ART 3601 or ART 3608	Color Photography I Color Photography I	3
ART 3603 or ART 3605	Darkroom Photography Darkroom Photography	3
ART 3604	Photographic Lighting	3
ART 3611	Advanced Photo Workshop	3
ART 3612	Photo Process Workshop	3
ART 3613	Digital Photography	3
ART 4601	Senior Photography	3
ART 4696	Senior Seminar in Photography (WI)	3
Specialized Photo Course		
Select one of the following:		3

ART 3085	Field Internship
ART 3602	View Camera
ART 3606	Digital Projects
ART 3607	Contemporary Photography
ART 3610	Special Topics in Photography

Entrepreneurship Courses

Select three of the following: 9

SGM 3002	Planning to Start Your Own Business
SGM 3501	Entrepreneurial and Innovative Thinking
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas
SGM 3504	Launch a New Venture in 100 Days
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact
SGM 3521	Pitching and Funding Entrepreneurial Ventures
SGM 3580	Special Topics - Strategic Management
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures
or SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder

Select one of the following: ² 3

ART 3085	Field Internship
ART 3796	Art Career Workshop (WI)
ART 4096	Professional Practices in Art (WI)
GAD 3053	Art Careers Promotion
GAD 3096	The Business of Design (WI)
GAD 3185	Field Internship
TYLE 3211	Creative Cottage Industrialist
TYLE 4285	Rome Internship

1

The schedule of courses that are required for the Photography major is posted each semester on the Tyler Photography web site at <https://tyler.temple.edu/programs/photography>.

2

These courses cannot fulfill both a requirement for the major and for this category.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Fine Arts in Photography with Entrepreneurial Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3
FDPR 1503	Woodshop Fundamentals	1
ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 or Honors Arts of the World I: Prehistoric to 1300	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		17
Spring		
FDPR 1512	Foundation Drawing	3
FDPR 1522	2D Foundation Principles	3
FDPR 1532	3D Foundation Principles/C	3

FDPR 1502	Investigations of Art and Design	1
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		16
Year 2		
Fall		
ART 2601 or ART 2603	Photo I: Digital or Photo I: Digital	3
ART or GAD 2000-2999 Sophomore Studio Elective		3
ART or GAD 2000-2999 Sophomore Studio Elective		3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Spring		
ART 2602 or ART 2901	Digital Imaging or Honors Digital Imaging: Seeing Photographically	3
ART or GAD 2000-2999 Sophomore Studio Elective		3
Select one of the following:		3
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
ART 3601 or ART 3608	Color Photography I or Color Photography I	3
ART 3603 or ART 3605	Darkroom Photography or Darkroom Photography	3
ART 3604	Photographic Lighting	3
Art History Elective WI ²		4
GenEd Breadth Course		3
Credit Hours		16
Spring		
ART 3611	Advanced Photo Workshop	3
ART 3613	Digital Photography	3
Select one of the following (not previously chosen):		3
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	

SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
Art History Elective ³		4
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
ART 4696	Senior Seminar in Photography	3
Specialized Photography Course ⁴		3
Select one of the following (not previously chosen):		3
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
Open Elective ³		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
ART 4601	Senior Photography	3
ART 3612	Photo Process Workshop	3
ART or GAD 2000+ Studio Elective		3
Select one of the following: ⁵		3
ART 3085	Field Internship	
ART 3796	Art Career Workshop	
ART 4096	Professional Practices in Art	
GAD 3053	Art Careers Promotion	
GAD 3096	The Business of Design	
GAD 3185	Field Internship	
TYLE 3211	Creative Cottage Industrialist	
TYLE 4285	Rome Internship	
GenEd Breadth Course		3
Credit Hours		15
Total Credit Hours		126

1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2

Students selecting a WI course from the list of Tyler entrepreneurship courses may elect to take a non-WI Art History course.

3

Students completing a 3-credit Art History 2000+ elective must select a 4-credit open elective to reach the minimum 126 credits to earn the BFA degree.

4

Choose from: ART 3085, ART 3602, ART 3606, ART 3607, ART 3610.

5

These courses cannot fulfill both a requirement for the major and a requirement for this category.

Please Note: An approved study abroad program waives the GenEd Global/World Society (GG) requirement; however, these credits must be made up with academic coursework taken outside of Tyler departments to be in compliance with BFA accreditation. BFA majors interested in studying abroad

should consult with an academic advisor to determine if a semester (generally spring semester of second year) or a summer program would be the best option to remain on track for graduation.

Printmaking BFA

Overview

The **Bachelor of Fine Arts in Printmaking**, offered by the Department of Art, is one of the nation's top programs in the discipline and provides students access to exceptional faculty, world-class facilities, and strong regional and national professional networks.

Tyler Printmaking majors join a welcoming community of artists and educators. Bridging tradition and innovation, students learn the full range of printmaking techniques from the simplest to the most technically advanced. Students learn how to think critically and solve problems, working with professors, and side-by-side with graduate students. Tyler provides access to the resources of a large, public research university combined with the intimacy of an art school.

Tyler BFA students take full advantage of the school's location in Philadelphia, a vibrant art center with a strong printmaking tradition, to find internships and jobs, explore museums and galleries, launch creative practices, start businesses and earn placements in the most competitive graduate programs.

Each student moves from a common foundation curriculum (p. 141) that introduces materials and processes and prepares them for success in a range of fields of study. Those who select Art as their major will work side-by-side with majors in Visual Studies, Art Education and Art Therapy. The dynamic exchange of ideas that result from these interdisciplinary conversations spur intellectual risk and drive research-based creative concepts.

Upon graduation, students have the practical skill sets and honed aesthetic for successful careers in studio art, art education and design, as well as attend top-tier graduate programs.

Campus Location: Main

Program Code: TA-PRNT-BFA

Concentration

Students may complete an **optional** Concentration in Art Education (p. 283).

Admissions

Admission to Tyler's Studio Art (Bachelor of Fine Arts) programs is based on a review of academic credentials and portfolio review. For detailed information on how to apply, please visit Tyler's Studio Art admissions page.

Study Abroad

Students who plan to study abroad should arrange to meet with their academic advisor and the Education Abroad and Overseas Campuses office as early as possible, preferably during the freshman year, in order to explore options and plan the sequence of courses that would be most appropriate.

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational and other art/design-related endeavors.

Contact Information

Amze J. Emmons, Program Head
Tyler School of Art Building, Room 260C
215-777-9126
amze.emmons@temple.edu

Learn more about the Bachelor of Fine Arts in Printmaking.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Fine Arts degree in Printmaking may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00. All Printmaking majors must complete the BFA curriculum (p. 141) and General Education (p. 83) requirements.

- Students must earn a C- or better in either ART 2701 or ART 2702 and one of the introductory printmaking courses (ART 2704, ART 2705/ART 2706, ART 2707) to enter the Printmaking major.
- The required Junior/Senior studio courses and ART 3796 Art Career Workshop (capstone) must be completed with a C- or better to fulfill major requirements.

Major Requirements for BFA in Printmaking

Code	Title	Credit Hours
Sophomore Prerequisites		
Select one Survey of Printmaking course from the following:		3
ART 2701	Survey of Lithography and Serigraphy	
ART 2702	Survey of Etching and Relief	
Select one introductory Printmaking course from the following:		3
ART 2704	Serigraphy ¹	
ART 2705	Etching ²	
or ART 2706	Intaglio Printmaking	
ART 2707	Lithography ³	
Junior and Senior Requirements		
Select two of the following (not taken as sophomore prerequisite):		6
ART 2704	Serigraphy ¹	
ART 2705	Etching ²	
or ART 2706	Intaglio Printmaking	
ART 2707	Lithography ³	
Select two Advanced Printmaking courses from the following:		6
ART 3704	Advanced Serigraphy (fall only)	
ART 3705	Advanced Etching (fall only)	
ART 3706	Advanced Lithography (spring only)	
Select three Specialized Printmaking courses from the following:		9
ART 3701	Printmaking Workshop (Intermedia, fall only)	
ART 3702	Relief and Monoprint Workshop (spring only)	
ART 3703	Color Print Workshop (Intermedia, spring only)	
ART 4602	Senior Projects Workshop/Seminar (spring only)	
ART 3796	Art Career Workshop (WI, Capstone)	3

1

Prerequisite for ART 3704.

2

Prerequisite for ART 3705.

3

Prerequisite for ART 3706.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Fine Arts in Printmaking

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3
FDPR 1503	Woodshop Fundamentals	1

ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 or Honors Arts of the World I: Prehistoric to 1300	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4

Credit Hours **17**

Spring

FDPR 1512	Foundation Drawing	3
FDPR 1522	2D Foundation Principles	3
FDPR 1532	3D Foundation Principles/C	3
FDPR 1502	Investigations of Art and Design	1
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3

Credit Hours **16**

Year 2**Fall**

Select one of the following: 3

ART 2701	Survey of Lithography and Serigraphy	
ART 2702	Survey of Etching and Relief	
ART or GAD 2000-2999	Sophomore Studio Elective	3
ART or GAD 2000-2999	Sophomore Studio Elective	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3

GenEd Quantitative Literacy Course ^{GQ} 4

Credit Hours **16**

Spring

Select one introductory Printmaking course from the following: 3

ART 2704	Serigraphy ²	
ART 2705 or ART 2706	Etching ³ or Intaglio Printmaking	
ART 2707	Lithography ⁴	
ART or GAD 2000-2999	Sophomore Studio Elective	3
ART or GAD 2000-2999	Sophomore Studio Elective	3
GenEd Breadth Course		3
GenEd Breadth Course		3

Credit Hours **15**

Year 3**Fall**

Select two of the following Printmaking courses (not previously taken): 6

ART 2704	Serigraphy ²	
ART 2705 or ART 2706	Etching ³ or Intaglio Printmaking	
ART 2707	Lithography ⁴	
ART or GAD Studio Elective		3
Art History Elective ^{WI}		4
GenEd Breadth Course		3

Credit Hours **16**

Spring

Advanced Printmaking course ⁵		3
ART 3796	Art Career Workshop (Capstone)	3
ART or GAD Studio Elective		3

Art History Elective ⁶	4
GenEd Breadth Course	3
Credit Hours	16
Year 4	
Fall	
Advanced Printmaking course ⁵	3
Specialized Printmaking course ⁷	3
ART or GAD Studio Elective	3
GenEd Breadth Course	3
GenEd Breadth Course	3
Credit Hours	15
Spring	
Specialized Printmaking course ⁷	3
Specialized Printmaking course ⁷	3
ART or GAD Studio Elective	3
Open Elective ⁶	3
Non-Studio Elective	3
Credit Hours	15
Total Credit Hours	126

1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2

Prerequisite for ART 3704.

3

Prerequisite for ART 3705.

4

Prerequisite for ART 3706.

5

Choose from ART 3704 (fall only), ART 3705 (fall only), and ART 3706 (spring only). Two different advanced courses are required.

6

Students completing a 3 credit Art History 2000+ elective **must** select a 4 credit open elective to reach the minimum 126 credits to earn the BFA degree.

7

Choose from ART 3701 (fall only), ART 3702 (spring only), ART 3703 (spring only) and ART 4602 (spring only). Three distinct specialized courses are required.

Please Note: An approved study abroad program waives the GenEd Global/World Society (GG) requirement; however, these credits must be made up with academic coursework taken outside of Tyler departments to be in compliance with BFA accreditation. Printmaking majors interested in studying abroad should consult with an academic advisor to determine if a semester (generally spring semester of second year) or a summer program would be the best option to remain on track for graduation.

Art Education Concentration

The **Bachelor of Fine Arts with an optional Concentration in Art Education**, offered by the Department of Art, is one of two pathways at the Tyler School of Art and Architecture to earning art teaching certification in Pennsylvania and becoming a teaching artist. Students may also become certified teachers through the Bachelor of Science in Education in Art Education (p. 125).

Tyler offers students seeking a BFA degree an opportunity to earn Pennsylvania Teacher Certification in Art, K-12. The BFA with Art Education Concentration combines Tyler's art curriculum with approved courses in education and the liberal arts—all with Tyler's uniquely urban, community-based approach.

Offering students access to the resources of both a world-class art school and a large, public research university, Tyler's undergraduate Art Education programs prepare students to become thoughtful art teachers with the extensive knowledge and skills to teach kindergarten through twelfth grade.

Tyler students take full advantage of the school's location in Philadelphia and the city's rich array of schools, communities, museums, galleries and artists, opening up opportunities for artistic growth, research, networking and jobs.

The Tyler faculty is committed to urban art education and the power of collaborating with communities. Tyler students don't just learn how to teach art and grow as artists—they learn how to affect positive change in the communities where they work.

Students must complete BFA requirements (p. 141) along with a three-year sequence in Education and Art Education that begins in the sophomore year. Typically five years are necessary to fulfill all requirements. Students work with both the Art Education faculty advisors and the Tyler academic advisors regarding completion of requirements.

Campus Location: Main

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational, and other art/design-related endeavors.

Licensure/Certification

Teacher certification is the process used in the US to ensure that prospective K-12 teachers are qualified and prepared to teach at the levels and in the subjects that they intend to teach. Certification in Art Education prepares graduates to teach art to students from K-12. Certification is not always required by private institutions, but some may prefer to hire certified teachers.

In order to become certified in Art Education, students must complete a bachelor's degree from a regionally accredited institution of higher education, pass the Praxis exams required in their state of employment, and satisfy other state-licensing examinations, as applicable.

Temple University is a Pennsylvania state-approved teacher preparation program for K-12 Art. Completion of Temple University's Bachelor of Science in Education in Art Education or Master of Education in Art Education with Teaching Certification satisfies the necessary requirements for graduates to sit for the Praxis Core Academic Skills for Educators, Praxis Subject Assessments, and Praxis Fundamentals.

For certification in some states, students may need to take the Praxis Principles of Learning and Teaching (PLT) exam for their desired grade levels, which they are prepared for through their field placements, classroom observations, and study of human development and pedagogy.

<https://www.education.pa.gov/Educators/Certification/BecomeAnEducator/Pages/ACPSpecialty.aspx>

Admission

Admission to Tyler's Bachelor of Fine Arts programs is based on a review of academic credentials and portfolio review. For detailed information on how to apply, please visit Tyler's Studio Art admissions page.

Contact Information

Renee Jackson, Program Head for Art Education
Tyler Building, Art Education and Community Arts Practices Suite B090C
215-777-9258
renee.jackson@temple.edu

Summary of Requirements

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

The Bachelor of Fine Arts degree with the Art Education Concentration may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 155 semester hours of credit with a minimum cumulative GPA of 3.0.

University Requirements

All Temple students are required to complete the General Education (GenEd (p. 83)) curriculum.

- Successful completion (minimum C-) of FDPR 1511 and ARTH 1156 satisfies the GenEd Arts (GA) requirement.
- Successful completion (minimum C-) of EDUC 2109, SPED 2231, and TESL 3631 satisfies the GenEd Human Behavior (GB) requirement.
- Summer or semester study abroad will satisfy the GenEd Global/World Society (GG) requirement.

BFA with Art Education Concentration Requirements

ARTE 2001, ARTE 3096, ARTE 4003, ARTE 4088, and ARTE 1001 must be completed with a C or better to fulfill concentration requirements.

Students must earn a minimum grade of C- in required College of Education coursework and additional mathematics requirement to fulfill concentration requirements.

Students in the BFA degree with the Art Education Concentration are required to take a Ceramics studio course and an additional studio course in Glass, Metals/Jewelry/CAD-CAM, or Fibers and Materials Studies; a Painting studio course and an additional studio course in Painting or Sculpture; a Printmaking studio course and an additional studio course in Photography or Graphic Design. These courses may include prerequisite, sophomore, and/or studio courses within the student's chosen BFA major.

Any BFA student who wishes to pursue the Art Education Concentration must arrange to meet with the Art Education faculty advisor to discuss field placement, clearances, and requirements, as the state of Pennsylvania may change requirements after the *Bulletin* information has been posted. It is strongly suggested that students do so during their freshman year.

Code	Title	Credit Hours
Studio Courses		74
Foundation Program (20 credits)		
2000 level Sophomore studios including major prerequisites (18 credits)		
Major studio requirements (24-27 credits, varies depending on major)		
Studio electives (9-12 credits, varies depending on major)		
Art History Courses		12-13
ARTH 1155	Arts of the World I: Prehistoric to 1300	
or ARTH 1955	Honors Arts of the World I: Prehistoric to 1300	
ARTH 1156	Arts of the World II: 1300 to the 21st Century	
or ARTH 1956	Honors Arts of the World II: 1300 to the 21st Century	
2000+ ARTH elective		
2000+ ARTH elective		
General Education Courses ¹		29
Education Requirements		19-18
EDUC 2103	Socio-cultural Foundations of Education in the United States	
EDUC 2109	Adolescent Development for Educators	
SPED 2231	Introduction to Special Education	
SPED 3211	Effective Instructional Strategies for Students with Disabilities	
TESL 3631	Principles and Practice for Teaching English Learners	
Mathematics course (1000 level) for PA Certification		
Art Education Courses		21
ARTE 1001	Professional Practices in Art Education and Art Therapy	
ARTE 2001	Science and Art of Teaching	
ARTE 3096	Art in Elementary and Secondary School	
ARTE 4003	Inclusive Art Education K-12 Students in the Art Room	
ARTE 4088	Student Teaching	
Total Credit Hours		155

1

Students waived from General Education (p. 83) requirements via placement test (GW) or study abroad (GG) must make up the credits with electives to reach the minimum 155 credits to earn the degree.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

BFA with Art Education Concentration (Five-Year)

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3

FDPR 1503	Woodshop Fundamentals	1
ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 or Honors Arts of the World I: Prehistoric to 1300	3
Credit Hours		17
Spring		
ARTE 1001	Professional Practices in Art Education and Art Therapy	1
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
FDPR 1512	Foundation Drawing	3
FDPR 1522	2D Foundation Principles	3
FDPR 1532	3D Foundation Principles/C	3
FDPR 1502	Investigations of Art and Design	1
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
Credit Hours		17
Year 2		
Fall		
Studio		3
Studio		3
Studio		3
EDUC 2103	Socio-cultural Foundations of Education in the United States	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		15
Spring		
Studio		3
Studio		3
Studio		3
EDUC 2109	Adolescent Development for Educators ²	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Year 3		
Fall		
Studio Major Course		3
Studio Major Course		3
Studio Elective		3
Second Mathematics course for certification ³		3-4
GenEd Breadth Course		3
Credit Hours		15-16
Spring		
Studio Major Course		3
Studio Major Course		3
ARTE 2001	Science and Art of Teaching	4
SPED 2231	Introduction to Special Education ²	3
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
Studio Major Course		3
Studio Major Course		3
2000+ ARTH Elective ³		4-3
TESL 3631	Principles and Practice for Teaching English Learners ²	3

GenEd Breadth Course		3
Credit Hours		16-15
Spring		
Studio Major Course		3
Studio Major Course		3
Select one of the following:		3
CRFT (Major Capstone) ^{WI}		
GAD (Major Capstone) ^{WI}		
PDS (Major Capstone) ^{WI}		
2000+ ARTH Elective		3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
Credit Hours		15
Year 5		
Fall		
Studio Elective		3
Studio Elective		3
ARTE 3096	Art in Elementary and Secondary School	4
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Spring		
ARTE 4003	Inclusive Art Education K-12 Students in the Art Room	3
ARTE 4088	Student Teaching	9
Credit Hours		12
Total Credit Hours		155

1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2

These 3 courses constitute the waiver for the GenEd Human Behavior category if the courses are completed with a C- or better.

3

Students need to complete either a 4-credit Art History 2000+ elective **or** a 4-credit second Mathematics course to reach the minimum 155 credits to earn the BFA degree with Art Education Concentration.

Printmaking with Entrepreneurial Studies BFA

Overview

The **Bachelor of Fine Arts in Printmaking with Entrepreneurial Studies**, offered by the Department of Art, is one of the nation's top programs in the discipline and provides students access to exceptional faculty, world-class facilities, and strong regional and national professional networks.

Tyler Printmaking majors join a welcoming community of artists and educators. Bridging tradition and innovation, students learn the full range of printmaking techniques from the simplest to the most technically advanced. Students learn how to think critically and solve problems, working with professors, and side-by-side with graduate students. Tyler provides access to the resources of a large, public research university combined with the intimacy of an art school.

Tyler BFA students take full advantage of the school's location in Philadelphia, a vibrant art center with a strong printmaking tradition, to find internships and jobs, explore museums and galleries, launch creative practices, start businesses and earn placements in the most competitive graduate programs.

Designed to complement the studio experience with tools to support a studio practice or pursue graduate studies, the Entrepreneurship coursework enhances students' career options. Graduates of this degree program will possess requisite business skills to support themselves as visual artists or entrepreneurs in art and related fields.

Each student moves from a common foundation curriculum (p. 141) that introduces materials and processes and prepares them for success in a range of fields of study. Those who select Art as their major will work side-by-side with majors in Visual Studies, Art Education and Art Therapy. The dynamic exchange of ideas that result from these interdisciplinary conversations spur intellectual risk and drive research-based creative concepts.

Upon graduation, students have the practical skill sets and honed aesthetic for successful careers in studio art, art education and design, as well as attend top-tier graduate programs.

Campus Location: Main

Program Code: TA-PRNE-BFA

Admissions

Admission to Tyler's Studio Art (Bachelor of Fine Arts) programs is based on a review of academic credentials and portfolio review. For detailed information on how to apply, please visit Tyler's Studio Art admissions page.

Study Abroad

Students who plan to study abroad should arrange to meet with their academic advisor and the Education Abroad and Overseas Campuses office as early as possible, preferably during the freshman year, in order to explore options and plan the sequence of courses that would be most appropriate.

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational and other art/design-related endeavors.

Contact Information

Amze J. Emmons, Program Head
Tyler School of Art Building, Room 260C
215-777-9126
amze.emmons@temple.edu

Learn more about the Bachelor of Fine Arts in Printmaking.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Fine Arts degree in Printmaking with Entrepreneurial Studies may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00. All Printmaking with Entrepreneurial Studies majors must complete the General Education (p. 83) requirements.

- Students must earn a C- or better in either ART 2701 or ART 2702 and one of the introductory printmaking courses (ART 2704, ART 2705/ART 2706, ART 2707) to enter the Printmaking with Entrepreneurial Studies major.
- The required Junior/Senior studio courses and ART 3796 (capstone) must be completed with a C- or better to fulfill major requirements.

Major Requirements for BFA in Printmaking with Entrepreneurial Studies

Code	Title	Credit Hours
Sophomore Prerequisites		
Select one Survey of Printmaking course from the following:		3
ART 2701	Survey of Lithography and Serigraphy	
ART 2702	Survey of Etching and Relief	
Select one introductory Printmaking course from the following:		3
ART 2704	Serigraphy ¹	
ART 2705	Etching ²	
or ART 2706	Intaglio Printmaking	
ART 2707	Lithography ³	
Junior and Senior Requirements		
Select two of the following (not taken as sophomore prerequisites):		6
ART 2704	Serigraphy ¹	
ART 2705	Etching ²	
or ART 2706	Intaglio Printmaking	
ART 2707	Lithography ³	

Select two Advanced Printmaking courses from the following:		6
ART 3704	Advanced Serigraphy (fall only)	
ART 3705	Advanced Etching (fall only)	
ART 3706	Advanced Lithography (spring only)	
Select three Specialized Printmaking courses from the following:		9
ART 3701	Printmaking Workshop (Intermedia, fall only)	
ART 3702	Relief and Monoprint Workshop (spring only)	
ART 3703	Color Print Workshop (Intermedia, spring only)	
ART 4602	Senior Projects Workshop/Seminar (spring only)	
ART 3796	Art Career Workshop (WI, Capstone)	3
Entrepreneurship Courses		
Select three of the following:		9
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
or SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
Select one of the following: ⁴		3
ART 3085	Field Internship	
ART 4096	Professional Practices in Art	
GAD 3053	Art Careers Promotion	
GAD 3096	The Business of Design (WI)	
GAD 3185	Field Internship	
TYLE 3211	Creative Cottage Industrialist	
TYLE 4285	Rome Internship	

1

Prerequisite for ART 3704.

2

Prerequisite for ART 3705.

3

Prerequisite for ART 3706.

4

These courses cannot fulfill both a requirement for the major and a requirement for this category.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Fine Arts in Printmaking with Entrepreneurial Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3
FDPR 1503	Woodshop Fundamentals	1
ARTH 1155	Arts of the World I: Prehistoric to 1300	3
or ARTH 1955	or Honors Arts of the World I: Prehistoric to 1300	

ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
Credit Hours		17
Spring		
FDPR 1512	Foundation Drawing	3
FDPR 1522	2D Foundation Principles	3
FDPR 1532	3D Foundation Principles/C	3
FDPR 1502	Investigations of Art and Design	1
ARTH 1156	Arts of the World II: 1300 to the 21st Century ¹	3
or ARTH 1956	or Honors Arts of the World II: 1300 to the 21st Century	
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
Credit Hours		16
Year 2		
Fall		
Select one of the following:		3
ART 2701	Survey of Lithography and Serigraphy	
ART 2702	Survey of Etching and Relief	
ART or GAD 2000-2999 Sophomore Studio Elective		3
ART or GAD 2000-2999 Sophomore Studio Elective		3
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Spring		
Select one of the following:		3
ART 2704	Serigraphy ²	
ART 2705	Etching ³	
or ART 2706	or Intaglio Printmaking	
ART 2707	Lithography ⁴	
ART or GAD 2000-2999 Sophomore Studio Elective		3
Select one of the following:		3
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
Select two of the following (not previously taken):		6
ART 2704	Serigraphy ²	
ART 2705	Etching ³	
or ART 2706	or Intaglio Printmaking	
ART 2707	Lithography ⁴	
Select one of the following (not previously taken):		3

SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
Art History Elective WI ⁵		4
GenEd Breadth Course		3
Credit Hours		16
Spring		
Advanced Printmaking Course ⁶		3
ART 3796	Art Career Workshop (Capstone)	3
ART or GAD Studio Elective		3
Art History Elective ⁷		4
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
Advanced Printmaking Course ⁶		3
Specialized Printmaking Course ⁸		3
Select one of the following (if not taken previously):		3
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
Specialized Printmaking Course ⁸		3
Specialized Printmaking Course ⁸		3
ART or GAD Studio Elective		3
Select one of the following: ⁹		3
ART 3085	Field Internship	
ART 4096	Professional Practices in Art	
GAD 3053	Art Careers Promotion	
GAD 3096	The Business of Design	
GAD 3185	Field Internship	
TYLE 3211	Creative Cottage Industrialist	
TYLE 4285	Rome Internship	
Open Elective ⁷		3
Credit Hours		15
Total Credit Hours		126

1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2

Prerequisite for ART 3704.

3

Prerequisite for ART 3705.

4

Prerequisite for ART 3706.

5

Students taking a WI course from the list of Tyler entrepreneurship courses may take a non-WI Art History elective.

6

Choose from ART 3704 (fall only), ART 3705 (fall only), and ART 3706 (spring only). Two different advanced courses are required.

7

Students completing a 3-credit Art History 2000+ elective must select a 4-credit open elective to reach the minimum 126 credits to earn the BFA degree.

8

Choose from ART 3701 (fall only), ART 3702 (spring only), ART 3703 (spring only) and ART 4602 (spring only). Three distinct specialized courses are required.

9

These courses cannot fulfill both a requirement for the major and a requirement for this category.

Please Note: An approved study abroad program waives the GenEd Global/World Society (GG) requirement; however, these credits must be made up with academic coursework taken outside of Tyler departments to be in compliance with BFA accreditation. BFA majors interested in studying abroad should consult with an academic advisor to determine if a semester (generally spring semester of second year) or a summer program would be the best option to remain on track for graduation.

Sculpture BFA

Overview

The **Bachelor of Fine Arts in Sculpture**, offered by the Department of Art, helps students develop creative, intellectual and practical skills in expansive, state-of-the-art facilities and prepares them for successful careers as artists and professionals in a range of industries.

Tyler Sculpture majors join a warm community of bold thinkers and makers who, through intense study of theory and the exploration of materials and media, become critical thinkers and problem solvers. Students develop technical proficiency and gain practical knowledge of technology, including robotics, digital fabrication, video editing, woodworking, metalworking and more.

Tyler offers access to the region's vibrant contemporary art scene in Philadelphia and nearby cities like New York and Washington, D.C. Students graduate to become socially-conscious practicing artists, find employment in education, industrial design, fabrication and more and earn placements in top graduate programs.

Each student moves from a common foundation curriculum (p. 141) that introduces materials and processes and prepares them for success in a range of fields of study. Those who select Art as their major will work side-by-side with majors in Visual Studies, Art Education and Art Therapy. The dynamic exchange of ideas that result from these interdisciplinary conversations spur intellectual risk and drive research-based creative concepts.

Upon graduation, students have the practical skill sets and honed aesthetic for successful careers in studio art, art education and design, as well as attend top-tier graduate programs.

Campus Location: Main

Program Code: TA-SCLP-BFA

Concentration

Students may complete an **optional** Concentration in Art Education (p. 296).

Admissions

Admission to Tyler's Studio Art (Bachelor of Fine Arts) programs is based on a review of academic credentials and portfolio review. For detailed information on how to apply, please visit Tyler's Studio Art admissions page.

Study Abroad

Students who plan to study abroad should arrange to meet with their academic advisor and the Education Abroad and Overseas Campuses office as early as possible, preferably during the freshman year, in order to explore options and plan the sequence of courses that would be most appropriate.

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational and other art/design-related endeavors.

Contact Information

C.T. Jasper, Program Head
Tyler School of Art Building, Room 130K
215-777-9176
ctom@temple.edu

Learn more about the Bachelor of Fine Arts in Sculpture.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Fine Arts degree in Sculpture may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00. All Sculpture majors must complete the BFA curriculum (p. 141) and General Education (p. 83) requirements.

- Students must earn a C- or better in Sculpture (ART 2801 or ART 2807) to enter the major.
- The eight required Junior/Senior courses and ART 3896 must be completed with a C- or better to fulfill major requirements.

The faculty encourages taking sculpture courses in excess of the minimum required. These additional courses count towards required studio electives.

Major Requirements for BFA in Sculpture

Sophomore Prerequisite

Code	Title	Credit Hours
ART 2801 or ART 2807	Sculpture Sculpture: Rome	3

Students are encouraged to take *Installation* or *Mold Making* in the second semester of the sophomore year after *Sophomore Sculpture*.

Junior and Senior Requirements

Code	Title	Credit Hours
Select two of the following: ¹		6
ART 3805	Advanced Sculpture	
ART 3806	Advanced Sculpture	
ART 3807	Advanced Sculpture	
ART 3808	Advanced Sculpture	
Specialized Sculpture course (see list below)		3
Specialized (see list below) or Advanced Sculpture courses ¹		6
ART 4801	Senior Sculpture	3
Select two Drawing courses from the following:		6
ART 2502 or ART 2504	Intermediate Drawing Intermediate Drawing	
ART 2508 or ART 3511	Digital Drawing Digital Drawing	
ART 2802	Video Workshop	

or ART 3802	Advanced Video	
ART 3512	Rome Sketchbook	
ART 3514	Advanced Drawing ²	
or ART 3515	Advanced Drawing: Rome	
or ART 3516	Advanced Drawing	
or ART 4514	Advanced Drawing	
ART 3517	Figure Drawing ²	
or ART 3518	Figure Drawing	
or ART 4517	Figure Drawing	
or ART 4518	Figure Drawing	
ART 3011	Interactive Projects	
Capstone		
ART 3896	PDS Seminar (WI) ³	3

1

Advanced Sculpture courses include specials topics in: Sound, Performance, Metal Fabrication and Robotics. These vary from semester to semester. More than the two required Advanced Sculpture courses are recommended in order to intensify creative development of sculptural practice.

2

These courses have a sophomore level prerequisite. Check the course descriptions for more details.

3

Students are advised to take the capstone in their Junior Year.

Specialized Sculpture Courses

Code	Title	Credit Hours
ART 2802	Video Workshop	3
ART 3802	Advanced Video	3
ART 2803	Installation	3
ART 3803	Installation	3
ART 2804	Mold Making Technology	3
ART 3804	Mold Making Technology	3
ART 2805	Figure Modeling	3
ART 2808	Figure Modeling: Rome	3
ART 3811	Sculpture Techniques and Materials	3
ART 3809	Public Art Projects	3
ART 3085	Field Internship ¹	3
PDS 4582	Independent Study	1-3

1

It is possible to do Field Internships with alternative arts organizations and art fabrication companies in the Philadelphia area.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Fine Arts in Sculpture

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3
FDPR 1503	Woodshop Fundamentals	1
ARTH 1155	Arts of the World I: Prehistoric to 1300	3
or ARTH 1955	or Honors Arts of the World I: Prehistoric to 1300	

ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		17
Spring		
FDPR 1512	Foundation Drawing	3
FDPR 1522	2D Foundation Principles	3
FDPR 1532	3D Foundation Principles/C	3
FDPR 1502	Investigations of Art and Design	1
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		16
Year 2		
Fall		
ART 2801 or ART 2807	Sculpture ² or Sculpture: Rome	3
ART or GAD 2000-2999	Sophomore Studio Elective	3
ART or GAD 2000-2999	Sophomore Studio Elective	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Spring		
ART or GAD 2000-2999	Sophomore Studio Elective	3
ART or GAD 2000-2999	Sophomore Studio Elective	3
ART or GAD 2000-2999	Sophomore Studio Elective	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
ART 3805 or ART 3807	Advanced Sculpture or Advanced Sculpture	3
Specialized Sculpture Course		3
ART 3896	PDS Seminar (Capstone)	3
Art History Elective ³		4
GenEd Breadth Course		3
Credit Hours		16
Spring		
ART 3806 or ART 3808	Advanced Sculpture or Advanced Sculpture	3
ART Drawing Course ⁴		3
ART or GAD Studio Elective		3
Art History Elective (WI)		4
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
ART 4801	Senior Sculpture	3
ART Drawing Course ⁴		3
ART or GAD Studio Elective		3

GenEd Breadth Course	3
Non-Studio Elective	3
Credit Hours	15
Spring	
Specialized or Advanced Sculpture Course	3
Specialized or Advanced Sculpture Course	3
ART or GAD Studio Elective	3
GenEd Breadth Course	3
Open Elective ³	3
Credit Hours	15
Total Credit Hours	126

1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2

ART 2807 also fulfills the prerequisite to enter the Sculpture major; however it is only offered in Rome.

3

Students completing a 3 credit Art History 2000+ elective **must** select a 4 credit open elective to reach the minimum 126 credits to earn the BFA degree.

4

Select two Drawing courses from the following: ART 2502/ART 2504, ART 2508/ART 3511, ART 2802/ART 3802, ART 3512, ART 3514/ART 3515/ART 3516/ART 4514, ART 3517/ART 3518/ART 4517/ART 4518, and ART 3011. Some courses have a sophomore level prerequisite. Check the course descriptions for more details.

Please Note: An approved study abroad program waives the GenEd Global/World Society (GG) requirement; however, these credits must be made up with academic coursework taken outside of Tyler departments to be in compliance with BFA accreditation. Sculpture majors interested in studying abroad may elect to study abroad for a semester or attend a summer program. Please see an academic advisor for more details.

Art Education Concentration

The **Bachelor of Fine Arts with an optional Concentration in Art Education**, offered by the Department of Art, is one of two pathways at the Tyler School of Art and Architecture to earning art teaching certification in Pennsylvania and becoming a teaching artist. Students may also become certified teachers through the Bachelor of Science in Education in Art Education (p. 125).

Tyler offers students seeking a BFA degree an opportunity to earn Pennsylvania Teacher Certification in Art, K-12. The BFA with Art Education Concentration combines Tyler's art curriculum with approved courses in education and the liberal arts—all with Tyler's uniquely urban, community-based approach.

Offering students access to the resources of both a world-class art school and a large, public research university, Tyler's undergraduate Art Education programs prepare students to become thoughtful art teachers with the extensive knowledge and skills to teach kindergarten through twelfth grade.

Tyler students take full advantage of the school's location in Philadelphia and the city's rich array of schools, communities, museums, galleries and artists, opening up opportunities for artistic growth, research, networking and jobs.

The Tyler faculty is committed to urban art education and the power of collaborating with communities. Tyler students don't just learn how to teach art and grow as artists—they learn how to affect positive change in the communities where they work.

Students must complete BFA requirements (p. 141) along with a three-year sequence in Education and Art Education that begins in the sophomore year. Typically five years are necessary to fulfill all requirements. Students work with both the Art Education faculty advisors and the Tyler academic advisors regarding completion of requirements.

Campus Location: Main

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational, and other art/design-related endeavors.

Licensure/Certification

Teacher certification is the process used in the US to ensure that prospective K-12 teachers are qualified and prepared to teach at the levels and in the subjects that they intend to teach. Certification in Art Education prepares graduates to teach art to students from K-12. Certification is not always required by private institutions, but some may prefer to hire certified teachers.

In order to become certified in Art Education, students must complete a bachelor's degree from a regionally accredited institution of higher education, pass the Praxis exams required in their state of employment, and satisfy other state-licensing examinations, as applicable.

Temple University is a Pennsylvania state-approved teacher preparation program for K-12 Art. Completion of Temple University's Bachelor of Science in Education in Art Education or Master of Education in Art Education with Teaching Certification satisfies the necessary requirements for graduates to sit for the Praxis Core Academic Skills for Educators, Praxis Subject Assessments, and Praxis Fundamentals.

For certification in some states, students may need to take the Praxis Principles of Learning and Teaching (PLT) exam for their desired grade levels, which they are prepared for through their field placements, classroom observations, and study of human development and pedagogy.

<https://www.education.pa.gov/Educators/Certification/BecomeAnEducator/Pages/ACPSpecialty.aspx>

Admission

Admission to Tyler's Bachelor of Fine Arts programs is based on a review of academic credentials and portfolio review. For detailed information on how to apply, please visit Tyler's Studio Art admissions page.

Contact Information

Renee Jackson, Program Head for Art Education
Tyler Building, Art Education and Community Arts Practices Suite B090C
215-777-9258
renee.jackson@temple.edu

Summary of Requirements

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

The Bachelor of Fine Arts degree with the Art Education Concentration may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 155 semester hours of credit with a minimum cumulative GPA of 3.0.

University Requirements

All Temple students are required to complete the General Education (GenEd (p. 83)) curriculum.

- Successful completion (minimum C-) of FDPR 1511 and ARTH 1156 satisfies the GenEd Arts (GA) requirement.
- Successful completion (minimum C-) of EDUC 2109, SPED 2231, and TESL 3631 satisfies the GenEd Human Behavior (GB) requirement.
- Summer or semester study abroad will satisfy the GenEd Global/World Society (GG) requirement.

BFA with Art Education Concentration Requirements

ARTE 2001, ARTE 3096, ARTE 4003, ARTE 4088, and ARTE 1001 must be completed with a C or better to fulfill concentration requirements.

Students must earn a minimum grade of C- in required College of Education coursework and additional mathematics requirement to fulfill concentration requirements.

Students in the BFA degree with the Art Education Concentration are required to take a Ceramics studio course and an additional studio course in Glass, Metals/Jewelry/CAD-CAM, or Fibers and Materials Studies; a Painting studio course and an additional studio course in Painting or Sculpture; a Printmaking studio course and an additional studio course in Photography or Graphic Design. These courses may include prerequisite, sophomore, and/or studio courses within the student's chosen BFA major.

Any BFA student who wishes to pursue the Art Education Concentration must arrange to meet with the Art Education faculty advisor to discuss field placement, clearances, and requirements, as the state of Pennsylvania may change requirements after the *Bulletin* information has been posted. It is strongly suggested that students do so during their freshman year.

Code	Title	Credit Hours
Studio Courses		74
	Foundation Program (20 credits)	

2000 level Sophomore studios including major prerequisites (18 credits)

Major studio requirements (24-27 credits, varies depending on major)

Studio electives (9-12 credits, varies depending on major)

Art History Courses **12-13**

ARTH 1155	Arts of the World I: Prehistoric to 1300
or ARTH 1955	Honors Arts of the World I: Prehistoric to 1300
ARTH 1156	Arts of the World II: 1300 to the 21st Century
or ARTH 1956	Honors Arts of the World II: 1300 to the 21st Century
2000+ ARTH elective	
2000+ ARTH elective	

General Education Courses ¹ **29**

Education Requirements **19-18**

EDUC 2103	Socio-cultural Foundations of Education in the United States
EDUC 2109	Adolescent Development for Educators
SPED 2231	Introduction to Special Education
SPED 3211	Effective Instructional Strategies for Students with Disabilities
TESL 3631	Principles and Practice for Teaching English Learners
Mathematics course (1000 level) for PA Certification	

Art Education Courses **21**

ARTE 1001	Professional Practices in Art Education and Art Therapy
ARTE 2001	Science and Art of Teaching
ARTE 3096	Art in Elementary and Secondary School
ARTE 4003	Inclusive Art Education K-12 Students in the Art Room
ARTE 4088	Student Teaching

Total Credit Hours **155**

1

Students waived from General Education (p. 83) requirements via placement test (GW) or study abroad (GG) must make up the credits with electives to reach the minimum 155 credits to earn the degree.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

BFA with Art Education Concentration (Five-Year)

Year 1

Fall **Credit Hours**

ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3
FDPR 1503	Woodshop Fundamentals	1
ARTH 1155	Arts of the World I: Prehistoric to 1300	3
or ARTH 1955	or Honors Arts of the World I: Prehistoric to 1300	

Credit Hours **17**

Spring

ARTE 1001	Professional Practices in Art Education and Art Therapy	1
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
FDPR 1512	Foundation Drawing	3
FDPR 1522	2D Foundation Principles	3
FDPR 1532	3D Foundation Principles/C	3

FDPR 1502	Investigations of Art and Design	1
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
Credit Hours		17
Year 2		
Fall		
Studio		3
Studio		3
Studio		3
EDUC 2103	Socio-cultural Foundations of Education in the United States	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		15
Spring		
Studio		3
Studio		3
Studio		3
EDUC 2109	Adolescent Development for Educators ²	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Year 3		
Fall		
Studio Major Course		3
Studio Major Course		3
Studio Elective		3
Second Mathematics course for certification ³		3-4
GenEd Breadth Course		3
Credit Hours		15-16
Spring		
Studio Major Course		3
Studio Major Course		3
ARTE 2001	Science and Art of Teaching	4
SPED 2231	Introduction to Special Education ²	3
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
Studio Major Course		3
Studio Major Course		3
2000+ ARTH Elective ³		4-3
TESL 3631	Principles and Practice for Teaching English Learners ²	3
GenEd Breadth Course		3
Credit Hours		16-15
Spring		
Studio Major Course		3
Studio Major Course		3
Select one of the following:		3
CRFT (Major Capstone) ^{WI}		
GAD (Major Capstone) ^{WI}		
PDS (Major Capstone) ^{WI}		
2000+ ARTH Elective		3

SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
Credit Hours		15
Year 5		
Fall		
Studio Elective		3
Studio Elective		3
ARTE 3096	Art in Elementary and Secondary School	4
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Spring		
ARTE 4003	Inclusive Art Education K-12 Students in the Art Room	3
ARTE 4088	Student Teaching	9
Credit Hours		12
Total Credit Hours		155

1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2

These 3 courses constitute the waiver for the GenEd Human Behavior category if the courses are completed with a C- or better.

3

Students need to complete either a 4-credit Art History 2000+ elective **or** a 4-credit second Mathematics course to reach the minimum 155 credits to earn the BFA degree with Art Education Concentration.

Sculpture with Entrepreneurial Studies BFA

Overview

The **Bachelor of Fine Arts in Sculpture with Entrepreneurial Studies**, offered by the Department of Art, helps students develop creative, intellectual and practical skills in expansive, state-of-the-art facilities and prepares them for successful careers as artists and professionals in a range of industries.

Tyler Sculpture majors join a warm community of bold thinkers and makers who, through intense study of theory and the exploration of materials and media, become critical thinkers and problem solvers. Students develop technical proficiency and gain practical knowledge of technology, including robotics, digital fabrication, video editing, woodworking, metalworking and more.

Tyler offers access to the region's vibrant contemporary art scene in Philadelphia and nearby cities like New York and Washington, D.C. Students graduate to become socially-conscious practicing artists, find employment in education, industrial design, fabrication and more and earn placements in top graduate programs.

Designed to complement the studio experience with tools to support a studio practice or pursue graduate studies, the Entrepreneurship coursework enhances students' career options. Graduates of this degree program will possess requisite business skills to support themselves as visual artists or entrepreneurs in art and related fields.

Each student moves from a common foundation curriculum (p. 141) that introduces materials and processes and prepares them for success in a range of fields of study. Those who select Art as their major will work side-by-side with majors in Visual Studies, Art Education and Art Therapy. The dynamic exchange of ideas that result from these interdisciplinary conversations spur intellectual risk and drive research-based creative concepts.

Upon graduation, students have the practical skill sets and honed aesthetic for successful careers in studio art, art education and design, as well as attend top-tier graduate programs.

Campus Location: Main

Program Code: TA-SCLE-BFA

Admissions

Admission to Tyler's Studio Art (Bachelor of Fine Arts) programs is based on a review of academic credentials and portfolio review. For detailed information on how to apply, please visit Tyler's Studio Art admissions page.

Study Abroad

Students who plan to study abroad should arrange to meet with their academic advisor and the Education Abroad and Overseas Campuses office as early as possible, preferably during the freshman year, in order to explore options and plan the sequence of courses that would be most appropriate.

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational and other art/design-related endeavors.

Contact Information

C.T. Jasper, Program Head
Tyler School of Art Building, Room 130K
215-777-9176
ctom@temple.edu

Learn more about the Bachelor of Fine Arts in Sculpture.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Fine Arts degree in Sculpture with Entrepreneurial Studies may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00. All Sculpture with Entrepreneurial Studies majors must complete the General Education (p. 83) requirements.

- Students must earn a C- or better in Sculpture (ART 2801 or ART 2807) to enter the Sculpture with Entrepreneurial Studies major.
- The required Junior/Senior courses and ART 3896 must be completed with a C- or better to fulfill major requirements.

Major Requirements for BFA in Sculpture with Entrepreneurial Studies

Sophomore Prerequisite

Code	Title	Credit Hours
ART 2801 or ART 2807	Sculpture Sculpture: Rome	3

Students are encouraged to take *Installation* or *Mold Making* in the second semester of the sophomore year after *Sophomore Sculpture*.

Junior and Senior Requirements

Code	Title	Credit Hours
Select two of the following: ¹		6
ART 3805	Advanced Sculpture	
ART 3806	Advanced Sculpture	
ART 3807	Advanced Sculpture	
ART 3808	Advanced Sculpture	
Specialized Sculpture course (see list below)		3
Specialized (see list below) or Advanced Sculpture courses ¹		6
ART 4801	Senior Sculpture	3
Select two Drawing courses from the following:		6
ART 2502 or ART 2504	Intermediate Drawing Intermediate Drawing	3
ART 2508 or ART 3511	Digital Drawing Digital Drawing	3
ART 2802 or ART 3802	Video Workshop Advanced Video	3
ART 3512	Rome Sketchbook	3

ART 3514 or ART 3515 or ART 3516 or ART 4514	Advanced Drawing ² Advanced Drawing: Rome Advanced Drawing Advanced Drawing	3
ART 3517 or ART 3518 or ART 4517 or ART 4518	Figure Drawing ² Figure Drawing Figure Drawing Figure Drawing	3
ART 3011	Interactive Projects	3
Capstone		
ART 3896	PDS Seminar (WI) ³	3

Specialized Sculpture Courses

Code	Title	Credit Hours
ART 2803	Installation	3
ART 3803	Installation	3
ART 2802	Video Workshop	3
ART 3802	Advanced Video	3
ART 2804	Mold Making Technology	3
ART 3804	Mold Making Technology	3
ART 2805	Figure Modeling	3
ART 2808	Figure Modeling: Rome	3
ART 3811	Sculpture Techniques and Materials	3
ART 3809	Public Art Projects	3
ART 3085	Field Internship	3
PDS 4582	Independent Study	1 to 3

Entrepreneurship Requirements

Code	Title	Credit Hours
Select three of the following:		9
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585 or SGM 3685	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
Select one of the following: ⁴		3
ART 3085	Field Internship	
ART 3796	Art Career Workshop (WI)	
ART 4096	Professional Practices in Art (WI)	
GAD 3053	Art Careers Promotion	
GAD 3096	The Business of Design (WI)	
GAD 3185	Field Internship	
TYLE 3211	Creative Cottage Industrialist	
TYLE 4285	Rome Internship	

Total Credit Hours**12**

1

Advanced Sculpture courses include special topics in sound, performance, metal fabrication and robotics. These topics vary each semester.

2

These courses have a sophomore level prerequisite. Check the course descriptions for more information.

3

Students are advised to take the capstone in their junior year.

4

These courses cannot fulfill both a requirement for the major and for this category.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Fine Arts in Sculpture with Entrepreneurial Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
FDPR 1511	Foundation Drawing ¹	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531	3D Foundation Principles/W	3
FDPR 1503	Woodshop Fundamentals	1
ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 or Honors Arts of the World I: Prehistoric to 1300	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		17
Spring		
FDPR 1512	Foundation Drawing	3
FDPR 1522	2D Foundation Principles	3
FDPR 1532	3D Foundation Principles/C	3
FDPR 1502	Investigations of Art and Design	1
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		16
Year 2		
Fall		
ART 2801 or ART 2807	Sculpture ² or Sculpture: Rome	3
ART or GAD 2000-2999	Sophomore Studio Elective	3
ART or GAD 2000-2999	Sophomore Studio Elective	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Spring		
ART or GAD 2000-2999	Sophomore Studio Elective	3
ART or GAD 2000-2999	Sophomore Studio Elective	3
Select one of the following:		3
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	

SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
ART 3805 or ART 3807	Advanced Sculpture or Advanced Sculpture	3
Specialized Sculpture Course		3
ART 3896	PDS Seminar (Capstone)	3
Art History Elective WI ³		4
GenEd Breadth Course		3
Credit Hours		16
Spring		
ART 3806 or ART 3808	Advanced Sculpture or Advanced Sculpture	3
ART Drawing Course ⁴		3
Select one of the following (not previously chosen):		3
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
Art History Elective ⁵		4
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
ART 4801	Senior Sculpture	3
ART Drawing Course ⁴		3
Select one of the following (not previously chosen):		3
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
Open Elective ⁵		3

GenEd Breadth Course		3
	Credit Hours	15
Spring		
Specialized or Advanced Sculpture Course		3
Specialized or Advanced Sculpture Course		3
Select one of the following: ⁶		3
ART 3085	Field Internship	
ART 3796	Art Career Workshop	
ART 4096	Professional Practices in Art	
GAD 3053	Art Careers Promotion	
GAD 3096	The Business of Design	
GAD 3185	Field Internship	
TYLE 3211	Creative Cottage Industrialist	
TYLE 4285	Rome Internship	
ART or GAD Studio Elective		3
GenEd Breadth Course		3
	Credit Hours	15
	Total Credit Hours	126

1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2

ART 2807 also fulfills the prerequisite to enter the Sculpture major; however it is only offered in Rome.

3

Students taking a WI course from the list of Tyler entrepreneurship courses may take a non-WI Art History elective.

4

Select two Drawing courses from the following: ART 2502/ART 2504, ART 2508/ART 3511, ART 2802/ART 3802, ART 3512, ART 3514/ART 3515/ART 3516/ART 4514, ART 3517/ART 3518/ART 4517/ART 4518, and ART 3011. Some courses have a sophomore level prerequisite. Check the course descriptions for more details.

5

Students completing a 3-credit Art History 2000+ elective must select a 4-credit open elective to reach the minimum 126 credits to earn the BFA degree.

6

These courses cannot fulfill both a requirement for the major and a requirement for this category.

Please Note: An approved study abroad program waives the GenEd Global/World Society (GG) requirement; however, these credits must be made up with academic coursework taken outside of Tyler departments to be in compliance with BFA accreditation. BFA majors interested in studying abroad should consult with an academic advisor to determine if a semester (generally spring semester of second year) or a summer program would be the best option to remain on track for graduation.

Sustainable Food Systems Certificate

Overview

The **Certificate in Sustainable Food Systems**, offered by the Department of Architecture and Environmental Design (AED), provides students the opportunity to enhance their majors with an interdisciplinary approach to investigate the complexities of food systems that includes horticulture, city planning, and public health. Courses in the certificate explore the relationship of farmland preservation, food production practices, and supply alternatives that improve local economies, reduce energy consumption, lower environmental impact, and ensure widespread access to affordable and healthy food. This prepares students to contribute to the overall sustainability of the communities in which they live and work and strengthens students' preparation to work as professionals in environmentally-oriented fields or as citizen activists.

The certificate is available to all undergraduate degree students and non-degree students. Consult with an academic advisor about how the required courses fit into academic and career plans.

Campus Locations: Ambler, Main

Program Code: TA-SUFS-CERT

Contact Information

Ambler Campus

Office of Academic Advising and Student Success
West Hall 109
267-468-8200
tuaadvis@temple.edu

Main Campus

Isaiah Gaffney
Tyler Art Building, Suite 212
mctyler@temple.edu

Learn more about the undergraduate certificate in Sustainable Food Systems.

Requirements

This 12 credit certificate may be conferred upon a student by recommendation of the faculty and upon satisfactory completion of the required credits with a minimum cumulative GPA of 2.0.

At least half of the courses required for the certificate must be completed at Temple University.

Code	Title	Credit Hours
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Note: The symbol after the course title indicates that the class is offered ONLY in the semester indicated.

(F) = offered fall only

(FE) = offered fall of even numbered years

(FO) = offered fall of odd numbered years

(S) = offered spring only

(SE) = offered spring of even numbered years

(SO) = offered spring of odd numbered years

(O) = offered occasionally

Code	Title	Credit Hours
------	-------	--------------

Required Courses

Select two of the following:	5-6
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CTRP 2251	Sustainable Food Systems Planning (F)
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HORT 1001	Fundamentals of Horticulture ¹
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HORT 2334	Food Crops I (S)
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SBS 1104	Nutrition and Health
----------	----------------------

Electives

Select at least two of the following: ¹	7-6
--	-----

CTRP 2166	Land Use Planning (FO)
-----------	------------------------

CTRP 2213	Environmental Planning (S)
-----------	----------------------------

CTRP 3155	Ecological Planning and Development (FE)
-----------	--

CTRP 3255	Sustainability in Suburban Communities (SE)
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CTRP 3256	Sustainable Community Design and Development
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HORT 2323	Greenhouse Management (F)
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HORT 2324	Plant Propagation (S)
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HORT 2556	Introduction to Beekeeping
-----------	----------------------------

HORT 2850	Special Topics in Horticulture/Landscape Architecture I ²
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HORT 2860	Special Topics in Horticulture/Landscape Architecture II ²
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HORT 2870	Special Topics ²
-----------	-----------------------------

Total Credit Hours

12

1

If HORT 1001 is taken as one of the required courses, students must complete 7 credits of elective coursework.

2

Consult with an advisor to make certain topic is relevant for the certificate.

Sustainable Food Systems Minor

Overview

The **Minor in Sustainable Food Systems**, offered by the Department of Architecture and Environmental Design (AED), provides all Temple University undergraduate students the opportunity to enhance their majors with an interdisciplinary approach to investigate the complexities of food systems that includes horticulture, city planning and public health. Courses in the minor explore the relationship of farmland preservation, food production practices and supply alternatives that improve local economies, reduce energy consumption, lower environmental impact, and ensure widespread access to affordable and healthy food. This prepares students to contribute to the overall sustainability of the communities in which they live and work and strengthens students' preparation to work as professionals in environmentally-oriented fields or as citizen activists.

The Minor in Sustainable Food Systems consists of 18 credits, with two required foundation courses and four elective courses. The required courses ensure that students have a strong foundation for the study of food systems including food crops, planning for food systems, and nutrition. The electives allow students to delve deeper into different facets of food systems planning from the perspective of city planning and/or horticulture.

Campus Locations: Ambler, Main

Contact Information

Sasha W. Eisenman, PhD, Architecture and Environmental Design Department Chair
 Tyler School of Art and Architecture
 Dixon Hall, Room 201
 580 Meetinghouse Road
 Ambler, PA 19002
 267-468-8168
 eisenman@temple.edu

Requirements

Students must earn a minimum grade of C- in courses satisfying minor requirements and must have a minimum 2.0 grade point average in the required 18 credits to earn the minor.

- A student may not double count any course for the Minor in Sustainable Food Systems toward any other major, minor, or certificate.
- At least half of the courses for the minor must be taken at Temple University.
- Courses for the minor must be completed prior to graduation.

Code	Title	Credit Hours
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Note: The symbol after the course title indicates that the class is offered ONLY in the semester indicated.

(F) = offered fall only

(FE) = offered fall of even numbered years

(FO) = offered fall of odd numbered years

(S) = offered spring only

(SE) = offered spring of even numbered years

(SO) = offered spring of odd numbered years

(O) = offered occasionally

Code	Title	Credit Hours
------	-------	--------------

Required Courses

Select two of the following: 5-6

CTRP 2251	Sustainable Food Systems Planning (F)
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HORT 1001	Fundamentals of Horticulture ¹
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HORT 2334	Food Crops I (S)
-----------	------------------

SBS 1104	Nutrition and Health
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Electives

Select at least four of the following: ¹		13-12
CTRP 2166	Land Use Planning (FO)	
CTRP 2213	Environmental Planning (S)	
CTRP 3155	Ecological Planning and Development (FE)	
CTRP 3255	Sustainability in Suburban Communities (SE)	
CTRP 3256	Sustainable Community Design and Development	
HORT 2323	Greenhouse Management (F)	
HORT 2324	Plant Propagation (S)	
HORT 2556	Introduction to Beekeeping	
HORT 2850	Special Topics in Horticulture/Landscape Architecture I ²	
HORT 2860	Special Topics in Horticulture/Landscape Architecture II ²	
HORT 2870	Special Topics ²	

Total Credit Hours**18**¹

If HORT 1001 is taken as one of the required courses, students must complete 13 credits of elective coursework.

²

Consult with an advisor to make certain topic is relevant for the minor.

Visual Studies BA

Overview

The **Bachelor of Arts in Visual Studies**, offered by the Department of Art History, is ideal for socially-conscious artists who want to utilize the resources of a larger research university while accessing the historic studio traditions of Tyler School of Art and Architecture. The BA in Visual Studies is complemented by its situation in the Art History department, where art historians and contemporary artists work together to foster historical and contemporary understandings about global art and visual culture, and the power of image-making.

Visual Studies students develop skills as makers and thinkers in an equal ratio of studio and academic classes, and the curriculum allows for a higher-than-average number of electives that can be chosen according to the student's particular needs and interests. Our curriculum is consciously interdisciplinary, and not oriented towards specialization, so that students can explore the theoretical and technical aspects of art making outside the traditional restrictions of a single studio area. The skills needed to succeed today in the arts are not the same as previous generations. Today young artists need to be able to write about their own work in relation to contemporary visual culture, be able to find and work with collaborators in many different related occupations, know how to find and take advantage of opportunities, know how to access financial and social resources from many different places, and use and adapt to rapidly evolving tools, technology and data effectively.

Campus Location: Main

Program Code: TA-VISS-BA

Admissions

For more information on how to apply, please visit Tyler's Visual Studies admissions page.

Study Abroad

Students who plan to study abroad should arrange to meet with their academic advisor and the Education Abroad and Overseas Campuses office as early as possible, preferably during the freshman year, in order to explore options and plan the sequence of courses that would be most appropriate.

Career Opportunities

Graduates of Visual Studies are well prepared for a wide-range of careers in the cultural sphere as exhibiting artists and published writers, museum and gallery work, as curators, positions in design and media industries, as small business owners and entrepreneurs, and in the non-profit sectors of education, political advocacy, and community leadership.

Continuing Studies

Graduates are well prepared for advanced academic training, and recent students have gone on to complete graduate degrees in fine arts, art therapy, textile design, book restoration, art history, curatorial studies and art education.

Accreditation

Temple University is a non-profit accredited member of the National Association of Schools of Art and Design (NASAD). NASAD establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational and other art/design-related endeavors.

Contact Information

Leah Modigliani, Program Head
Tyler Building, Room 230C
215-777-9170
lmodigliani@temple.edu

Learn more about the Bachelor of Art in Visual Studies.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Arts degree may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 122 semester hours of credit with a minimum cumulative 2.00 GPA.

University Requirements

Students must complete the university's General Education (p. 83) curriculum.

- Successful completion (minimum grade of C-) in both FDPR 1511 and ARTH 1156 will waive the GenEd Arts (GA) requirement.
- Summer or semester study abroad will satisfy the GenEd Global/World Society requirement.

Major Requirements

- Required courses in the Visual Studies program must be completed with a minimum grade of C- to apply towards degree requirements.
- All Temple students must take a minimum of two writing-intensive courses at Temple University as part of the major. The specific writing-intensive courses required for this major are ART 3796 and VS 4096.

Code	Title	Credit Hours
Foundation Requirements		
FDPR 1511	Foundation Drawing	3
FDPR 1521	2D Foundation Principles	3
FDPR 1531 or FDPR 1532	3D Foundation Principles/W 3D Foundation Principles/C	3
VS 1651	Visual Studies 1 Foundation: Digital Imaging	3
TYLE 1071	Visual Studies 1 Introduction to Visual Studies: History, Theory, Practice	3
FDPR 1503	Woodshop Fundamentals	1
Studio Requirements		
VS 2001	VS Seminar: Identities	3
VS 2002	VS Seminar: Narratives	3
VS 2003	VS Seminar: Sites	3
VS 2004	VS Seminar: Global Citizens	3
ART 3796	Art Career Workshop	3
ART 2011	Socially Engaged Arts Practices in Communities	3
VS 4096	Visual Studies Thesis Seminar	3
Select 6 studio electives from ART, ARCH, ARTE, CART, GAD, LARC ¹		18
Art History Requirement		
ARTH 1155 or ARTH 1955	Arts of the World I: Prehistoric to 1300 Honors Arts of the World I: Prehistoric to 1300	3
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century Honors Arts of the World II: 1300 to the 21st Century	3
Academic Requirements		

Select 4 Non-Studio Elective courses at any level ^{2, 3}	13
Select 4 Upper Level Non-Studio electives (2000-level or above) ²	12
Language Requirement (select one from the following) ⁴	4
ARBC 1002	Arabic Elements II
CHI 1002	Chinese Elements II
FREN 1002	Introduction to French II
GER 1002	Introduction to German II
GRKA 1002	Ancient Greek 2
GRKM 1002	Modern Greek Elements II
HEBR 1002	Elements II
HIN 1002	Hindi Elements II
ITAL 1002	Italian Language II
or ITAL 1902	Honors Italian Language II
JPNS 1002	Japanese Elements II
KRN 1002	Korean Elements II
LAT 1002	Latin 2
PORT 1002	Basic II
RUS 1002	First-Year Russian II
SPAN 1002	Basic II
or SPAN 1902	Honors Basic II
Total Credit Hours	90

1

These studio electives must be taken in two or more areas within the subject codes ART, ARCH, ARTE, CART, GAD, or LARC but may not include ART 2011, CART 3011, or CART 3911.

2

Academic Electives may not be fulfilled with studio classes or courses with the subject code of ART or GAD.

3

If Language 1001 level is required per placement test results, this will apply towards one of the required academic elective courses.

4

If Language 1002 is not required as determined by placement testing, these credits must be taken as academic elective.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Visual Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
FDPR 1503	Woodshop Fundamentals	1
FDPR 1511	Foundation Drawing ¹	3
Select one of the following:		3
FDPR 1531	3D Foundation Principles/W	
FDPR 1532	3D Foundation Principles/C	
TYLE 1071	Visual Studies 1 Introduction to Visual Studies: History, Theory, Practice	3
ARTH 1155	Arts of the World I: Prehistoric to 1300	3
or ARTH 1955	or Honors Arts of the World I: Prehistoric to 1300	
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
Credit Hours		17
Spring		
FDPR 1521	2D Foundation Principles	3

VS 1651	Visual Studies 1 Foundation: Digital Imaging	3
VS 2001	VS Seminar: Identities	3
ARTH 1156 or ARTH 1956	Arts of the World II: 1300 to the 21st Century ¹ or Honors Arts of the World II: 1300 to the 21st Century	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Year 2		
Fall		
VS 2002	VS Seminar: Narratives	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Studio Elective ²		3
Language 1001 (or Academic Elective) ³		4
Academic Elective (any level)		3
Credit Hours		16
Spring		
ART 2011	Socially Engaged Arts Practices in Communities	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Studio Elective ²		3
Language 1002 (or Academic Elective) ⁴		4
Academic Elective (any level)		3
Credit Hours		16
Year 3		
Fall		
VS 2003	VS Seminar: Sites	3
Studio Elective ²		3
Academic Elective (any level)		3
Academic Elective (2000+) ³		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
ART 3796	Art Career Workshop	3
Studio Elective ²		3
Academic Elective (2000+)		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 4		
Fall		
VS 2004	VS Seminar: Global Citizens	3
Studio Elective ²		3
Academic Elective (2000+)		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
VS 4096	Visual Studies Thesis Seminar	3
Studio Elective ²		3
Academic Elective (2000+)		3

GenEd Breadth Course	3
Credit Hours	12
Total Credit Hours	122

1

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2

Select 2000+ level studio electives ART, ARCH, ARTE, CART, GAD, LARC, but not ART 2011. These studio electives must be from two or more areas.

3

If first level language (1001) is not required as determined by placement testing, these credits must be taken as academic elective.

4

If second level language (1002) is not required as determined by placement testing, these credits must be taken as academic elective.

Please Note: An approved study abroad program will waive the GenEd Global/World Society (GG) requirement. Visual Studies majors interested in studying abroad should consult with an academic advisor to discuss how a semester or a summer program fits in the program to remain on track for graduation.

Center for the Performing and Cinematic Arts

The Center for the Performing and Cinematic Arts at Temple University is a comprehensive and unified academic unit consisting of the Boyer College of Music and Dance and the School of Theater, Film and Media Arts.

The Center for the Performing and Cinematic Arts offers the BA, BS, BM, BFA, MA, MM, MS, MFA, MMT, DMA and PhD degrees and a collaboratively oriented community of award-winning faculty and professionals within the context of an urban major research university located in one of the most culturally vital cities in the United States.

Sharing the Center's vision of growth and sustainability as a cultural leader in the 21st century, its donors and alumni serve as ambassadors to the mission and represent some of the most prolific and noted individuals in national and international cultural arenas.

The Center for the Performing and Cinematic Arts at Temple University serves its neighboring communities in addition to national and international audiences through more than 1,400 performances, lectures, screenings, master classes, productions and exhibits each year—all open to the public and most of which are free.

The Center for the Performing and Cinematic Arts is overseen by its Dean and the Vice Provost for the Arts at Temple University, Robert T. Stroker.

arts.temple.edu

Boyer College of Music and Dance

Overview

The Boyer College of Music and Dance was founded in 1962.

Mission

The Boyer College of Music and Dance is committed to nurturing and advancing music as a form of human expression, as an art, and as a subject for intellectual inquiry. Recognizing that music possesses unique powers—to move the spirit, to excite the mind, to reveal the past, to chart the future, to instruct, to heal, and to foster communication—the college seeks to perpetuate music in its myriad forms through creative and scholarly work, teaching, and service, according to the highest artistic and academic standards.

As an integral part of Temple University, the Boyer College shares the ideals of Russell Conwell upon which Temple was founded: to recognize talent and personal potential wherever they may be found; to provide educational opportunities for meritorious students of limited financial means; and to serve as a constructive presence in the wider Philadelphia community.

In carrying out its mission, the Boyer College seeks both to continue the long tradition of artistry and scholarship that we have inherited and to develop new insights, perspectives, and practices. This dual objective—to explore both past and future, old and new—should be broadly reflected in the life of the college: in curricula and instruction; institutional policy; professional activities of faculty; advisement of students; and musical performances.

For the art of music to remain vital, our culture must develop both highly trained, professional musicians and informed, perceptive listeners. Accordingly, the college recognizes its responsibility to administer professional education to the student seeking a career in music, provide opportunities for the general university student to study and experience music, and share its musical life with the public.

The Boyer College provides a distinctive union of the best conservatory-type training with intense academically oriented classroom teaching. Coupled with the performance opportunities of the university and the culturally rich Philadelphia area, the Boyer College offers students the competitive edge in complete, comprehensive musical preparation. Many programs throughout the university offer minors. Students who wish to pursue a minor outside of music should contact the appropriate department.

Accreditation

Boyer College of Music and Dance is accredited by the National Association of Schools of Music, National Association of Schools of Dance, Middle States Association, National Council for Accreditation of Teacher Education, Pennsylvania Department of Education, and American Music Therapy Association.

Music Admissions

The following requirements for admission to the college are to be considered minimal. Applicants who pass the following examinations may be recommended to the Director of Admissions as eligible for admission to the college. In addition, candidates must meet general requirements set by the Office of Undergraduate Admissions.

- An audition in the major performing medium must be completed before an applicant can be accepted into the Boyer College of Music and Dance.
- After submitting the completed application, the applicant is responsible for scheduling his/her audition. E-mail music@temple.edu to schedule your audition. Refer to Boyer College for audition dates, pre-screening requirements, and audition requirements.
- The freshman application deadline is March 1. Applications for admission to the spring semester must be received no later than November 1.
- If the applicant is unable to be present because of distance, applicants should upload a video audition to Acceptd. Refer to Boyer College for specific video audition details.
- Prescreening audition recordings are required for jazz guitar; prescreening portfolio submissions are required for the BM in Composition program.
- BS in Music applicants must submit a statement of goals to music@temple.edu, and take a theory test.
- BS in Music Technology applicants should refer to Boyer's audition requirements for additional admissions information.

Dance Admissions

Admission into the dance program requires the submission of four items:

- A general university application submitted to the Office of Undergraduate Admissions.
- Official transcripts / standardized test scores submitted to the Office of Undergraduate Admissions.
- A dance application submitted to the Department of Dance.
- Attendance at an audition located on Temple University Main Campus in Philadelphia, or other arrangements to complete the audition requirements.

A dance audition cannot be scheduled until all other required application materials have been submitted. Please note that Temple University will not make an admission decision until applicants attend a dance audition.

The dance audition consists of technique classes divided into sections of ballet, modern, and African dance; a one-minute solo of an applicant's own choreography; and an interview. The faculty attempts to choose students with physical, artistic, and intellectual potential to enter and complete the dance program and the university curriculum. The faculty is concerned that potential students' goals and aspirations are supported by the department philosophy, maximizing success in the program.

For additional information regarding dance admissions and for an application, please visit Boyer Admissions.

Academic Departments

Boyer College of Music and Dance consists of the following departments:

- Dance
- Instrumental Studies
- Keyboard Instruction
- Music Education and Music Therapy
- Music Studies
- Vocal Arts

Transfer Credits

In addition to the university's statement regarding transfer credit (see Transfer Students (p. 27)), the Boyer College of Music and Dance will, during New Student Orientation, determine all transferred music credits through placement exams. Where deemed necessary, students may be tested in music theory, music history, and secondary piano. Tests in other music areas may be arranged through individual departments.

Financial Aid

See Financial Aid (p. 1809) in the *Bulletin*.

Financial aid is available to full-time undergraduates in the form of music grants, academic scholarships, loans, grants, music grants-in-aid, and work-study programs. No separate application is necessary.

Music Grants are awarded based on merit. The Boyer College has application and audition deadlines for priority music scholarship consideration. No separate application is required.

Entering Student Scholarships are offered by the Dance Department following successful entrance auditions and are based on artistic talent and potential for success in the dance curriculum. No separate application is necessary.

Financial aid awards are made after the student has been admitted as a fully matriculated student. Students are to be enrolled full-time, unless prior permission is granted to do otherwise by the Associate Dean.

Music and Dance scholarships and awards for currently enrolled and graduating undergraduate and graduate students include, but are not limited, to the following:

Voice/Opera

Florence Berggren Voice Scholarship
 Philip Y. Cho Voice Scholarship Fund
 John T. Douglas Award for Young Artists
 Else Fink Memorial Scholarship
 Professor Robert Grooters Memorial Scholarship
 Klara Meyers Scholarship
 Morton C. Meyers Memorial Scholarship
 Sidney and Mindelle Weinberg Voice Scholarship

Choral Conducting

Robert Page Graduate Choral Conducting Scholarship

Music Therapy

Anni Baker Scholarship in Music Therapy

Instrumental

Max Aronoff Prize
 Stuart J. Best Memorial Scholarship
 Fred Schrader Memorial Scholarship Fund
 Elizabeth Smith String Scholarship
 Glenn Steele Percussion Scholarship

Keyboard

Olga Gagliardi Getto Award
Jacobs Music Company Steinway Award
Louis and Peter Vennett Scholarship

Jazz

Paul Beller Memorial Scholarship
David M. Katz Scholarship
Julian F. King Jazz Studies Award
Billy Strayhorn Jazz Education Scholarship Award

Diamond Band

H. E. Pike Memorial Award

Music Studies

Bruce Archibald Memorial Fund
Dr. B. Stimson Carrow Award
Dr. Milton J. Sutter, Jr. Memorial Award

Music Education

Dorothy Albert Bogusz Scholarship
Ruth M. Lafferty Memorial Award
Frances G. Lumsden Memorial Scholarship
William T. and Carmen T. Middleberg Scholarship

General

Irving Berlin Scholarship
Esther Boyer Scholarship Fund
Elaine Brown Tribute Fund
Dr. Jeffrey M. Cornelius Tribute Fund Award
Rida C. Davis Memorial Scholarship
Douty Foundation Scholarship
Richard M. Duris Scholarship for Excellence in Classical Music
Elizabeth K. Frescoln Award
Frances Hutton Memorial Award
Helen Laird Tribute Award
Dr. Arthur Bennett Lipkin Memorial Fund
Esther M. Schultz Award
William M. Singer Memorial
Alice Tully Scholarship
David L. Stone Tribute Scholarship
E. M. Yarnell Scholarship
Boyer College Alumni Association Award
Dr. Jeffrey M. Cornelius Tribute Fund Award
Edwin B. Garrigues Scholarships
Jill D. Hamm Memorial Scholarship
Michael S. Kavalhuna Scholarship
New School Scholarship
Presser Foundation Scholarships
Janet M. Yamron Scholarship

Dance

Terese Benzwie Dance in Education Award
Frances Bowden Scholarship
The Katherine Dunham Award for Creative Dance Research
Edrie Ferdun Award
Sarah Hilsendager Award
Rose Vernick Award

Special Programs

Music Preparatory Division and Community Music Scholars Program

Mark Huxsoll, Director

215-204-1512

Temple Music Prep provides lifelong, non-credit learning opportunities in music and dance to the Greater Philadelphia community and surrounding areas. As a division of Temple University's Boyer College of Music and Dance, Music Prep is uniquely able to combine university expertise with Philadelphia's outstanding cultural assets, assuring excellence in experience and results.

Programming includes Early Childhood Music Foundations beginning with newborns through 4 years of age, Movement and Dance Classes for children 3 years old through teens, individual instruction in all instruments and voice for children and adults, and classes specially designed for adults. Music Prep is also an authorized provider of Act 48 credits for Pennsylvania educators.

A major component is the Center for Gifted Young Musicians, which serves those students with exceptional ability and motivation. The Community Music Scholars Program serves students with need from over fifty public schools, allowing access to affordable quality instruction.

Temple Music Prep is a member of the National Guild for Community Arts Education and the Greater Philadelphia Cultural Alliance.

Key Program Components

- **Individual lessons** from an outstanding faculty in orchestral instruments, piano, guitar, voice, composition and jazz techniques are offered for children and adults.

Suzuki instruction in violin, cello, guitar, and piano is also offered for young children. In the "talent education method" of Dr. Shinichi Suzuki, children learn to play music with the same enjoyment and fluency with which they learn language.

- **Early Childhood Music Foundations** is an innovative program in early childhood music education (newborns through children 4 years of age) that has a national reputation for excellence. In a carefully planned sequence of music learning, the program uses the natural human inclination for chanting, singing and movement as the first steps in the musical understanding of melody and rhythm.
- **Movement and Dance** classes take children through a sequential, age-specific dance program. Offerings include: Creative Movement (3 & 4 yrs.), Music and Movement (5 yrs. in kindergarten through 7 yrs.), Modern Dance (8 yrs. through teens in three levels) and Ballet Technique (pre-teens & teens).
- **Basic Musicianship** classes are offered in three progressive levels. The goal of these classes is to develop musicianship by integrating aural, written, vocal, and tactile skills. By using movable "Do" solfege, students learn to make the connection between musical notation and sound. A one-week summer music theory intensive course is offered for those students preparing to enter a college music degree program.
- **Adult classes** are designed to provide opportunities for personal growth and professional development. Offerings include: classes in learning to play piano, learning to play guitar, learning to sing, jazz improvisation, or in Suzuki piano teacher training; participation in a community band or a community choir during the academic year or week-long music workshops offered at the Boyer College; as well as individual study in instruments and voice. Pennsylvania educators are eligible to receive Act 48 credit for most of these offerings.
- The **Center for Gifted Young Musicians** is the component of Music Prep that focuses on the training of exceptionally gifted students who have the ability and willingness to make a serious commitment to music. By audition only.

Instrumental Division (for strings)

The Center's instrumental program provides a comprehensive package of music instruction and performance for young musicians who have demonstrated the greatest potential for musical achievement. Emphasis in this program is placed on the development of superior musical skills through large and small ensemble performance. The faculty is made up of the finest artist/teachers in the region, including members of The Philadelphia Orchestra and professors from Temple's own Boyer College of Music and Dance.

Young Artists Harp Ensemble

The Young Artists Harp Ensemble offers pedal and lever harp students ages 10 through high school the opportunity to participate in a group ensemble experience with a conductor as well as in student-led chamber music settings. Participants are also eligible to attend monthly studio master classes by Philadelphia Orchestra principal harpist, Elizabeth Hainen at the Boyer College of Music and Dance. Students may also have the opportunity to collaborate with other Temple Music Prep ensemble groups.

The Festival of Young Musicians

The Festival of Young Musicians has long been the centerpiece of the Center for Gifted Young Musicians. Held annually in late April/early May, it consists of a series of concerts throughout the region that feature all the performers in the Center.

- **The Community Music Scholars Program: Upper Division** provides weekly individual instruction, music theory and ensemble experience at a nominal fee for young instrumentalists. These Philadelphia school students with need are nominated by their school music teachers and accepted by audition.
- **The Philadelphia String Project at Temple University** is aligned with the National String Project Consortium (NSPC) a coalition of String Project sites at universities across the United States that exchange ideas and learn from each other but operate completely independently. The NSPC is dedicated to increasing the number of children playing stringed instruments, addressing the critical shortage of string teachers in the US and

supporting public school string programs. Participating students receive twice weekly instruction taught by a Master Teacher and supported by Temple University undergraduate music education and performance string interns.

The Boyer College of Music Preparatory and Extension Division is located at Temple University's Center City Campus, 1515 Market Street, in the heart of metropolitan Philadelphia at the hub of the Regional Transit System.

For further information concerning curricula and fees, write to:

Temple Music Preparatory Division
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musicprep@temple.edu
215-204-1512

Facilities

Presser Hall, opened in 1967, is the center of musical activity at Temple University. This building houses practice rooms, classrooms, ensemble rehearsal rooms, teaching studios, faculty offices, a 16-station computer classroom, student and faculty lounges, a large listening and viewing library, and the Presser Learning Center. Presser Hall's performance facilities include Klein Recital Hall and Arronson Rehearsal Hall. Presser Hall houses the Music Studies Department, the Music Education Department, the wind, brass, and Percussion programs of the Instrumental Department, the Choral Activities Department, the Department of Voice and Opera, and the programs in Music Therapy and Jazz Studies. Presser Hall is fully Wi-Fi enabled.

The nationally recognized Presser Center for Research and Creativity in Music, located on the first floor of Presser Hall, houses over 6,000 books, recordings, periodicals, videotapes, audio tapes, classroom instruments, and other materials used in the preparation of music teachers and music therapists. Included in the computer classroom is the hardware and software necessary for future teachers and therapists to become knowledgeable about the role of computers in music and administration.

The Presser Hall Listening Library houses a collection of more than 20,000 recordings and tapes, 10,000 compact discs, hundreds of video tapes and DVDs, reference books, and scores. Music listening and viewing assignments for courses in music history, theory, composition, jazz, education, and literature can be completed with this collection, which spans music history and performance from the earliest times to the present. This facility also contains general use computer stations, cell-phone and laptop charging stations, searchable databases of digital audio tracks, iPad stations, and multiple LP/CD/DVD media stations. A larger collection of music books and scores is found in Charles Library.

The Boyer College's Rock Hall was extensively renovated for music and dedicated in 1994 in recognition of the generous support of Dr. Milton Rock and the late Mrs. Shirley Rock. Located at Broad Street and Cecil B. Moore Avenue on Temple University's Main Campus, Rock Hall houses the Office of the Dean, the string and chamber music programs of the New School Institute, the programs in Music Composition, the Keyboard Department, the Early Music Program, the Alice Tully Library, three state-of-the-art computer/electronic laboratories for music and dance, practice rooms, classrooms, and a 325-seat chamber music recital hall. Rock Hall is fully Wi-Fi enabled.

The visual video/film scoring studio in Rock Hall features a variety of voice modules controlled by a computer workstation, a multi-channel mixer, 5:1 surround sound, and digital and analog recording facilities. Students are encouraged to design their own libraries of timbres for use in composition. The computer synthesis studio uses several computer workstations with expanded disk memory, digital and analog recording equipment, and a broad range of software for music synthesis. Most hardware and software titles in the Boyer College Computer Labs are identical to those in the TECH Center's dedicated Music Lab, enabling students to work on projects in multiple venues.

The Boyer College added a three-story addition to Presser Hall in 2009 which contains 21 additional practice rooms, three large classrooms, teaching studios, administrative offices, the Center for Arts and Quality of Life, and a 24-track ProTools recording studio.

The Boyer College's Department of Dance has its administrative, faculty, institute, and student offices housed in 1700 North Broad Street. Dance classes are held in three large dance studios in Pearson Hall where there are additional support spaces as well as two small teaching studios for smaller groups. Dance classes and performances are held in Conwell Dance Theater in Conwell Hall, a 125-seat black box theater. All Dance Department spaces are Wi-Fi enabled.

As of the 2011-2012 academic year, the College presents its largest ensembles in performance in the Temple Performing Arts Center. This iconic building—formerly the Baptist Temple of Philadelphia—was specifically converted into a performing arts complex capable of housing a full symphony orchestra and choir. Boyer's symphony orchestra, choirs, wind symphony, percussion ensemble and other large ensembles all perform in this venue. In addition, the Temple Performing Arts Center is also available to the College for recording sessions, rehearsals, faculty concerts and other significant events.

Also utilized by the Boyer College is the third floor of Mitten Hall where the Temple Opera Theater's rehearsal, administrative and faculty offices are housed along with the Opera Listening and Study Library, and the scene, costume, and prop shops. Tomlinson Theater, located across the street from Presser Hall, is used for on-campus large ensemble performances and for the twice yearly staged opera productions. A 55-seat smart classroom for music and dance instruction is housed in the Tuttleman Learning Center.

The Boyer College is able to loan professional equipment to students in the form of instruments (violins, violas, celli, basses, all woodwinds, all brasses, all percussion), audio gear (JBL, Yamaha and Peavey), portable digital recording units, iPads, and video gear. Also available for use are unique vintage instruments: Hammond B3 Organ with Leslie Speaker, Fender Rhodes 73 synthesizer, Yamaha and Kurzweil synthesizers.

In July of 2012, the Boyer College of Music and Dance became part of Temple University's Center for the Arts, a comprehensive administrative restructuring of all of the Arts programs on Temple's campus. The combined programs included the Boyer College of Music and Dance, Tyler School of Art, and the Division of Theater, Film and Media Arts. With the oversight of all these areas by the Vice Provost for the Arts and Dean of the Center, Dr. Robert Stroker, the possibilities for collaborations among all of the arts programs on Temple's campus have significantly increased.

In October 2015, the Center for the Arts was renamed the Center for the Performing and Cinematic Arts; the Division of Theater, Film and Media Arts was renamed the School of Theater, Film and Media Arts; and the Tyler School of Art became an independent school.

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Undergraduate Programs

- Chamber Music Certificate (p. 333)
- Classical Piano Certificate (p. 334)
- Classical Voice Certificate (p. 335)
- Composition BM (p. 336)
- Dance BFA (p. 339)
- Dance Certificate (p. 344)
- Dance Minor (p. 345)
- Hip Hop Dance and Culture Minor (p. 346)
- Jazz Arranging Certificate (p. 347)
- Jazz Improvisation Certificate (p. 348)
- Jazz Piano Certificate (p. 349)
- Jazz Studies Composition Certificate (p. 350)
- Jazz Studies/Composition BM (p. 351)
- Jazz Studies/Performance BM (p. 358)
- Jazz Studies/Performance BM with Piano Concentration (p. 362)
- Jazz Studies/Performance BM with Voice Concentration (p. 366)
- Jazz Voice Certificate (p. 370)
- Music BS (p. 371)
- Music Certificate (p. 374)
- Music Composition Certificate (p. 376)
- Music Education BM (p. 377)
- Music Education/Jazz BM (p. 395)
- Music History BM (p. 417)
- Music History Certificate (p. 423)
- Music Minor (p. 424)
- Music Performance Certificate (p. 425)
- Music Technology BS (p. 426)

- Music Technology BS with Interdisciplinary Studies Concentration (p. 431)
- Music Technology Certificate (p. 435)
- Music Theory (Jazz) Certificate (p. 436)
- Music Theory (Traditional) Certificate (p. 437)
- Music Therapy BM (p. 438)
- Music Therapy/Jazz BM (p. 444)
- Orchestral Music Certificate (p. 449)
- Performance BM (p. 450)
- Performance BM with Classical Guitar Concentration (p. 458)
- Performance BM with Harpsichord Concentration (p. 464)
- Performance BM with Piano Concentration (p. 467)
- Performance BM with Voice Concentration (p. 471)
- Performing Arts Certificate (p. 475)
- Piano Pedagogy BM (p. 476)
- Theory BM (p. 478)

Policies

For university-wide academic policies, refer to Undergraduate Academic Policies (p. 1835).

Note that the policies for music students and dance students are listed in separate sections below.

- Music policies (p. 322)
- Dance policies (p. 324)

Boyer College Policies for Music Students

Students are responsible for complying with all university-wide academic policies as well as those of the Boyer College of Music and Dance that appear below.

Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List (p. 1849) policy for specific GPA and credit-hour requirements.

Band Camp and Choir Retreat Policy

Each fall, prior to the opening of school, the Temple University Marching Band holds its annual band camp. In addition to having a concentrated four-day work period to prepare for the coming season, students get to know each other in both a working and social relationship. They also become acquainted with the group directors at both the personal and professional levels. Attendance at band camp is mandatory for group participation.

The Temple University Concert Choir often meets a few days prior to fall classes or during the first weekend of fall classes for extensive rehearsals.

Ensemble Requirements

- Undergraduate students with a major or concentration in voice or keyboard are required to participate in a choral ensemble, as determined by the Director of Choral Activities, throughout the undergraduate degree program where indicated by the curriculum. Participation begins in the first semester and continues until a baccalaureate degree is obtained. The requirement is waived during the semester of senior recital, internship, or student teaching.
- Music Education/Jazz majors whose concentration is voice are required to participate in both classical and jazz vocal ensembles. After advisement to determine which kind of ensemble is appropriate, these students should go to the Director of Choral Activities to be placed in a classical ensemble and to the Director of Jazz Studies to be placed in a jazz ensemble.
- Undergraduate students with a major or concentration in strings are required to play in the Temple University Symphony Orchestra. Participation begins in the first semester and continues until a baccalaureate degree is obtained. Qualified jazz strings and upright bass students are required to audition. This requirement is waived during the semester of student teaching or internship.
- All woodwind, brass, and percussion performance majors and/or concentrations must audition for instrumental ensembles, large and small, at the beginning of the fall semester for placement during the academic year. Continuing students will audition for ensemble placement through juries at the end of each semester. New students will audition for ensemble placement at the beginning of the first semester of study.

- Music education majors whose principal instrument is woodwind, brass, or percussion are required to play in the marching band for one semester, normally during the fall semester of the freshman and sophomore years. Transfer students in this category must also register for Marching Band for one semester unless they can show evidence of equivalent undergraduate experience at another college or university as determined by the Director of Bands.
- All students taking private lessons (major or concentration) or Recital Extensions are required to participate in an ensemble each semester in attendance.
- Percussion majors are required to participate in Percussion Ensemble.
- Any instrumental student who does not play for a private lesson jury at the end of each semester must arrange for an audition for ensemble placement for the succeeding semester with the Department of Instrumental Studies.
- Students may perform in more than two ensembles only with permission of their advisor.
- All students must show evidence of ensemble experience in their performance medium.
- All students who are registered for applied and concentration lessons must arrange their schedules in order to attend regularly scheduled master/studio classes. Failure to do so may result in the lowering of the applied lesson grade.

Independent Study Policy

Independent Study provides a special opportunity for juniors and seniors to work in a highly individualized setting with one or more faculty members.

Those who wish to design an Independent Study project must prepare a written proposal six months in advance of the semester in which the study is to be accomplished. This proposal is then submitted for the approval of a special Honors subcommittee of the Academic Planning and Review Committee, which includes the dean and associate dean. Private lessons beyond those required in the curriculum are not an appropriate form of Independent Study.

Professional Development Policy

All students in the college, in addition to passing the required subjects toward their degrees, are obligated to serve in a number of capacities in order to enrich their academic and musical expertise. The Boyer College believes that such experiences give impetus to successful professional careers. Among the duties that may be required are conducting laboratory classes, tutoring, teaching private lessons, coaching, participating in the distribution and inventory control of university-owned musical instruments and instructional materials, participating in ensembles, accompanying, supervising performance classes, performing at admission and open house events, and other academically related activities. The Boyer College performances must be given priority over non-college commitments.

Instrumental Jury Policy

All instrumental students, both performance majors and instrumental concentration students, must play a jury at the conclusion of each semester to show evidence of progress on their instrument. For string performance majors, the jury at the end of the sophomore year is the "Junior Standing Jury," which must be successfully passed in order for the student to continue in the performance program.

Recital and Concert Attendance Policy

The dean and faculty of the Boyer College of Music and Dance consider recital and concert attendance to be a significant educational activity in the training of a musician. It is largely through the process of active listening that the young musician develops powers of discrimination and critical judgment with relation to musical performance. Therefore, attendance at a minimum of sixteen college recitals or concerts throughout the course of an academic year is mandatory for full-time undergraduate students. A maximum of 56 recitals is needed to complete the requirement. Of the eight required recitals attended in each semester by full-time students, one must be an official Boyer College World Music Recital or Multicultural Music Lecture-Performance. Part-time, matriculated undergraduate students are also responsible for attending a specific number of concerts with the same World Music Recital or Multicultural Music Lecture-Performance requirement. For part-time students the number of required recitals in a semester will be in a direct ratio to the number of credits for which they are registered. During student teaching, therapy internship, or senior recital, this requirement is waived. The requirement for full-time transfer students will be based on the number of semesters they attended the Boyer College. Failure to comply with this ruling may result in delay of graduation from the college.

Senior Recital Policy

Students in the following curriculums are required to perform a senior recital:

- Piano Performance
- Piano Pedagogy
- Instrumental Performance
- Voice Performance
- Jazz Instrumental Performance

- Jazz Voice Performance
- Jazz Arranging/Composition

The senior recital provides the opportunity for the performance major to display his or her development and potential as a professional musician and should be considered the focal point for the semesters of private lessons which precede it. Before the senior recital is scheduled, the student

1. must have successfully completed private lessons during **each semester** prior to the recital and
2. must have achieved senior status academically.

All grades of "incomplete" in private lessons must be cleared before the student may apply for the senior recital. Students should refer to the Boyer College of Music and Dance Undergraduate Handbook for further details and policies governing recitals.

After receiving approval from the jury and the major teacher in the applied area, a student should apply for the Senior Recital date and complete the necessary recital arrangements through the recital coordinator.

For students enrolled in the Instrumental Studies Department, the recital approval jury serves to demonstrate the student's ability to perform the degree recital successfully. Normally, this occurs at the preceding semester's jury. If by departmental approval this jury does not occur, then a jury must be scheduled at least four weeks prior to the recital. **If the jury is not successfully completed by that time, the Instrumental Studies Department reserves the right to cancel the recital date.** Most of the recital repertoire, with the exception of chamber ensemble works, should be available for performance at the jury and accompanied by the recital accompanist. Recital approval is dependent upon the time remaining between the approval jury and the actual recital date, as well as the degree of preparedness of the repertoire.

Except for non-sonata and complicated contemporary repertoire, string performance majors should perform from memory (and the recital program should include some portion that will be performed from memory). Students who wish an exception to this memorization policy must obtain prior approval from the department by indicating the request on the recital repertoire form when it is submitted to the department for approval of the program.

Senior Recitals are usually presented Monday through Friday at 5:15 PM or 7:30 PM. Performance time should be 45 to 50 minutes, exclusive of an optional intermission of no more than 10 minutes.

Recital Extension Policy

Some students may need to extend their applied study beyond the required number of semesters in order to complete the preparation for the Senior Recital. Students who do not present a recital during the recital semester will receive the grade of "Incomplete" and must register for MUSC 5000 for 2 semester hours of non-degree credit. *Recital Extension* must be taken each semester until the recital has been presented. The sole exceptions to this rule are as follows:

- Students who give their recitals during the first three weeks of the spring semester are not required to register for *Recital Extension* that semester.
- Students who register for *Recital Extension* or for private lessons during the summer may give their recitals during the first three weeks of the fall semester. However, if a student does not register for either *Recital Extension* or lessons during the summer, he or she may not present the recital in the fall semester—regardless of the date—without also registering for that semester of lessons or *Recital Extension*.
- Private applied lessons beyond the eight-semester requirement currently in effect for undergraduate performance majors may be taken by permission of the jury and/or the appropriate performance department chairman. MUSC 5000 carries a \$500 fee (subject to change without notice). Tuition scholarships do not cover this private lesson fee.

Program Performance Policy

All music departments reserve the right to dismiss an undergraduate student at any time from a given undergraduate degree program, regardless of grade point average, if in the opinion of the major department, he or she is unable to meet departmental standards. The decision will receive automatic review by the Academic Review and Planning Committee. The student has the right to appeal the dismissal to the Academic Review and Planning Committee of the Boyer College of Music and Dance.

Undergraduate Private Lesson Policy

Weekly one-hour private lessons are arranged for full-time matriculated undergraduates in the Boyer College for as many semesters as required by the particular curriculum. (A full-time student must be registered for at least 12 credits each semester.) A per semester lesson fee of \$250 (subject to change without notice)—above and beyond the regular tuition—will be automatically added to the tuition charge of each student for this study. Students who do not complete a minimum of 12 semester hours must pay a private lesson fee of \$500 for the succeeding semester of private lessons. Students who are accepted for a double concentration or a double major in performance must be fully accepted by both departments by audition. A private lesson fee of \$500 is assessed for the second instrument. Approval of the associate dean is required for all students desiring a double major or double concentration. Tuition scholarships granted by the Boyer College do not cover the private lesson fees.

Boyer College Policies for Dance Students

Students are responsible for complying with all university-wide academic policies that apply to their individual academic status. Additional and unique policies, or exceptions for the Boyer College of Music, Department of Dance, appear below.

Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List (p. 1849) policy for specific GPA and credit-hour requirements.

Leave of Absence

Full-time students may apply for a Leave of Absence (LOA), as per the LOA policy (p. 1856). However, the Dance department requires students to meet with the Undergraduate Program Coordinator and Department Chairperson in advance of the semester in which the leave of absence is to take place to discuss the reason(s) why the leave is necessary. (Policy # 02.10.16)

Injury Policy

An injury may affect a student's ability to successfully continue in a course. A student who is injured is expected to immediately contact their instructor and the Undergraduate Program Coordinator to discuss the possibility of continuance in the course. Injured students are responsible for seeking appropriate medical attention for their injuries. Students must provide an official doctor's note recommending non-participation in class to their instructors. Failure to provide a doctor's note verifying an injury may result in the student's violation of applicable absence policies or may otherwise impact the student's grade.

Any student who is advised by a doctor to refrain from dancing for three weeks or more may be required to withdraw from studio courses that focus on dance technique, composition, repertory and improvisation. For students who will miss fewer than three weeks of classes due to their injury, and who are physically able to do so, must attend all classes to observe and take notes. Instructors may assign additional written work if appropriate. If a student is unable to participate in midterm or final examinations due to an injury, the student is responsible for working with their instructor to develop alternate assignments at the discretion of the faculty member.

Persons subject to this policy may have the option for a medical withdrawal or an incomplete in their courses. Students should review Temple University's Withdrawal from Classes Policy (02.10.14) and Incomplete Coursework Policy (02.10.13).

Independent Study and Field Experience

Students who wish to register for Independent Study or Field Experience must submit a written proposal to the Undergraduate Program Coordinator no later than two months in advance of the semester in which the study is to be accomplished. A student who is on academic probation may not register for Independent Study or Field Experience. Credits will not be granted retroactively, and no more than 4 credits will be awarded over the course of a student's undergraduate study.

Full-Time/Part-Time Status

The maximum semester load for full-time undergraduate students is 18 credits. Undergraduate students must carry at least 12 credit hours to be classified as full-time. The Bachelor of Fine Arts (BFA) in Dance requires matriculated students to attend on a full-time basis each semester. Students who have been full-time for at least four semesters may petition the Undergraduate Program Coordinator no later than two months in advance for approval to enroll in the subsequent semester on a part-time basis. All requests for part-time status must be approved by the dance faculty. Part-time status is granted for one semester only. Students who are on academic probation are not eligible for part-time status. If a student is granted part-time status and is then placed on academic probation, part-time status will be revoked.

Academic Overloads (19 or more semester hours)

Academic overloads need special approval from the Associate Dean for Student Affairs. Students interested in pursuing an academic overload should contact their Faculty Advisor no later than 2 months prior to the start of the semester in which they desire to overload. Students who are on academic probation are not eligible for academic overloads.

Technique Standards

Temple University's Department of Dance recognizes the necessity of technical training in building professional quality performers, choreographers, and teachers. Our technique classes focus on contemporary dance practice and draw on styles rooted in African diasporic dance, ballet, and modern dance. Each of our technique teachers draws from an array of influences and styles, preparing students for the eclecticism found within the contemporary dance world today. Through four years of technical training, our students gain an understanding of and apply the following principles in reaching their expressive potential and minimizing injury:

- Alignment and Core Connection
- Physical Strength and Flexibility
- Upper and Lower Body Integration
- Clarity in Articulating Various Body Parts
- Sensitivity to Qualitative Range and Expressivity Inside Movement
- Rhythmic Awareness and Musicality
- Incorporation of Weight and Breath

- Spatial Awareness
- Critical Thinking
- Self-Motivation and Discipline

Contemporary Dance Practices represent the core of our students' technical training. In all technique classes, video evaluations are recommended at the mid-term and final periods of each semester. Following these evaluations, students receive verbal and written feedback from their instructors. This process provides a method of looking at a student's progress in developing the target competencies for each level of technique.

Technique Placement Class

All entering undergraduates are usually placed into the foundation/introductory technique levels (DANC 1834, DANC 1835, DANC 1836), but may occasionally be placed in a higher level based on their audition and supplemental dance application. Adjustments to level placement may be made during the first week of classes. Returning undergraduates should consult with their faculty advisor about level placement prior to registering for classes. Students may repeat a level up to two times, and are not allowed to regress in level.

First Semester Program Review

At the end of the first semester, each student's progress will be formally evaluated in the following categories to determine suitability for continued study within the dance program.

Academic Progress

Students must successfully complete the following dance courses:

Code	Title	Credit Hours
DANC 1801	First Year Seminar in Dance	1
DANC 1811	Movement Improvisation I	2
DANC 1813 or DANC 1819	Dance Repertory I Dance Production	2
DANC 1841	Music for Dancers	2

Three Contemporary Dance Practices courses

Technical Growth

Students must be able to demonstrate and articulate verbally a conceptual understanding of alignment, strength, and mobility. They must be able to assimilate sequential movement materials and successfully perform basic movement phrases.

Improvisation

Students must demonstrate their ability to spontaneously create solo movement and demonstrate their understanding of basic partnering techniques and improvising in groups. Students will be able to generate movement material that both explores and expands their expressive range as dancers.

Creative Engagement

Over the course of the first semester, students must:

- Participate in one performance or audition one finished work for the student concert.
- Demonstrate consistent attendance, focus, intellectual curiosity, and openness to new approaches, as reflected in faculty evaluations of student coursework.
- Demonstrate receptivity to feedback and in-class evaluation from instructors, and apply this information in subsequent work.
- Demonstrate healthy life practices as part of a disciplined approach towards one's work as a dancer.
- Maintain positive professional interactions with peers and faculty.

Second Semester Program Review

At the end of the second semester, each student's progress will be formally evaluated in the following categories to determine suitability for continued study within the dance program.

Academic Progress

Students must successfully complete the following dance courses:

Code	Title	Credit Hours
DANC 1801	First Year Seminar in Dance	1
DANC 1813	Dance Repertory I	2
DANC 1819	Dance Production	1
DANC 1841	Music for Dancers	2
DANC 1852	Ways of Knowing Dance	2
Six Contemporary Dance Practices courses		

Technical Growth

Students must be able to apply, demonstrate, and articulate verbally a conceptual understanding of alignment, strength, and mobility. They must be able to assimilate sequential movement materials, and successfully perform movement phrases that deal with the following elements:

- Movement efficiency and proper alignment
- Shifting off the vertical line of balance and returning to center
- Basic rhythmic structures and patterns
- Basic locomotor movement and some inverted movement
- Variable spatial planes, directions, and levels
- Assimilation of sequential movement material
- Concepts of body organization: such as breath support, core to distal/head to tail patterning, upper-lower/body half integration, and cross-lateral patterning
- Differing energy qualities: how energy is directed within the body and projected out into space

Creative Engagement

Over the course of the second semester, students must:

- Participate in one performance or audition one finished work for the student concert.
- Demonstrate consistent attendance, focus, intellectual curiosity, and openness to new approaches, as reflected in faculty evaluations of student coursework.
- Demonstrate receptivity to feedback and in-class evaluation from instructors and apply this information in subsequent work.
- Demonstrate healthy life practices as part of a disciplined approach towards one's work as a dancer.
- Maintain positive professional interactions with peers and faculty.

Third Semester Program Review

At the end of the third semester, each student's progress will be formally evaluated in the following categories to determine suitability for continued study within the dance program.

Academic Progress

Students must successfully complete the following dance courses, in addition to those listed for the first and second semester reviews:

Code	Title	Credit Hours
DANC 2813	Dance Composition I	2
DANC 3851	Lighting Design for Dance	3
DANC 4861	Dance Science and Somatics	3
Nine Contemporary Dance Practices courses		

Technical Growth

Students must demonstrate awareness of alignment issues and articulate personal strategies for addressing them. They must be able to assimilate and retain movement material sequentially and qualitatively, and successfully perform movement phrases that deal with the following elements:

- Increased movement efficiency and proper alignment
- Basic kinesiological principles in technique and conditioning contexts
- Increased facility in shifting off the vertical line of balance and returning to center
- Incorporation of weight into on-balance and off-balance movement involving momentum and weight release
- Increased rhythmic acuity: ability to work with shifting accents, structures & patterns

- Embodiment of musicality and more complex phrasing
- Movement initiation and follow-through
- Ability to risk and expand one's spatial parameters: demonstration of an increased drive through space
- Modulation between different energy states with breath support inside metric and non-metric phrasing
- Developing confidence in one's creative engagement with movement material
- Ability to adapt when experiencing new teaching methods and styles

Choreography

Students must also be able to discuss their work and the process by which they created it. Students must be able to create and perform a dance that:

- Successfully communicates an idea of personal significance;
- Demonstrates the ability to develop thematic movement material;
- Investigates movement imaginatively;
- Explores a range of dynamic qualities; and,
- Reflects a basic understanding of choreographic structure.

Creative Engagement

By the end of the third semester, students must:

- Audition one piece of their choreography for a student concert and participate in three performances.
- Demonstrate consistent attendance, focus, intellectual curiosity, and openness to new approaches as reflected in faculty evaluations of student coursework.
- Demonstrate receptivity to feedback and in-class evaluations from instructors and apply this information in subsequent work.
- Maintain positive, professional interactions with peers and faculty.
- Demonstrate healthy life practices as part of a disciplined approach towards one's work as a dancer.
- Participate in one audition or recruitment event.

Special Course Sequences

The courses listed below must be taken in the specified sequence and cannot be taken out of order or during the same semester. All courses must be completed before students register for Senior Choreographic Project or Dance Education Project.

- Composition: Movement Improvisation I, Movement Improvisation II, Composition I, Composition II, Creative Process in Dance
- Creating Dance Histories, Dancing Cultures, Making Meaning in Dance
- Repertory: Dance Repertory I, Dance Repertory II, Dance Repertory III
- Technical Theater: Dance Production, Lighting Design for Dance

College Requirements

Note that the general college graduation requirements for music students and dance students are listed in separate sections below.

- Music graduation requirements (p. 328)
- Dance graduation requirements (p. 329)

University Requirements

- All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.
- All Temple students must take a minimum of two writing-intensive courses as part of the major.

General College Graduation Requirements - Music

- All music education students must maintain a 3.0 GPA to obtain permission to student teach and qualify for state teacher certification.
- All music therapy students must receive a grade of C or better in all music therapy classes. Grades below C in any music therapy course may not be applied toward degree requirements in music therapy. All students are permitted to repeat a course one time. Students who need to repeat a course a second time must obtain the approval of the dean/designee of their home school or college and be registered with assistance. Except as permitted by this policy, no students may repeat a course a third time. Students who have exhausted course attempts for course(s) required for their major will be required to change majors.
- All Boyer College music students must attend a minimum number of college recitals each semester to qualify for graduation. Refer to the Recital and Concert Attendance Policy for more detailed information.
- All Boyer College music students are required to participate in specific ensembles as determined by their department and program. Refer to the Ensemble Requirement Policy for more detailed information.

- Students in the following curriculums are required to perform a senior recital prior to graduation: Piano Performance, Piano Pedagogy, Instrumental Performance, Voice Performance, Jazz Instrumental Performance, Jazz Voice Performance, and Jazz Arranging/Composition. Refer to the Senior Recital Policy for more detailed information.
- All undergraduate music students must be cleared by the Assistant Director of Advising for graduation by the end of their junior year.

Please refer to the Boyer College Policies section for a complete list of policies. Detailed requirements for each degree program are listed within the curriculum section of the *Bulletin*.

Descriptions

1. Certain courses fulfill multiple requirements. In consultation with an advisor, students will be able to plan their curriculum more effectively.
2. The total number of credit hours required for graduation may be greater for some students based on placement exams, transfer evaluations, individual curricular choices, and academic progress.
3. Students must fulfill the necessary prerequisites for any given course or course sequence. See the Prerequisites and Co-requisites Policy (p. 1860) in the University-wide Academic Policies section of this *Bulletin*.

General College Graduation Requirements - Dance

See the Dance Major (p. 339) page for the specific courses that are required for dance majors.

1. Dance required GPA for graduation: 2.0 cumulative, 2.0 in dance major courses.
2. Dance Contact Information:
1700 N. Broad Street, Suite 309
Main Office Phone: 215-204-8710
3. Dance Requirements and Special Course Sequences (see dance major page for details):
 - a. Must be taken in the required sequence
 - b. Cannot be taken out of order or during the same semester
 - c. All must be completed before students register for *Senior Choreographic Projects*.

Academic Advising

The advising team in the Center for the Performing and Cinematic Arts (CPCA) serves all undergraduate students in the Boyer College of Music and Dance. We have lead advisors in each area that specialize in helping you navigate your undergraduate curriculum.

The advising team is in Mitten Hall, Suite 200 West. Our office follows the university schedule, meaning it is closed on the days the university is not open for business.

While academic advisors can help you make an academic plan, register for classes each semester and navigate Temple University, students must assume primary responsibility for understanding the requirements for their degree and acquiring current information about their academic status.

Boyer College of Music and Dance - Advising Contacts

Marguerite Jackson, Academic Advisor
200 Mitten Hall West Balcony
215-204-2229
margo@temple.edu

Bradley Pearson, Director of Advising, Center for the Performing and Cinematic Arts
200 Mitten Hall West Balcony
215-204-8372
bradley.pearson@temple.edu

Cooper Creal, Academic Advisor
200 Mitten Hall West Balcony
215-204-3437
cooper.creal@temple.edu

Edward Flanagan, Senior Associate Dean for Student Affairs
Presser Hall Office
215-204-8301
edward.flanagan@temple.edu

Beth Bolton, Vice Dean for Faculty and Academic Affairs
Presser Hall Office
215-204-8474

bbolton@temple.edu

Students also have access to faculty advisors in their major.

Departmental Faculty Advisors

Dance

Karen Bond, Dance Department Chair and Associate Professor of Dance
215-204-6280
kbond003@temple.edu

Sherril Dodds, Professor of Dance
215-204-4959
sherril.dodds@temple.edu

Jillian Harris, Associate Professor of Dance
215-204-5114
jhdan2@temple.edu

Laura Katz Rizzo, Assistant Professor of Dance and Undergraduate Program Coordinator for Dance
215-204-6279
laura.katz@temple.edu

Merian Soto, Professor of Dance
215-204-8301
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Instrumental

Matthew Brunner, Director of Athletic Bands
215-204-2162
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Patricia Cornett, Director of Bands
215-204-8335
patricia.cornett@temple.edu

Phillip O'Banion, Associate Professor, Artist Director for Percussion
215-204-8329
obanion@temple.edu

Jazz Studies

Terell Stafford, Professor, Director of Jazz Studies
215-204-8036
terell.stafford@temple.edu

Music Education and Music Therapy

Rollo Dilworth, Associate Professor of Music Education
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Deborah Confredo, Professor of Music Education
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debconfredo@temple.edu

Beth Bolton, Vice Dean for Faculty and Academic Affairs, and Associate Professor of Music Education
215-204-8474
bbolton@temple.edu

Alison Reynolds, Chair and Professor of Music Education
215-204-1660
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Nathan Buonviri, Associate Professor of Music Education
215-204-8328
buonviri@temple.edu

Darlene Brooks, Associate Professor of Music Therapy
215-204-8301
darlene.brooks@temple.edu

Music Studies

Music Studies

Edward Latham, Music Studies Department Chair
215-204-8498
elatham@temple.edu

Composition

Maurice Wright, Composition Coordinator
215-204-8016
wright@temple.edu

Music History

Steven Zohn, Music History Coordinator
215-204-5096
szohn@temple.edu

Music Theory

Edward Latham, Music Studies Department Chair
215-204-8498
elatham@temple.edu

Keyboard Instruction

Charles Abramovic, Keyboard Instruction Department Chair and Professor of Piano
215-204-7388
charles.abramovic@temple.edu

Vocal Arts

Paul Rardin, Vocal Arts Department Chair and Associate Professor of Vocal Arts
215-204-4742
rardin@temple.edu

Change of Program for Boyer Majors

Students wishing to change their concentration or major within Boyer should meet with their academic advisor to discuss the steps needed.

Change of Program to Music or Dance

If you are considering changing your major to Music or Dance from another major at Temple University, please contact boyer@temple.edu for audition and application information.

Faculty

Charles Abramovic, Professor, Department of Keyboard Studies, Boyer College of Music and Dance; DMA, Temple University.

Mitos Andaya Hart, Associate Professor, Department of Vocal Arts, Boyer College of Music and Dance; DMA, University of Kansas.

Christine L. Anderson, Associate Professor, Department of Vocal Arts, Boyer College of Music and Dance; DMA, University of Cincinnati College-Conservatory of Music.

Beth Bolton, Associate Professor, Department of Music Education and Music Therapy, Boyer College of Music and Dance; PhD, Temple University.

Karen E. Bond, Associate Professor, Department of Dance, Boyer College of Music and Dance; PhD, La Trobe University.

Darlene M. Brooks, Associate Professor, Department of Music Education and Music Therapy, Boyer College of Music and Dance; PhD, Temple University.

Matthew Brunner, Assistant Professor of Instruction, Department of Instrumental Studies, Boyer College of Music and Dance; DMA, Indiana University.

Sara Buechner, Professor, Department of Keyboard Studies, Boyer College of Music and Dance; DMA, Manhattan School of Music.

Nathan Buonviri, Associate Professor, Department of Music Education and Music Therapy, Boyer College of Music and Dance; PhD, Temple University.

David B. Cannata, Associate Professor, Department of Music Studies, Boyer College of Music and Dance; PhD, New York University.

Dustin Cates, Assistant Professor, Department of Music Education and Music Therapy, Boyer College of Music and Dance; PhD, University of Missouri-Kansas City Conservatory of Music and Dance.

Deborah A. Confredo, Professor, Department of Music Education and Music Therapy, Boyer College of Music and Dance; PhD, Florida State University.

Patricia Cornett, Assistant Professor, Department of Instrumental Studies, Boyer College of Music and Dance; DMA, University of Michigan.

Marcus DeLoach, Associate Professor, Department of Vocal Arts, Boyer College of Music and Dance; DMA, Rice University.

Alexander deVaron, Associate Professor of Instruction, Department of Music Studies, Boyer College of Music and Dance; DMA, Temple University.

Rollo A. Dilworth, Professor, Department of Music Education and Music Therapy, Boyer College of Music and Dance; DMA, Northwestern University.

Sherril Dodds, Professor, Department of Dance, Boyer College of Music and Dance; PhD, University of Surrey.

Stephanie Doktor, Assistant Professor, Department of Music Studies, Boyer College of Music and Dance; PhD, University of Virginia.

Lillian Eyre, Visiting Professor, Department of Music Education and Music Therapy, Boyer College of Music and Dance; PhD, Temple University.

Edward Flanagan, Associate Professor, Department of Music Studies, Boyer College of Music and Dance; PhD, Temple University.

Rachelle Fleming, Associate Professor, Department of Vocal Arts, Boyer College of Music and Dance; DMA, University of Miami.

Mark Franko, Laura H. Carnell Professor, Department of Dance, Boyer College of Music and Dance; PhD, Columbia University.

Shana Goldin-Perschbacher, Associate Professor, Department of Music Studies, Boyer College of Music and Dance; PhD, University of Virginia.

Lorie A. Gratis Harris, Assistant Professor of Instruction, Department of Vocal Arts, Boyer College of Music and Dance; DMA, Temple University.

Matthew J. Greenbaum, Professor, Department of Music Studies, Boyer College of Music and Dance; PhD, City University of New York.

Suzanne Hall, Associate Professor, Department of Music Education and Music Therapy, Boyer College of Music and Dance; PhD, University of Memphis.

Jillian Harris, Associate Professor, Department of Dance, Boyer College of Music and Dance; MFA, New York University Tisch School of the Arts.

yaTande Whitney V. Hunter, Assistant Professor, Department of Dance, Boyer College of Music and Dance; PhD, Institute for Doctoral Studies in the Visual Arts.

Lawrence R. Indik, Associate Professor of Practice, Department of Vocal Arts, Boyer College of Music and Dance; DMA, Manhattan School of Music.

Laura E. Katz Rizzo, Associate Professor, Department of Dance, Boyer College of Music and Dance; PhD, Temple University.

Gregory S. Kettinger, Instructor, Department of Music Studies, Boyer College of Music and Dance; BM, Temple University.

Joann M. Kirchner, Assistant Professor of Instruction, Department of Keyboard Studies, Boyer College of Music and Dance; PhD, University of Oklahoma.

Michael Klein, Professor, Department of Music Studies, Boyer College of Music and Dance; PhD, State University of New York at Buffalo.

Jan L. Krzywicki, Professor, Department of Music Studies, Boyer College of Music and Dance; MM, Philadelphia Musical Academy.

Edward D. Latham, Associate Professor, Department of Music Studies, Boyer College of Music and Dance; PhD, Yale University.

Kathryn Leemhuis, Assistant Professor, Department of Vocal Arts, Boyer College of Music and Dance; DMA, University of Cincinnati College-Conservatory of Music.

Joyce Z. Lindorff, Professor, Department of Keyboard Studies, Boyer College of Music and Dance; DMA, The Juilliard School.

Wendy Magee, Professor, Department of Music Education and Music Therapy, Boyer College of Music and Dance; PhD, University of Sheffield.

Noriko Manabe, Associate Professor, Department of Music Studies, Boyer College of Music and Dance; PhD, Graduate Center, City University of New York.

David McDonnell, Assistant Professor of Instruction, Department of Music Studies, Boyer College of Music and Dance; DMA, University of Cincinnati College-Conservatory of Music.

Alisha C. Nypaver, Instructor, Department of Music Studies, Boyer College of Music and Dance; MM, Temple University.

Phillip R. O'Banion, Associate Professor, Department of Instrumental Studies, Boyer College of Music and Dance; MM, University of Colorado.

Richard D. Oatts, Professor, Department of Music Studies, Boyer College of Music and Dance.

Lambert T. Orkis, Professor, Department of Keyboard Studies, Boyer College of Music and Dance; MM, Temple University.

Elizabeth C. Parker, Associate Professor, Department of Music Education and Music Therapy, Boyer College of Music and Dance; PhD, University of Nebraska-Lincoln.

David Pasbrig, Associate Professor of Instruction, Department of Music Studies, Boyer College of Music and Dance; DMA, Temple University.

Paul Rardin, Elaine Brown Chair in Choral Music and Associate Professor, Department of Vocal Arts, Boyer College of Music and Dance; DMA, University of Michigan.

Alison M. Reynolds, Professor, Department of Music Education and Music Therapy, Boyer College of Music and Dance; PhD, Temple University.

Eduard Schmieder, Laura H. Carnell Professor, Department of Instrumental Studies, Boyer College of Music and Dance; DMA equiv., Gneissen Russian Academy of Music.

Helen Shoemark, Professor, Department of Music Education and Music Therapy, Boyer College of Music and Dance; PhD, University of Melbourne.

Jeffrey G. Solow, Professor, Department of Instrumental Studies, Boyer College of Music and Dance; BA, University of California Los Angeles.

Merián Soto, Professor, Department of Dance, Boyer College of Music and Dance; MA, Columbia University.

Terrell L. Stafford, Laura H. Carnell Professor, Department of Music Studies, Boyer College of Music and Dance; MM, Rutgers University.

Robert T. Stroker, Professor, Department of Music Education and Music Therapy, Boyer College of Music and Dance; PhD, Michigan State University.

Christopher Turbessi, Instructor, Department of Vocal Arts, Boyer College of Music and Dance; MM, University of Michigan.

Adam Vidiksis, Assistant Professor, Department of Music Studies, Boyer College of Music and Dance; DMA, Temple University.

Timothy Warfield, Visiting Professor, Department of Music Studies, Boyer College of Music and Dance.

Lindsay Weightman, Associate Professor of Instruction, Department of Music Studies, Boyer College of Music and Dance; DMA, Manhattan School of Music.

Samuel Wells, Assistant Professor of Instruction, Department of Music Studies, Boyer College of Music and Dance; DMA, California Institute of the Arts.

Maurice W. Wright, Laura H. Carnell Professor, Department of Music Studies, Boyer College of Music and Dance; DMA, Columbia University.

Xiang Xu, Assistant Professor, Department of Dance, Boyer College of Music and Dance; MFA, New York University Tisch School of the Arts.

Michael L. Zanders, Assistant Professor, Department of Music Education and Music Therapy, Boyer College of Music and Dance; PhD, Temple University.

Steven D. Zohn, Laura H. Carnell Professor, Department of Music Studies, Boyer College of Music and Dance; PhD, Cornell University.

Chamber Music Certificate

Overview

Undergraduate certificate programs in Performance (Performing Arts, Classical and Jazz, and Dance), Music Studies (Theory, History, Composition, and Jazz Studies), and Technology provide opportunities to experience the excitement of Center for the Performing and Cinematic Arts courses. Completing these certificate programs will culminate in significant music and dance knowledge and performance experience. Each of the certificate programs offers a coherent disciplinary context beyond that which is possible in random course election. Graded experiences will be recognized on the final transcript.

Undergraduate students interested in the **Certificate in Chamber Music** must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

In addition to the online application and other requirements listed below, students must also submit a video recording (DVD) of one movement of a solo work from standard classical repertoire.

Coursework may be completed in four semesters if the program permits. Most students should complete all requirements within six semesters. Accepted students may delay certain required coursework by one semester or take courses out of sequence only with Boyer College advisor approval.

There are no exit requirements, comprehensive exams, theses, or practica required. Grading will consist of standard letter grades awarded according to Boyer College and university policy for all coursework. The minimum grade for all coursework is C-. There will be no course auditing, pass/fail grades, or CR options. Evidence of student success will be indicated by courses completed and grades earned.

Admission

Applicants must complete an online application. Admission requires students to be in good standing, and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

All application materials must be submitted by November 30 for Spring semester matriculation and May 15 for Fall semester matriculation.

Only one program may be selected. There will be no concurrent multiple program admission.

Advising and course selection will occur after admission. A grade of C- or higher must be earned in all required courses to receive the certificate.

No certificate program will be recognized as stand-alone.

No certificate program will be available to any applicant after completion of the bachelor's degree.

Certificate completion will be acknowledged on the official transcript only at the time of the awarding of the bachelor's degree.

Campus Location: Main

Program Code: BC-CHMU-CERT

Learn more about the undergraduate certificate in Chamber Music.

Requirements

The Certificate in Chamber Music will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

Code	Title	Credit Hours
MUST 3770	Topics in Music Theory (take 2 times for 2 credits each)	4
MUSC 3551	Applied Lesson - Instrumental (take 2 times for 3 credits each)	6
MUSC 4510	Instrumental Ensemble (take 2 times for 1 credit each)	2
MUSC 4520	Ensemble (take 2 times for 1 credit each)	2
Total Credit Hours		14

Classical Piano Certificate

Overview

Undergraduate certificate programs in Performance (Performing Arts, Classical and Jazz, and Dance), Music Studies (Theory, History, Composition, and Jazz Studies), and Technology provide opportunities to experience the excitement of Center for the Performing and Cinematic Arts courses. Completing these certificate programs will culminate in significant music and dance knowledge and performance experience. Each of the certificate programs offers a coherent disciplinary context beyond that which is possible in random course election. Graded experiences will be recognized on the final transcript.

Undergraduate students interested in the **Certificate in Classical Piano** must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

In addition to the online application and other requirements listed below, students must also successfully complete MUSC 1411 (classical section) or submit a video recording (DVD) of a short selection from the standard classical repertoire.

Coursework may be completed in four semesters if the program permits. Most students should complete all requirements within six semesters. Accepted students may delay certain required coursework by one semester or take courses out of sequence only with Boyer College advisor approval.

There are no exit requirements, comprehensive exams, theses, or practica required. Grading will consist of standard letter grades awarded according to Boyer College and university policy for all coursework. The minimum grade for all coursework is C-. There will be no course auditing, pass/fail grades, or CR options. Evidence of student success will be indicated by courses completed and grades earned.

Admission

Applicants must complete an online application. Admission requires students to be in good standing, and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

All application materials must be submitted by November 30 for Spring semester matriculation and May 15 for Fall semester matriculation.

Only one program may be selected. There will be no concurrent multiple program admission.

Advising and course selection will occur after admission. A grade of C- or higher must be earned in all required courses to receive the certificate.

No certificate program will be recognized as stand-alone.

No certificate program will be available to any applicant after completion of the bachelor's degree.

Certificate completion will be acknowledged on the official transcript only at the time of the awarding of the bachelor's degree.

Campus Location: Main

Program Code: BC-CLPN-CERT

Learn more about the undergraduate certificate in Classical Piano.

Requirements

The Certificate in Classical Piano will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

Code	Title	Credit Hours
MUSC 1411	Private Piano for Non-Music Majors	1
MUSC 1412	Private Piano for Non-Music Majors	1
MUSC 2411	Private Piano for Non-Music Majors	1
MUST 3770	Topics in Music Theory (take 2 times for 3 credits each)	6
MUSC 3422	Keyboard Literature	3
Total Credit Hours		12

Classical Voice Certificate

Overview

Undergraduate certificate programs in Performance (Performing Arts, Classical and Jazz, and Dance), Music Studies (Theory, History, Composition, and Jazz Studies), and Technology provide opportunities to experience the excitement of Center for the Performing and Cinematic Arts courses. Completing these certificate programs will culminate in significant music and dance knowledge and performance experience. Each of the certificate programs offers a coherent disciplinary context beyond that which is possible in random course election. Graded experiences will be recognized on the final transcript.

Undergraduate students interested in the **Certificate in Classical Voice** must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

In addition to the online application and other requirements listed below, students must also successfully complete MUSC 1256 (classical section) or submit a video recording (DVD) of one song or aria from the standard classical repertoire.

Coursework may be completed in four semesters if the program permits. Most students should complete all requirements within six semesters. Accepted students may delay certain required coursework by one semester or take courses out of sequence only with Boyer College advisor approval.

There are no exit requirements, comprehensive exams, theses, or practica required. Grading will consist of standard letter grades awarded according to Boyer College and university policy for all coursework. The minimum grade for all coursework is C-. There will be no course auditing, pass/fail grades, or CR options. Evidence of student success will be indicated by courses completed and grades earned.

Admission

Applicants must complete an online application. Admission requires students to be in good standing, and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

All application materials must be submitted by November 30 for Spring semester matriculation and May 15 for Fall semester matriculation.

Only one program may be selected. There will be no concurrent multiple program admission.

Advising and course selection will occur after admission. A grade of C- or higher must be earned in all required courses to receive the certificate.

No certificate program will be recognized as stand-alone.

No certificate program will be available to any applicant after completion of the bachelor's degree.

Certificate completion will be acknowledged on the official transcript only at the time of the awarding of the bachelor's degree.

Campus Location: Main

Program Code: BC-CLVC-CERT

Learn more about the undergraduate certificate in Classical Voice.

Requirements

The Certificate in Classical Voice will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

Code	Title	Credit Hours
MUSC 1256	Private Voice for Non-Music Majors	1
MUSC 1257	Private Voice for Non-Music Majors	1
MUSC 1258	Private Voice for Non-Music Majors	1
MUST 1741	Aural Theory I	2
MUSC 1407	Piano for Non-Music Majors I	1
MUSC 1408	Piano for Non-Music Majors II	1
MUSC 3300	Choral Ensemble (take 3 times for 1 credit each)	3
Select one of the following:		2
MUST 1701	Music Theory for Non-Music Majors	
MUST 3770	Topics in Music Theory	
Total Credit Hours		12

Composition BM

Overview

The **Bachelor of Music in Composition**, offered by the Department of Music Studies, covers courses in composition for various media, including electronic music. Creativity, the development of personal expression through music, and the assessment of music's role in the 21st-century societal context are the focal points for composition majors.

Special Admissions Requirements

See Music Admissions information (p. 314) on the Boyer College of Music and Dance page.

Campus Location: Main

Program Code: BC-COMP-BMUS

Contact Information

Edward Latham, Music Studies Department Chair
215-204-8498
elatham@temple.edu

Learn more about the Bachelor of Music in Composition.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Music in Composition is conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124 credits.

University Requirements

- All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.
- All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for the major are MUST 3696 and MUST 3896.

Program Requirements

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
MUST 3896	Theory Seminar II	3
Music History		
MUST 2703	Music in History	3
MUST 2704	Music in History	3
MUST 3696	Music in History	3
Counterpoint		
MUST 4717	Counterpoint	3
Orchestration		
MUST 3713	Orchestration	3
Composition		
MUST 1758	Composition Lesson I	3
MUST 1759	Composition Lesson II	3
MUST 2758	Composition Lesson III	3
MUST 2759	Composition Lesson IV	3
MUST 3758	Composition Lesson V	3
MUST 3759	Composition Lesson VI	3
MUST 4758	Composition Lesson VII	3
MUST 4759	Composition Lesson VIII	3
Intermediate Conducting		
MUSC 2323	Basic Conducting	1
MUSC 2324	Conducting Intermediate	1
Secondary Piano		
MUSC 1405	Secondary Piano for Music Majors	1
MUSC 1406	Secondary Piano for Music Majors	1
MUSC 2405	Secondary Piano for Music Majors	1
MUSC 2406	Secondary Piano for Music Majors	1
Music Technology		
MUST 4712	Computer Synthesis of Music	3
MUST 4720	New Music Seminar	1
MUST 4723	Score Reading	3
MUST 4724	Printing Music Scores and Parts	3
MUST 4727	Electronic Music Composition: Practice, History, Theory	3
Ensembles		
MUST 4710	Early Music Ensemble	1

Take any combination of the following eight courses for a total of 2 credits:	2
MUSC 1428	Accompanying and Piano Ensemble
MUSC 1429	Accompanying and Piano Ensemble
MUSC 3300	Choral Ensemble
MUSC 4300	Concert Choir
MUSC 4310	Graduate Conductors Choir
MUSC 4500	Instrumental Ensemble
MUSC 4510	Instrumental Ensemble
MUSC 4520	Ensemble
Electives	
Take a total of three Music Studies elective credits from MUST 1000-4999	3
Take a total of three Music Elective credits within the following subject areas:	3
MUSC 1000-4999	
MUED 1000-4999	
MUST 1000-4999	
Free Electives	6
Total Credit Hours	124

Suggested Academic Plan

Bachelor of Music in Composition

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
MUST 1758	Composition Lesson I	3
MUSC 1405	Secondary Piano for Music Majors	1
MUSC 2323	Basic Conducting	1
MUST 1711	Theory I	4
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Breadth Course		3
Credit Hours		16
Spring		
MUST 1759	Composition Lesson II	3
MUSC 1406	Secondary Piano for Music Majors	1
MUSC 2324	Conducting Intermediate	1
MUST 1712	Theory II	4
GenEd Quantitative Literacy Course ^{GQ}		4
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
Credit Hours		16
Year 2		
Fall		
MUST 2758	Composition Lesson III	3
MUSC 2405	Secondary Piano for Music Majors	1
MUST 2711	Theory III	4
MUST 2703	Music in History	3
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
GenEd Breadth Course		3
Credit Hours		17

Spring		
MUST 2759	Composition Lesson IV	3
MUSC 2406	Secondary Piano for Music Majors	1
MUST 2712	Theory IV	4
MUST 2704	Music in History	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		17
Year 3		
Fall		
MUST 3758	Composition Lesson V	3
MUST 3696	Music in History	3
MUST 4717	Counterpoint	3
Ensemble		1
MUST 4727	Electronic Music Composition: Practice, History, Theory	3
Music Elective (select from MUSC, MUED and MUST 1000-4999)		3
Credit Hours		16
Spring		
MUST 3759	Composition Lesson VI	3
MUST 4712	Computer Synthesis of Music	3
Ensemble		1
MUST 4723	Score Reading	3
MUST 3713	Orchestration	3
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
MUST 4758	Composition Lesson VII	3
MUST 4724	Printing Music Scores and Parts	3
MUST 4720	New Music Seminar	1
GenEd Breadth Course		3
Free Elective		3
Credit Hours		13
Spring		
MUST 4759	Composition Lesson VIII	3
MUST 3896	Theory Seminar II	3
MUST 4710	Early Music Ensemble	1
Music Studies Elective (select from MUST 1000-4999)		3
Free Elective		3
Credit Hours		13
Total Credit Hours		124

Dance BFA

Overview

Offered by the Department of Dance, the **Bachelor of Fine Arts in Dance** emphasizes modern dance technique, performance, choreography and dance theory. The Bachelor of Fine Arts (BFA) in Dance at Temple is focused on building well-rounded, versatile artists who are not only technically proficient, but also have a broad range and a deep understanding of their work. The BFA program focuses on modern dance technique and choreography, but with a broad curriculum that includes requirements in ballet, which follows the AMERICAN BALLET THEATRE® National Training Curriculum, African dance and other technique electives. Other course requirements include composition, repertory, creative process, improvisation and dance science, in addition to courses that explore cultural, historical and analytical approaches to the study of dance.

The BFA in Dance aims to

- Guide students toward a balance of cognitive, analytic, intuitive and creative skills.
- Aid students in development of their creative potential through technique, choreography, performance, research and other creative media.
- Educate students about the various forms and purposes of dance within their historical, social and cultural contexts.
- Provide intensive training in a range of dance techniques and styles as represented by the faculty and selected guest artists.
- Prepare students for professional careers as performing artists, choreographers, teachers, scholars, and informed and responsible leaders in academic and other professional settings.

The Bachelor of Fine Arts degree in Dance is conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124 semester hours of credit and completion of the required Dance and university requirements.

Campus Location: Main

Program Code: BC-DANC-BFA

Special Admissions Requirements

See Dance Admissions information (p. 314) on the Boyer College of Music and Dance page.

Mission

The Department of Dance is committed to artistic and scholarly excellence through fostering a creative, reflective and inclusive learning environment. Through embodied practice, the Dance faculty and students seek to honor traditions while exploring new ways of knowing dance. In recognition that we experience through the body, the programs encourage students to consider how bodies in motion contribute to knowledge, transform our social world and facilitate community engagement.

Dance Resources

The Dance Department, with its three studios, rehearsal room, Pilates room, black-box theater, video library and assorted classrooms, embraces a broad array of activities. The Philadelphia Dance Collection at Temple University (PDCAT) provides access to the dance legacy of the region through a permanent collection of multi-format archival resources related to the history of Philadelphia dance.

Special Opportunities

The Conwell Dance Theater season provides many opportunities for students to perform and choreograph. A typical season features two student concerts, two Master of Fine Arts thesis concerts, two Bachelor of Fine Arts senior concerts, a faculty dance concert and an alumni concert. Added to this are performances by guest artists, repertory showings and informal student choreography performances. Recent guest artists have included Kyle Abraham; Rennie Harris Puremovement; Cornelius Carter; Ruth Andrien, former soloist with the Paul Taylor Dance Company; and Nina Watt, member of the José Limón Dance Company.

Accreditation

Full accredited Member of the National Association of Schools of Dance (NASD).

Contact Information

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Learn more about the Bachelor of Fine Arts in Dance.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Fine Arts degree in Dance is conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124 semester hours of credit and completion of the required Dance and university requirements.

University Requirements

- All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.
- All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for the major are identified with the code "WI".

Program Requirements

Code	Title	Credit Hours
General Education courses		32
Foundation		
DANC 1801	First Year Seminar in Dance	1
DANC 1811	Movement Improvisation I	2
DANC 1812	Movement Improvisation II	2
DANC 1813	Dance Repertory I	2
DANC 1819	Dance Production	1
DANC 1834	Introduction to African Diasporic Dance Traditions	2
DANC 1835	Early Modern Dance I	2
DANC 1836	Introduction to Classical Ballet	2
DANC 1837	Neo-Traditional West African Dance I	2
DANC 1838	Early Modern Dance II	2
DANC 1839	Ballet Enchainments	2
DANC 1841	Music for Dancers	2
DANC 1852	Ways of Knowing Dance	2
Advanced Courses		
DANC 2813	Dance Composition I	2
DANC 2814	Dance Composition II	2
DANC 2833	Contemporary Approaches to Ballet I	2
DANC 2834	Neo-Traditional West African Dance II	2
DANC 2835	Post-Judson Dance Practices I	2
DANC 2837	Umfundalai Technique I	2
DANC 2838	Post-Judson Dance Practices II	2
DANC 2839	Contemporary Approaches to Ballet II	2
DANC 2872	Foundations of Dance Education	3
DANC 3811	Field Experience in Dance	2
DANC 3812	Creative Process in Dance	3
DANC 3813	Dance Repertory II	3
DANC 3831	Global Ballet Styles and Conventions	2
DANC 3832	Ballet and Abstraction	2
DANC 3834	Umfundalai Technique II	2
DANC 3835	Somatic Dance Explorations I	2
DANC 3837	Hip Hop I	2
DANC 3838	Somatic Dance Explorations II	2
DANC 3851	Lighting Design for Dance	3
DANC 3873	Creating Dance Histories	3
DANC 3896	Dancing Cultures (WI)	3
DANC 3897	Making Meaning in Dance (WI)	3
Select two of the following:		4
DANC 4832	Advanced Ballet Technique I	

DANC 4834	Hip Hop II	
DANC 4835	Contemporary Hybrid Dance Practices I	
Select two of the following:		4
DANC 4833	Advanced Ballet Technique II	
DANC 4837	Matters in Contemporary African Diasporic Dance	
DANC 4838	Contemporary Hybrid Dance Practices II	
DANC 4861	Dance Science and Somatics	3
DANC 4873	Senior Seminar	3
Select one of the following:		3
DANC 4864	Dance Education Project	
DANC 4884	Senior Choreographic Project	
Total Credit Hours		124

Suggested Academic Plan

Bachelor of Fine Arts in Dance

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
DANC 1801	First Year Seminar in Dance	1
DANC 1811	Movement Improvisation I ¹	2
DANC 1819	Dance Production ²	1
DANC 1834	Introduction to African Diasporic Dance Traditions	2
DANC 1835	Early Modern Dance I	2
DANC 1836	Introduction to Classical Ballet	2
DANC 1841	Music for Dancers	2
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
Credit Hours		16
Spring		
DANC 1813	Dance Repertory I ²	2
DANC 1837	Neo-Traditional West African Dance I	2
DANC 1838	Early Modern Dance II	2
DANC 1839	Ballet Enchainments	2
DANC 2813	Dance Composition I ¹	2
DANC 4861	Dance Science and Somatics	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		17
Year 2		
Fall		
DANC 1812	Movement Improvisation II	2
DANC 1852	Ways of Knowing Dance	2
DANC 2833	Contemporary Approaches to Ballet I	2
DANC 2834	Neo-Traditional West African Dance II	2
DANC 2835	Post-Judson Dance Practices I	2
DANC 3851	Lighting Design for Dance ²	3
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
Credit Hours		16
Spring		
DANC 2814	Dance Composition II ¹	2
DANC 2837	Umfundalai Technique I	2

DANC 2838	Post-Judson Dance Practices II	2
DANC 2839	Contemporary Approaches to Ballet II	2
DANC 3813	Dance Repertory II	3
DANC 3897	Making Meaning in Dance	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		17
Year 3		
Fall		
DANC 3812	Creative Process in Dance ¹	3
DANC 3831	Global Ballet Styles and Conventions	2
DANC 3834	Umfundalai Technique II	2
DANC 3835	Somatic Dance Explorations I	2
DANC 3896	Dancing Cultures	3
GenEd Breadth Course		3
Credit Hours		15
Spring		
DANC 2872	Foundations of Dance Education	3
DANC 3832	Ballet and Abstraction	2
DANC 3837	Hip Hop I	2
DANC 3838	Somatic Dance Explorations II	2
DANC 3873	Creating Dance Histories	3
GenEd Breadth Course		3
Credit Hours		15
Year 4		
Fall		
Select two of the following:		4
DANC 4832	Advanced Ballet Technique I	
DANC 4834	Hip Hop II	
DANC 4835	Contemporary Hybrid Dance Practices I	
DANC 4873	Senior Seminar	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		13
Spring		
DANC 3811	Field Experience in Dance	2
Select two of the following:		4
DANC 4833	Advanced Ballet Technique II	
DANC 4837	Matters in Contemporary African Diasporic Dance	
DANC 4838	Contemporary Hybrid Dance Practices II	
Select one of the following:		3
DANC 4864	Dance Education Project	
DANC 4884	Senior Choreographic Project	
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Total Credit Hours		124

1

These four courses must be completed with a C- or better to fulfill the GenEd Arts requirement.

2

May be taken in Fall or Spring.

Dance Certificate

Overview

Undergraduate certificate programs in Performance (Performing Arts, Classical and Jazz, and Dance), Music Studies (Theory, History, Composition, and Jazz Studies), and Technology provide opportunities to experience the excitement of Center for the Performing and Cinematic Arts courses. Completing these certificate programs will culminate in significant music and dance knowledge and performance experience. Each of the certificate programs offers a coherent disciplinary context beyond that which is possible in random course election. Graded experiences will be recognized on the final transcript.

Undergraduate students interested in the **Certificate in Dance**, which is offered by the Department of Dance, must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

In addition to the online application and other requirements listed below, students must also submit a video recording (DVD) of a self-choreographed solo (two minutes maximum) which demonstrates the applicant's ability to develop movement ideas using some basic elements of composition.

Coursework may be completed in four semesters if the program permits. Most students should complete all requirements within six semesters. Accepted students may delay certain required coursework by one semester or take courses out of sequence only with Boyer College advisor approval.

There are no exit requirements, comprehensive exams, theses, or practica required. Grading will consist of standard letter grades awarded according to Boyer College and university policy for all coursework. The minimum grade for all coursework is C-. There will be no course auditing, pass/fail grades, or CR options. Evidence of student success will be indicated by courses completed and grades earned.

Admission

Applicants must complete an online application. Admission requires students to be in good standing, and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

All application materials must be submitted by November 30 for Spring semester matriculation and May 15 for Fall semester matriculation.

Only one program may be selected. There will be no concurrent multiple program admission.

Advising and course selection will occur after admission. A grade of C- or higher must be earned in all required courses to receive the certificate.

No certificate program will be recognized as stand-alone.

No certificate program will be available to any applicant after completion of the bachelor's degree.

Certificate completion will be acknowledged on the official transcript only at the time of the awarding of the bachelor's degree.

Campus Location: Main

Program Code: BC-DANC-CERT

Learn more about the undergraduate certificate in Dance.

Requirements

The Certificate in Dance will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

Code	Title	Credit Hours
DANC 1804	Jazz Dance I	2
DANC 1811	Movement Improvisation I	2
DANC 1852	Ways of Knowing Dance	2
DANC 2853	African Dance I	2
Select one of the following:		2
DANC 1807	Hatha Yoga I	
DANC 2822	Pilates: Body Conditioning	
Select one of the following:		2
DANC 1815	Modern Dance Technique I A	
DANC 1831	Ballet I A	

DANC 2844

Hip Hop

Total Credit Hours**12**

Dance Minor

Overview

Offered by the Department of Dance, the **Minor in Dance** is a 22-credit hour program available to undergraduate students in other departments and colleges. The minor provides a foundation in technique, followed by a small amount of specialization in dance theory. The course requirements consist of:

Code	Title	Credit Hours
Technique Courses		14
Dance Production Course		1
Theory Courses		7
Total Credit Hours		22

A limited number of slots are available each semester, and an interview and audition are required to begin this program. Interested students are advised to contact the Dance Department via email at dance@temple.edu for further information.

Once accepted, students must follow the academic policies and procedures of the Dance Department for all dance courses. Minor credit will not be awarded for grades below a B- in Dance coursework. Upon graduation, a notation on the undergraduate transcript will indicate successful completion of the minor.

Course Limitations/Restrictions: All technique courses are repeatable two times only, which will allow a student to enroll in the same level of technique for two semesters thus ensuring opportunity to develop full competencies associated with that level. Theory courses are not repeatable, although students may enroll in courses other than those listed in the requirements with permission of the instructor.

Transfer Students: Students transferring large numbers of credits in dance who wish to complete the Dance Minor must secure an evaluation of these credits prior to beginning their course of study. All students in this category must complete a minimum of 9 credits of dance courses at Temple including one theory course and three technique courses.

Campus Location: Main

Contact Information

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Requirements

Code	Title	Credit Hours
Technique Courses		
Select from the following for a total of 14 credits:		14
DANC 1815	Modern Dance Technique I A	
DANC 1817	Modern Dance Technique I B	
DANC 2815	Modern Dance Technique II A	
DANC 2817	Modern Dance Technique II B	
DANC 3817	Modern Dance Technique III A	
DANC 3818	Modern Dance Technique III B	
DANC 2853	African Dance I	
DANC 3853	African Dance II	
DANC 1811	Movement Improvisation I	
DANC 4871	Movement Improvisation II	

DANC 2822	Pilates: Body Conditioning
DANC 1807	Hatha Yoga I
DANC 1831	Ballet I A
DANC 1832	Ballet I B
DANC 2831	Ballet II A
DANC 2832	Ballet II B
DANC 3831	Global Ballet Styles and Conventions
DANC 3832	Ballet and Abstraction
DANC 4832	Advanced Ballet Technique I
DANC 4833	Advanced Ballet Technique II
DANC 2844	Hip Hop
DANC 1804	Jazz Dance I
DANC 1805	Tap Technique I

Dance Production Course

DANC 1819	Dance Production	1
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Theory Courses

Select from the following for a total of 7 credits: 7

DANC 1852	Ways of Knowing Dance (This course is compulsory)
DANC 1841	Music for Dancers
DANC 2872	Foundations of Dance Education
DANC 3896	Dancing Cultures
DANC 3897	Making Meaning in Dance
DANC 4897	

Performance Requirements

Students must participate in at least ONE performance, whether as a choreographer or performer.

Total Credit Hours 22

Hip Hop Dance and Culture Minor

Overview

Offered by the Department of Dance, the **Minor in Hip Hop Dance and Culture** is a 22-credit hour program available to beginning and experienced dancers across the university. Studies in hip hop dance will invite undergraduate students to address broader social concepts, including race and racism, cultural appropriation and commodification, oral history traditions, and African American heritage and values. Applicants must have completed one semester of coursework at Temple University before official acceptance to the Dance minor can occur.

The course requirements consist of:

Code	Title	Credit Hours
Technique Courses		14
Dance Production Course		1
Theory Courses		7
Total Credit Hours		22

Availability: A limited number of slots are available each semester, and an interview and audition are required to begin this program. Interested students are advised to contact the Dance Department via email at dance@temple.edu for further information.

Once accepted, students must follow the academic policies and procedures of the Dance Department for all dance courses. Minor credit will not be awarded for grades below a B- in Dance coursework. Upon graduation, a notation on the undergraduate transcript will indicate successful completion of the minor.

Course Limitations/Restrictions: All technique courses are repeatable two times only, which will allow a student to enroll in the same level of technique for two semesters thus ensuring opportunity to develop full competencies associated with that level. Theory courses are not repeatable, although students may enroll in courses other than those listed in the requirements with permission of the instructor.

Transfer Students: Students transferring large numbers of credits in dance who wish to complete the Dance Minor must secure an evaluation of these credits prior to beginning their course of study. All students in this category must complete a minimum of 9 credits of dance courses at Temple including one theory course and three technique courses.

Campus Location: Main

Contact Information

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Sherril Dodds, Graduate Program Coordinator
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Requirements

Code	Title	Credit Hours
Technique Courses		
DANC 1802	Breaking: Moves and Meanings	2
DANC 1803	House and Hip Hop Social Dance	2
DANC 1834	Introduction to African Diasporic Dance Traditions	2
DANC 2806	Funk Styles: Locking and Popping	2
DANC 2807	Creating Hip Hop for the Theater Stage	2
DANC 3837	Hip Hop I	2
DANC 4834	Hip Hop II	2
Production/Theory Courses		
DANC 1819	Dance Production	1
DANC 2809	Hip Hop Entrepreneurship	2
DANC 2811	Hip Hop History and Performance	2
DANC 2872	Foundations of Dance Education	3
or DANC 3896	Dancing Cultures	
Total Credit Hours		22

Jazz Arranging Certificate

Overview

Undergraduate certificate programs in Performance (Performing Arts, Classical and Jazz, and Dance), Music Studies (Theory, History, Composition, and Jazz Studies), and Technology provide opportunities to experience the excitement of Center for the Performing and Cinematic Arts courses. Completing these certificate programs will culminate in significant music and dance knowledge and performance experience. Each of the certificate programs offers a coherent disciplinary context beyond that which is possible in random course election. Graded experiences will be recognized on the final transcript.

Undergraduate students interested in the **Certificate in Jazz Arranging** must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

In addition to the online application and other requirements listed below, students must also submit one original jazz arrangement (minimum 12 measures, PDF format) to boyer@temple.edu.

Coursework may be completed in four semesters if the program permits. Most students should complete all requirements within six semesters. Accepted students may delay certain required coursework by one semester or take courses out of sequence only with Boyer College advisor approval.

There are no exit requirements, comprehensive exams, theses, or practica required. Grading will consist of standard letter grades awarded according to Boyer College and university policy for all coursework. The minimum grade for all coursework is C-. There will be no course auditing, pass/fail grades, or CR options. Evidence of student success will be indicated by courses completed and grades earned.

Admission

Applicants must complete an online application. Admission requires students to be in good standing, and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

All application materials must be submitted by November 30 for Spring semester matriculation and May 15 for Fall semester matriculation.

Only one program may be selected. There will be no concurrent multiple program admission.

Advising and course selection will occur after admission. A grade of C- or higher must be earned in all required courses to receive the certificate.

No certificate program will be recognized as stand-alone.

No certificate program will be available to any applicant after completion of the bachelor's degree.

Certificate completion will be acknowledged on the official transcript only at the time of the awarding of the bachelor's degree.

Campus Location: Main

Program Code: BC-JZAR-CERT

Learn more about the undergraduate certificate in Jazz Arranging.

Requirements

The Certificate in Jazz Arranging will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

Code	Title	Credit Hours
MUST 3770	Topics in Music Theory (take 2 times for 2 credits each)	4
MUST 4112	Jazz Arranging I	3
MUST 4115	Jazz Arranging II	3
MUST 4110	Seminar in Jazz Composition and Arranging	2
Total Credit Hours		12

Jazz Improvisation Certificate

Overview

Undergraduate certificate programs in Performance (Performing Arts, Classical and Jazz, and Dance), Music Studies (Theory, History, Composition, and Jazz Studies), and Technology provide opportunities to experience the excitement of Center for the Performing and Cinematic Arts courses. Completing these certificate programs will culminate in significant music and dance knowledge and performance experience. Each of the certificate programs offers a coherent disciplinary context beyond that which is possible in random course election. Graded experiences will be recognized on the final transcript.

Undergraduate students interested in the **Certificate in Jazz Improvisation** must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

In addition to the online application and other requirements listed below, students must also submit a video recording (DVD) of one jazz standard (with improvisation) from *The New Real Book*.

Coursework may be completed in four semesters if the program permits. Most students should complete all requirements within six semesters. Accepted students may delay certain required coursework by one semester or take courses out of sequence only with Boyer College advisor approval.

There are no exit requirements, comprehensive exams, theses, or practica required. Grading will consist of standard letter grades awarded according to Boyer College and university policy for all coursework. The minimum grade for all coursework is C-. There will be no course auditing, pass/fail grades, or CR options. Evidence of student success will be indicated by courses completed and grades earned.

Admission

Applicants must complete an online application. Admission requires students to be in good standing, and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

All application materials must be submitted by November 30 for Spring semester matriculation and May 15 for Fall semester matriculation.

Only one program may be selected. There will be no concurrent multiple program admission.

Advising and course selection will occur after admission. A grade of C- or higher must be earned in all required courses to receive the certificate.

No certificate program will be recognized as stand-alone.

No certificate program will be available to any applicant after completion of the bachelor's degree.

Certificate completion will be acknowledged on the official transcript only at the time of the awarding of the bachelor's degree.

Campus Location: Main

Program Code: BC-JZIM-CERT

Learn more about the undergraduate certificate in Jazz Improvisation.

Requirements

The Certificate in Jazz Improvisation will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

Code	Title	Credit Hours
MUST 3770	Topics in Music Theory (take 2 times for 2 credits each)	4
MUST 4113	Jazz Improvisation: Theory and Practice I	2
MUSC 3100	Small Jazz Ensemble (take 4 times for 1 credit each)	4
MUST 4114	Jazz Improvisation: Theory and Practice II	2
Total Credit Hours		12

Jazz Piano Certificate

Overview

Undergraduate certificate programs in Performance (Performing Arts, Classical and Jazz, and Dance), Music Studies (Theory, History, Composition, and Jazz Studies), and Technology provide opportunities to experience the excitement of Center for the Performing and Cinematic Arts courses. Completing these certificate programs will culminate in significant music and dance knowledge and performance experience. Each of the certificate programs offers a coherent disciplinary context beyond that which is possible in random course election. Graded experiences will be recognized on the final transcript.

Undergraduate students interested in the **Certificate in Jazz Piano** must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

In addition to the online application and other requirements listed below, students must also successfully complete MUSC 1411 (Jazz section) or submit a video recording (DVD) of one jazz standard (with improvisation) from *The New Real Book*.

Coursework may be completed in four semesters if the program permits. Most students should complete all requirements within six semesters. Accepted students may delay certain required coursework by one semester or take courses out of sequence only with Boyer College advisor approval.

There are no exit requirements, comprehensive exams, theses, or practica required. Grading will consist of standard letter grades awarded according to Boyer College and university policy for all coursework. The minimum grade for all coursework is C-. There will be no course auditing, pass/fail grades, or CR options. Evidence of student success will be indicated by courses completed and grades earned.

Admission

Applicants must complete an online application. Admission requires students to be in good standing, and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

All application materials must be submitted by November 30 for Spring semester matriculation and May 15 for Fall semester matriculation.

Only one program may be selected. There will be no concurrent multiple program admission.

Advising and course selection will occur after admission. A grade of C- or higher must be earned in all required courses to receive the certificate.

No certificate program will be recognized as stand-alone.

No certificate program will be available to any applicant after completion of the bachelor's degree.

Certificate completion will be acknowledged on the official transcript only at the time of the awarding of the bachelor's degree.

Campus Location: Main

Program Code: BC-JZPN-CERT

Learn more about the undergraduate certificate in Jazz Piano.

Requirements

The Certificate in Jazz Piano will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

Code	Title	Credit Hours
MUSC 1411	Private Piano for Non-Music Majors	1
MUSC 1412	Private Piano for Non-Music Majors	1
MUST 3770	Topics in Music Theory (take 2 times for 2 credits each)	4
MUSC 3100	Small Jazz Ensemble (take 4 times for 1 credit each)	4
MUST 4113	Jazz Improvisation: Theory and Practice I	2
Total Credit Hours		12

Jazz Studies Composition Certificate

Overview

Undergraduate certificate programs in Performance (Performing Arts, Classical and Jazz, and Dance), Music Studies (Theory, History, Composition, and Jazz Studies), and Technology provide opportunities to experience the excitement of Center for the Performing and Cinematic Arts courses. Completing these certificate programs will culminate in significant music and dance knowledge and performance experience. Each of the certificate programs offers a coherent disciplinary context beyond that which is possible in random course election. Graded experiences will be recognized on the final transcript.

Undergraduate students interested in the **Certificate in Jazz Studies Composition** must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

In addition to the online application and other requirements listed below, students must also submit one original jazz composition (minimum 16 measures, PDF format) to boyer@temple.edu.

Coursework may be completed in four semesters if the program permits. Most students should complete all requirements within six semesters. Accepted students may delay certain required coursework by one semester or take courses out of sequence only with Boyer College advisor approval.

There are no exit requirements, comprehensive exams, theses, or practica required. Grading will consist of standard letter grades awarded according to Boyer College and university policy for all coursework. The minimum grade for all coursework is C-. There will be no course auditing, pass/fail grades, or CR options. Evidence of student success will be indicated by courses completed and grades earned.

Admission

Applicants must complete an online application. Admission requires students to be in good standing, and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

All application materials must be submitted by November 30 for Spring semester matriculation and May 15 for Fall semester matriculation.

Only one program may be selected. There will be no concurrent multiple program admission.

Advising and course selection will occur after admission. A grade of C- or higher must be earned in all required courses to receive the certificate.

No certificate program will be recognized as stand-alone.

No certificate program will be available to any applicant after completion of the bachelor's degree.

Certificate completion will be acknowledged on the official transcript only at the time of the awarding of the bachelor's degree.

Campus Location: Main

Program Code: BC-JSCO-CERT

Learn more about the undergraduate certificate in Jazz Studies Composition.

Requirements

The Certificate in Jazz Studies Composition will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

Code	Title	Credit Hours
MUST 3770	Topics in Music Theory (take 2 times for 3 credits each)	6
MUST 4110	Seminar in Jazz Composition and Arranging	2
MUST 4112	Jazz Arranging I	3
MUST 4120	Seminar in Advanced Jazz Composition and Arranging	2
Total Credit Hours		13

Jazz Studies/Composition BM

Overview

The **Bachelor of Music in Jazz Studies/Composition** is offered by the Department of Music Studies.

Students **must select one of the following concentrations**:

- Bassoon
- Cello
- Clarinet
- Double Bass
- Euphonium
- Flute
- French Horn
- Guitar
- Harp
- Oboe
- Percussion
- Piano
- Saxophone
- Trombone
- Trumpet
- Tuba
- Viola
- Violin
- Voice

Students of Temple's Jazz Studies program have the opportunity to participate in various large and small ensembles, including Jazz Band, Lab Band, Percussion Ensemble and Jazz Vocal Ensemble. These ensembles provide comprehensive performance experience in solo as well as ensemble playing for both instrumentalists and vocalists. All the performing groups are coached by an experienced faculty of musician-educators. Graduates are prepared to begin a career as professional performers and composers.

Special Admissions Requirements

See Music Admissions information (p. 314) on the Boyer College of Music and Dance page.

Campus Location: Main

Program Code: BC-JSCO-BMUS

Contact Information

Terell Stafford, Director of Jazz Studies
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terell.stafford@temple.edu

Tim Warfield, Jr.
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warfield@temple.edu

Learn more about the Bachelor of Music in Jazz Studies/Composition.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Music in Jazz Studies/Composition is conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 123 credits. This major requires a concentration; the available concentrations are Instrumental (options include Bassoon, Cello, Clarinet, Double Bass, Euphonium, Flute, French Horn, Guitar, Harp, Oboe, Percussion, Saxophone, Trombone, Trumpet, Tuba, Viola, and Violin), Piano and Voice.

University Requirements

- All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.
- All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for the major are MUST 3196 and MUST 3896.

Program Requirements (Instrumental Concentration)

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
MUST 3896	Theory Seminar II	3
Music History		
MUST 2704	Music in History	3
MUST 2114	History of Jazz	3
MUST 3196	History of Pop	3
Basic Conducting		
MUSC 2323	Basic Conducting	1
Orchestration		
MUST 3713	Orchestration	3
The Business of Music		
MUST 1118	Business of Music I	2
Music Technology Elective		
Select one of the following:		3
MUST 4712	Computer Synthesis of Music	
MUST 4713	Sound Recording	
MUST 4714	Sound Editing	
MUST 4716	Composing Music for Films	
MUST 4719	MIDI	
MUST 4762	Introduction to Music Technology for Non-Majors	
Jazz Studies		
MUST 4110	Seminar in Jazz Composition and Arranging (Take four times for eight total credits)	8
MUST 4111	Jazz Style and Analysis	2
MUST 4112	Jazz Arranging I	3
MUST 4113	Jazz Improvisation: Theory and Practice I	2

MUST 4114	Jazz Improvisation: Theory and Practice II	2
MUST 4115	Jazz Arranging II	3
MUST 4120	Seminar in Advanced Jazz Composition and Arranging (Take two times for four total credits)	4
Instrumental Concentration		
MUSC 1501	Instrumental Concentration	2
MUSC 1502	Instrumental Concentration	2
MUSC 2501	Instrumental Concentration	2
MUSC 2502	Instrumental Concentration	2
MUSC 3501	Instrumental Concentration	2
MUSC 3502	Instrumental Concentration	2
MUSC 4501	Instrumental Concentration	2
MUSC 4502	Instrumental Concentration	2
Secondary Piano		
MUSC 1405	Secondary Piano for Music Majors	1
MUST 1106	Jazz Secondary Piano	1
MUST 2105	Jazz Secondary Piano	1
MUST 2106	Jazz Secondary Piano	1
Ensembles		
Take any combination of the following four courses for a total of 10 credits:		10
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 3300	Choral Ensemble	
MUSC 4520	Ensemble	

Total Credit Hours**123****Program Requirements (Piano Concentration)**

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
MUST 3896	Theory Seminar II	3
Music History		
MUST 2704	Music in History	3
MUST 2114	History of Jazz	3
MUST 3196	History of Pop	3
Basic Conducting		
MUSC 2323	Basic Conducting	1
Orchestration		
MUST 3713	Orchestration	3
The Business of Music		
MUST 1118	Business of Music I	2
Music Technology Elective		
Select one of the following:		3
MUST 4712	Computer Synthesis of Music	
MUST 4713	Sound Recording	
MUST 4714	Sound Editing	
MUST 4716	Composing Music for Films	
MUST 4719	MIDI	

MUST 4762	Introduction to Music Technology for Non-Majors	
Jazz Studies		
MUST 4110	Seminar in Jazz Composition and Arranging (Take four times for 8 total credits)	8
MUST 4111	Jazz Style and Analysis	2
MUST 4112	Jazz Arranging I	3
MUST 4113	Jazz Improvisation: Theory and Practice I	2
MUST 4114	Jazz Improvisation: Theory and Practice II	2
MUST 4115	Jazz Arranging II	3
MUST 4120	Seminar in Advanced Jazz Composition and Arranging (Take two times for 4 total credits)	4
Piano Concentration		
MUSC 1401	Piano Concentration	2
MUSC 1402	Piano Concentration	2
MUSC 2401	Piano Concentration	2
MUSC 2402	Piano Concentration	2
MUSC 3401	Piano Concentration	2
MUSC 3402	Piano Concentration	2
MUSC 4401	Piano Concentration	2
MUSC 4402	Piano Concentration	2
Ensembles		
Take any combination of the following three courses for a total of 10 credits:		10
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 4520	Ensemble	
Electives		
Free Electives		4
Total Credit Hours		123

Program Requirements (Voice Concentration)

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
MUST 3896	Theory Seminar II	3
Music History		
MUST 2704	Music in History	3
MUST 2114	History of Jazz	3
MUST 3196	History of Pop	3
Basic Conducting		
MUSC 2323	Basic Conducting	1
Orchestration		
MUST 3713	Orchestration	3
The Business of Music		
MUST 1118	Business of Music I	2
Music Technology Elective		
Select one of the following:		3
MUST 4712	Computer Synthesis of Music	
MUST 4713	Sound Recording	
MUST 4714	Sound Editing	

MUST 4716	Composing Music for Films	
MUST 4719	MIDI	
MUST 4762	Introduction to Music Technology for Non-Majors	
Jazz Studies		
MUST 4110	Seminar in Jazz Composition and Arranging (Take four times for 8 total credits)	8
MUST 4111	Jazz Style and Analysis	2
MUST 4112	Jazz Arranging I	3
MUST 4113	Jazz Improvisation: Theory and Practice I	2
MUST 4114	Jazz Improvisation: Theory and Practice II	2
MUST 4115	Jazz Arranging II	3
MUST 4120	Seminar in Advanced Jazz Composition and Arranging (Take two times for 4 total credits)	4
Voice Concentration		
MUSC 1201	Voice Concentration	2
MUSC 1202	Voice Concentration	2
MUSC 2201	Voice Concentration	2
MUSC 2202	Voice Concentration	2
MUSC 3201	Voice Concentration	2
MUSC 3202	Voice Concentration	2
MUSC 4201	Voice Concentration	2
MUSC 4202	Voice Concentration	2
Secondary Piano		
MUSC 1405	Secondary Piano for Music Majors	1
MUST 1106	Jazz Secondary Piano	1
MUST 2105	Jazz Secondary Piano	1
MUST 2106	Jazz Secondary Piano	1
Ensembles		
Take any combination of the following four courses for a total of 10 credits:		10
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 3300	Choral Ensemble	
MUSC 4520	Ensemble	

Total Credit Hours**123**

Suggested Academic Plan

Bachelor of Music in Jazz Studies/Composition

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MUSC 1405	Secondary Piano for Music Majors ¹	1
Select one of the following:		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 3300	Choral Ensemble	
MUSC 4520	Ensemble	
MUST 1711	Theory I	4
MUST 1118	Business of Music I	2
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Breadth Course		3
Select one of the following:		2
MUSC 1201	Voice Concentration	

MUSC 1401	Piano Concentration	
MUSC 1501	Instrumental Concentration	
Credit Hours		17
Spring		
MUST 1106	Jazz Secondary Piano ¹	1
Select one of the following:		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 3300	Choral Ensemble	
MUSC 4520	Ensemble	
MUST 1712	Theory II (Jazz)	4
GenEd Breadth Course		3
GenEd Quantitative Literacy Course ^{GQ}		4
Select one of the following:		2
MUSC 1202	Voice Concentration	
MUSC 1402	Piano Concentration	
MUSC 1502	Instrumental Concentration	
Credit Hours		15
Year 2		
Fall		
MUST 2105	Jazz Secondary Piano ¹	1
Select one of the following:		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 3300	Choral Ensemble	
MUSC 4520	Ensemble	
Select one of the following:		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 3300	Choral Ensemble	
MUSC 4520	Ensemble	
MUST 2711	Theory III (Jazz)	4
GenEd Breadth Course		3
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
Select one of the following:		2
MUSC 2201	Voice Concentration	
MUSC 2401	Piano Concentration	
MUSC 2501	Instrumental Concentration	
Credit Hours		15
Spring		
MUST 2106	Jazz Secondary Piano ¹	1
Select one of the following:		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 3300	Choral Ensemble	
MUSC 4520	Ensemble	
Select one of the following:		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 3300	Choral Ensemble	
MUSC 4520	Ensemble	

MUST 2712	Theory IV (Jazz)	4
MUST 4113	Jazz Improvisation: Theory and Practice I	2
MUST 2704	Music in History	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Select one of the following:		2
MUSC 2202	Voice Concentration	
MUSC 2402	Piano Concentration	
MUSC 2502	Instrumental Concentration	
Credit Hours		17
Year 3		
Fall		
MUST 4112	Jazz Arranging I	3
MUST 4114	Jazz Improvisation: Theory and Practice II	2
Select one of the following:		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 3300	Choral Ensemble	
MUSC 4520	Ensemble	
MUST 4110	Seminar in Jazz Composition and Arranging	2
MUSC 2323	Basic Conducting	1
GenEd Breadth Course		3
MUST 3196	History of Pop	3
Select one of the following:		2
MUSC 3201	Voice Concentration	
MUSC 3401	Piano Concentration	
MUSC 3501	Instrumental Concentration	
Credit Hours		17
Spring		
MUST 4115	Jazz Arranging II	3
Select one of the following:		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 3300	Choral Ensemble	
MUSC 4520	Ensemble	
MUST 4111	Jazz Style and Analysis	2
MUST 4110	Seminar in Jazz Composition and Arranging	2
MUST 2114	History of Jazz	3
GenEd Breadth Course		3
Select one of the following:		2
MUSC 3202	Voice Concentration	
MUSC 3402	Piano Concentration	
MUSC 3502	Instrumental Concentration	
Credit Hours		16
Year 4		
Fall		
Select one of the following:		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 3300	Choral Ensemble	
MUSC 4520	Ensemble	
MUST 4110	Seminar in Jazz Composition and Arranging	2

MUST 4120	Seminar in Advanced Jazz Composition and Arranging	2
MUST 3713	Orchestration	3
Music Technology Elective (see list below)		3
Select one of the following:		2
MUSC 4201	Voice Concentration	
MUSC 4401	Piano Concentration	
MUSC 4501	Instrumental Concentration	
Credit Hours		13
Spring		
Select one of the following:		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 3300	Choral Ensemble	
MUSC 4520	Ensemble	
MUST 4110	Seminar in Jazz Composition and Arranging	2
MUST 4120	Seminar in Advanced Jazz Composition and Arranging	2
GenEd Breadth Course		3
MUST 3896	Theory Seminar II	3
Select one of the following:		2
MUSC 4202	Voice Concentration	
MUSC 4402	Piano Concentration	
MUSC 4502	Instrumental Concentration	
Credit Hours		13
Total Credit Hours		123

Code	Title	Credit Hours
Music Technology Electives		
MUST 4712	Computer Synthesis of Music (Spring)	3
MUST 4713	Sound Recording (Fall)	3
MUST 4714	Sound Editing (Spring)	3
MUST 4716	Composing Music for Films (Fall)	3
MUST 4719	MIDI (Fall)	3
MUST 4762	Introduction to Music Technology for Non-Majors (Spring)	3

1

Piano concentration students should not take the 4 credits of Secondary Piano shown in this Academic Plan. They should instead take 4 additional credits of free electives.

Jazz Studies/Performance BM

Overview

The **Bachelor of Music in Jazz Studies/Performance** is offered by the Department of Music Studies.

Students **must select one of the following concentrations**:

- Bassoon
- Cello
- Clarinet
- Double Bass
- Euphonium
- Flute
- French Horn
- Guitar

- Harp
- Oboe
- Percussion
- Piano
- Saxophone
- Trombone
- Trumpet
- Tuba
- Viola
- Violin
- Voice

The following information pertains to all concentrations except for Piano and Voice. Refer to the Piano (p. 362) and Voice (p. 366) pages for their requirements.

Students of Temple's Jazz Studies program can participate in both large and small ensembles. Jazz Band, Lab Band, Percussion Ensemble and Vocal Ensemble provide comprehensive performance experiences in solo as well as ensemble playing for both instrumentalists and vocalists. All the performing groups are coached by an experienced faculty of musician-educators. Graduates are prepared to begin a career as professional performers.

Special Admissions Requirements

See Music Admissions information (p. 314) on the Boyer College of Music and Dance page.

Campus Location: Main

Program Code: BC-JSPE-BMUS

Contact Information

Terell Stafford, Director of Jazz Studies
215-204-8036
terell.stafford@temple.edu

Tim Warfield, Jr.
215-204-8306
warfield@temple.edu

Learn more about the Bachelor of Music in Jazz Studies/Performance.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Music in Jazz Studies/Performance, with a concentration in one of the following instruments: Bassoon, Cello, Clarinet, Double Bass, Euphonium, Flute, French Horn, Guitar, Harp, Oboe, Percussion, Saxophone, Trombone, Trumpet, Tuba, Viola and Violin, is conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124 credits.

University Requirements

- All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.
- All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for the major are MUST 3196 and MUST 3896.

Program Requirements

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4

MUST 2712	Theory IV	4
Music History		
MUST 2704	Music in History	3
MUST 2114	History of Jazz	3
MUST 3196	History of Pop	3
Jazz Studies		
MUST 3896	Theory Seminar II	3
MUST 4111	Jazz Style and Analysis	2
MUST 4112	Jazz Arranging I	3
MUST 4113	Jazz Improvisation: Theory and Practice I	2
MUST 4114	Jazz Improvisation: Theory and Practice II	2
The Business of Music		
MUST 1118	Business of Music I	2
Music Technology Elective		
Select one of the following:		3
MUST 4712	Computer Synthesis of Music	
MUST 4713	Sound Recording	
MUST 4714	Sound Editing	
MUST 4716	Composing Music for Films	
MUST 4719	MIDI	
MUST 4762	Introduction to Music Technology for Non-Majors	
Instrumental Concentration		
MUSC 1503	Instrumental Major	4
MUSC 1504	Instrumental Major	4
MUSC 2503	Instrumental Major	4
MUSC 2504	Instrumental Major	4
MUSC 3503	Instrumental Major	4
MUSC 3504	Instrumental Major	4
MUSC 4503	Instrumental Major	4
MUSC 4584	Instrumental Major	4
Ensembles		
MUSC 3100	Small Jazz Ensemble (Take eight times for eight total credits)	8
MUSC 3110	Large Jazz Ensemble (Take five times for five total credits)	5
Basic Conducting		
MUSC 2323	Basic Conducting	1
Secondary Piano		
MUSC 1405	Secondary Piano for Music Majors	1
MUST 1106	Jazz Secondary Piano	1
MUST 2105	Jazz Secondary Piano	1
MUST 2106	Jazz Secondary Piano	1
Total Credit Hours		124

Suggested Academic Plan

Bachelor of Music: Jazz Studies/Performance, Instrumental Concentrations

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MUSC 1503	Instrumental Major	4
MUSC 1405	Secondary Piano for Music Majors	1
MUSC 3100	Small Jazz Ensemble	1
MUST 1711	Theory I	4

ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
Credit Hours		17
Spring		
MUSC 1504	Instrumental Major	4
MUST 1106	Jazz Secondary Piano	1
MUSC 3100	Small Jazz Ensemble	1
MUST 1712	Theory II (Jazz)	4
GenEd Breadth Course		3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		17
Year 2		
Fall		
MUSC 2503	Instrumental Major	4
MUST 2105	Jazz Secondary Piano	1
MUSC 3100	Small Jazz Ensemble	1
MUSC 3110	Large Jazz Ensemble	1
MUST 2711	Theory III (Jazz)	4
GenEd Breadth Course		3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		17
Spring		
MUSC 2504	Instrumental Major	4
MUST 2106	Jazz Secondary Piano	1
MUSC 3100	Small Jazz Ensemble	1
MUST 2712	Theory IV (Jazz)	4
MUST 4113	Jazz Improvisation: Theory and Practice I	2
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
MUSC 3110	Large Jazz Ensemble	1
Credit Hours		16
Year 3		
Fall		
MUSC 3503	Instrumental Major	4
MUSC 3100	Small Jazz Ensemble	1
MUSC 3110	Large Jazz Ensemble	1
MUST 4112	Jazz Arranging I	3
MUST 4114	Jazz Improvisation: Theory and Practice II	2
MUST 3196	History of Pop	3
MUST 1118	Business of Music I	2
Credit Hours		16
Spring		
MUSC 3504	Instrumental Major	4
MUSC 3100	Small Jazz Ensemble	1
MUSC 3110	Large Jazz Ensemble	1
MUST 4111	Jazz Style and Analysis	2
MUST 2114	History of Jazz	3
MUST 2704	Music in History	3
Credit Hours		14

Year 4		
Fall		
Code	Title	Credit Hours
MUSC 4503	Instrumental Major	4
MUSC 3100	Small Jazz Ensemble	1
MUSC 3110	Large Jazz Ensemble	1
MUSC 2323	Basic Conducting	1
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		13
Spring		
MUSC 4584	Instrumental Major	4
MUSC 3100	Small Jazz Ensemble	1
Music Technology Elective (see list below)		3
MUST 3896	Theory Seminar II	3
GenEd Breadth Course		3
Credit Hours		14
Total Credit Hours		124

Code	Title	Credit Hours
Music Technology Electives		
MUST 4712	Computer Synthesis of Music (Spring)	3
MUST 4713	Sound Recording (Fall)	3
MUST 4714	Sound Editing (Spring)	3
MUST 4716	Composing Music for Films (Fall)	3
MUST 4719	MIDI (Fall)	3
MUST 4762	Introduction to Music Technology for Non-Majors (Spring)	3

Jazz Studies/Performance BM with Piano Concentration

Overview

The **Bachelor of Music in Jazz Studies/Performance** is offered by the Department of Music Studies.

Students **must select one of the following concentrations**:

- Bassoon,
- Cello,
- Clarinet,
- Double Bass,
- Euphonium,
- Flute,
- French Horn,
- Guitar,
- Harp,
- Oboe,
- Percussion,
- Piano,
- Saxophone,
- Trombone,
- Trumpet,
- Tuba,
- Viola,

- Violin, and
- Voice.

Piano Concentration

The following information pertains to the **Piano concentration**. Refer to Voice (p. 366) and the other instruments (p. 358) pages for their requirements.

Students of Temple's Jazz Studies program can participate in both large and small ensembles. Jazz Band, Lab Band, Percussion Ensemble and Vocal Ensemble provide comprehensive performance experiences in solo as well as ensemble playing for both instrumentalists and vocalists. All the performing groups are coached by an experienced faculty of musician-educators. Graduates are prepared to begin a career as professional performers.

Weekly private lessons are reinforced by regular performance classes, and a series of master classes taught by faculty members and guests artists focuses on special topics essential to the keyboard performer.

Special Admissions Requirements

See Music Admissions information (p. 314) on the Boyer College of Music and Dance page.

Campus Location: Main

Program Code: BC-JSPE-BMUS

Contact Information

Terell Stafford, Director of Jazz Studies
215-204-8036
terell.stafford@temple.edu

Tim Warfield, Jr.
215-204-8306
warfield@temple.edu

Learn more about the Bachelor of Music in Jazz Studies/Performance.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Music in Jazz Studies/Performance with a concentration in Piano is conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124 credits.

University Requirements

- All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.
- All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for the major are MUST 3196 and MUST 3896.

Program Requirements

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
Music History		
MUST 2704	Music in History	3
MUST 2114	History of Jazz	3
MUST 3196	History of Pop	3
Jazz Studies		

MUST 3896	Theory Seminar II	3
MUST 4111	Jazz Style and Analysis	2
MUST 4112	Jazz Arranging I	3
MUST 4113	Jazz Improvisation: Theory and Practice I	2
MUST 4114	Jazz Improvisation: Theory and Practice II	2
The Business of Music		
MUST 1118	Business of Music I	2
Music Technology Elective		
Select one of the following:		3
MUST 4712	Computer Synthesis of Music	
MUST 4713	Sound Recording	
MUST 4714	Sound Editing	
MUST 4716	Composing Music for Films	
MUST 4719	MIDI	
MUST 4762	Introduction to Music Technology for Non-Majors	
Piano Concentration		
MUSC 1403	Piano Major	4
MUSC 1404	Piano Major	4
MUSC 2403	Piano Major	4
MUSC 2404	Piano Major	4
MUSC 3403	Piano Major	4
MUSC 3404	Piano Major	4
MUSC 4403	Piano Major	4
MUSC 4484	Piano Major	4
Ensembles		
MUSC 3100	Small Jazz Ensemble (Take eight times for eight total credits)	8
Take any combination of the following two courses for a total of 5 credits:		5
MUSC 3110	Large Jazz Ensemble	
MUSC 4520	Ensemble	
Basic Conducting		
MUSC 2323	Basic Conducting	1
Electives		
Free Electives		4
Total Credit Hours		124

Suggested Academic Plan

Bachelor of Music in Jazz Studies/Performance with Concentration in Piano

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
MUSC 1403	Piano Major	4
MUSC 3100	Small Jazz Ensemble	1
Select one of the following:		1
MUSC 3110	Large Jazz Ensemble	
MUSC 4520	Ensemble	
MUST 1711	Theory I	4
Credit Hours		14

Spring		
MUSC 1404	Piano Major	4
MUSC 3100	Small Jazz Ensemble	1
Select one of the following:		1
MUSC 3110	Large Jazz Ensemble	
MUSC 4520	Ensemble	
MUST 1712	Theory II	4
GenEd Breadth Course		3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		17

Year 2		
Fall		
MUSC 2403	Piano Major	4
MUSC 3100	Small Jazz Ensemble	1
Select one of the following:		1
MUSC 3110	Large Jazz Ensemble	
MUSC 4520	Ensemble	
MUST 1118	Business of Music I	2
MUST 2711	Theory III	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		15

Spring		
MUSC 2404	Piano Major	4
MUSC 3100	Small Jazz Ensemble	1
Select one of the following:		1
MUSC 3110	Large Jazz Ensemble	
MUSC 4520	Ensemble	
MUST 2712	Theory IV	4
MUST 4113	Jazz Improvisation: Theory and Practice I	2
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		15

Year 3		
Fall		
MUSC 2323	Basic Conducting	1
MUSC 3100	Small Jazz Ensemble	1
MUSC 3403	Piano Major	4
MUST 3196	History of Pop	3
MUST 4112	Jazz Arranging I	3
MUST 4114	Jazz Improvisation: Theory and Practice II	2
GenEd Breadth Course		3
Credit Hours		17

Spring		
MUSC 3100	Small Jazz Ensemble	1
MUSC 3404	Piano Major	4
MUST 2704	Music in History	3
MUST 3896	Theory Seminar II	3
MUST 4111	Jazz Style and Analysis	2
GenEd Breadth Course		3
Credit Hours		16

Year 4		
Fall		
MUSC 3100	Small Jazz Ensemble	1
MUSC 4403	Piano Major	4
Select one of the following:		1
MUSC 3110	Large Jazz Ensemble	
MUSC 4520	Ensemble	
Music Technology Elective (see list below)		3
GenEd Breadth Course		3
Free Elective		4

Credit Hours	16
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Spring		
MUST 2114	History of Jazz	3
MUSC 3100	Small Jazz Ensemble	1
MUSC 4484	Piano Major	4
GenEd Breadth Course		3
GenEd Breadth Course		3

Credit Hours	14
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Total Credit Hours	124
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Code	Title	Credit Hours
Music Technology Electives		
MUST 4712	Computer Synthesis of Music (Spring)	3
MUST 4713	Sound Recording (Fall)	3
MUST 4714	Sound Editing (Spring)	3
MUST 4716	Composing Music for Films (Fall)	3
MUST 4719	MIDI (Fall)	3
MUST 4762	Introduction to Music Technology for Non-Majors (Spring)	3

Jazz Studies/Performance BM with Voice Concentration

Overview

The **Bachelor of Music in Jazz Studies/Performance** is offered by the Department of Music Studies.

Students **must select one of the following concentrations**:

- Bassoon
- Cello
- Clarinet
- Double Bass
- Euphonium
- Flute
- French Horn
- Guitar
- Harp
- Oboe
- Percussion
- Piano
- Saxophone
- Trombone
- Trumpet
- Tuba

- Viola
- Violin
- Voice

Voice Concentration

The following information pertains to the **Voice concentration**. Refer to Piano (p. 362) and the other instruments (p. 358) pages for their requirements.

Students of Temple's Jazz Studies program have the opportunity to participate in both large and small ensembles. Jazz Band, Lab Band, Percussion Ensemble and Vocal Ensemble provide comprehensive performance experiences in solo as well as ensemble playing for both instrumentalists and vocalists. All the performing groups are coached by an experienced faculty of musician-educators. Graduates are prepared to begin a career as professional performers.

The training provided by the Jazz Studies Program emphasizes vocal technique and repertoire in a challenging program of vocal development. Performance progress is closely guided through private lessons, juries and recital performances. The program of study prepares singers for careers in concert and recital performances with jazz ensembles.

Special Admissions Requirements

See Music Admissions information (p. 314) on the Boyer College of Music and Dance page.

Campus Location: Main

Program Code: BC-JSPE-BMUS

Contact Information

Terell Stafford, Director of Jazz Studies
215-204-8036
terell.stafford@temple.edu

Learn more about the Bachelor of Music in Jazz Studies/Performance.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Music in Jazz Studies/Performance with a Voice Concentration is conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124 credits.

University Requirements

- All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.
- All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for the major are MUST 3196 and MUST 3896.

Program Requirements

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
Music History		
MUST 2704	Music in History	3
MUST 2114	History of Jazz	3
MUST 3196	History of Pop	3
Jazz Studies		
MUST 3896	Theory Seminar II	3

MUST 4111	Jazz Style and Analysis	2
MUST 4112	Jazz Arranging I	3
MUST 4113	Jazz Improvisation: Theory and Practice I	2
MUST 4114	Jazz Improvisation: Theory and Practice II	2
The Business of Music		
MUST 1118	Business of Music I	2
Music Technology Elective		
Select one of the following:		3
MUST 4712	Computer Synthesis of Music	
MUST 4713	Sound Recording	
MUST 4714	Sound Editing	
MUST 4716	Composing Music for Films	
MUST 4719	MIDI	
MUST 4762	Introduction to Music Technology for Non-Majors	
Voice Concentration		
MUSC 1203	Voice Major	3
MUSC 1204	Voice Major	3
MUSC 2203	Voice Major	3
MUSC 2204	Voice Major	3
MUSC 3203	Voice Major	3
MUSC 3204	Voice Major	3
MUSC 4203	Voice Major	3
MUSC 4284	Voice Major	3
Ensembles		
MUSC 3100	Small Jazz Ensemble (Take eight times for eight total credits)	8
MUSC 3110	Large Jazz Ensemble	2
MUSC 3120	Vocal Jazz Ensemble	4
Intermediate Conducting		
MUSC 2323	Basic Conducting	1
MUSC 2324	Conducting Intermediate	1
Secondary Piano		
MUSC 1405	Secondary Piano for Music Majors	1
MUST 1106	Jazz Secondary Piano	1
MUST 2105	Jazz Secondary Piano	1
MUST 2106	Jazz Secondary Piano	1
Jazz Voice Major Elective		
Take any combination of the following three courses for a total of 3 credits:		3
MUSC 3300	Choral Ensemble	
MUST 3770	Topics in Music Theory	
MUST 4110	Seminar in Jazz Composition and Arranging	
MUST 4115	Jazz Arranging II	
MUST 4120	Seminar in Advanced Jazz Composition and Arranging	
Electives		
Free Electives		3
Total Credit Hours		124

Suggested Academic Plan

Bachelor of Music in Jazz Studies/Performance with Concentration in Voice

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MUSC 1203	Voice Major	3
MUSC 1405	Secondary Piano for Music Majors	1
MUSC 3100	Small Jazz Ensemble	1
MUSC 3120	Vocal Jazz Ensemble	1
MUST 1711	Theory I	4
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		14
Spring		
MUSC 1204	Voice Major	3
MUST 1106	Jazz Secondary Piano	1
MUSC 3100	Small Jazz Ensemble	1
MUST 1712	Theory II (Jazz)	4
GenEd Breadth Course		3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Year 2		
Fall		
MUSC 2203	Voice Major	3
MUST 2105	Jazz Secondary Piano	1
MUSC 3100	Small Jazz Ensemble	1
MUSC 3120	Vocal Jazz Ensemble	1
MUST 2711	Theory III	4
MUST 1118	Business of Music I	2
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		15
Spring		
MUSC 2204	Voice Major	3
MUST 2106	Jazz Secondary Piano	1
MUSC 3100	Small Jazz Ensemble	1
MUSC 3120	Vocal Jazz Ensemble	1
MUST 2712	Theory IV	4
MUST 4113	Jazz Improvisation: Theory and Practice I	2
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		15
Year 3		
Fall		
MUSC 3203	Voice Major	3
MUST 4112	Jazz Arranging I	3
MUST 4114	Jazz Improvisation: Theory and Practice II	2
MUSC 2323	Basic Conducting	1
MUSC 3100	Small Jazz Ensemble	1
MUSC 3120	Vocal Jazz Ensemble	1

GenEd Breadth Course		3
MUST 3196	History of Pop	3
Credit Hours		17
Spring		
MUSC 3204	Voice Major	3
MUSC 3100	Small Jazz Ensemble	1
MUSC 3110	Large Jazz Ensemble	1
MUST 2704	Music in History	3
MUST 4111	Jazz Style and Analysis	2
MUSC 2324	Conducting Intermediate	1
MUST 3896	Theory Seminar II	3
GenEd Breadth Course		3
Credit Hours		17
Year 4		
Fall		
MUSC 4203	Voice Major	3
MUSC 3100	Small Jazz Ensemble	1
MUSC 3110	Large Jazz Ensemble	1
Jazz Voice Major Elective - Take any combination of the following for a total of 3 credits:		3
MUSC 3300	Choral Ensemble	
MUST 3770	Topics in Music Theory	
MUST 4110	Seminar in Jazz Composition and Arranging	
MUST 4115	Jazz Arranging II	
MUST 4120	Seminar in Advanced Jazz Composition and Arranging	
GenEd Breadth Course		3
Music Technology Elective (see list below)		3
Credit Hours		14
Spring		
MUSC 4284	Voice Major	3
MUSC 3100	Small Jazz Ensemble	1
MUST 2114	History of Jazz	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Free Elective		3
Credit Hours		16
Total Credit Hours		124
Code	Title	Credit Hours
Music Technology Electives		
MUST 4712	Computer Synthesis of Music (Spring)	3
MUST 4713	Sound Recording (Fall)	3
MUST 4714	Sound Editing (Spring)	3
MUST 4716	Composing Music for Films (Fall)	3
MUST 4719	MIDI (Fall)	3
MUST 4762	Introduction to Music Technology for Non-Majors	3

Jazz Voice Certificate

Overview

Undergraduate certificate programs in Performance (Performing Arts, Classical and Jazz, and Dance), Music Studies (Theory, History, Composition, and Jazz Studies), and Technology provide opportunities to experience the excitement of Center for the Performing and Cinematic Arts courses. Completing

these certificate programs will culminate in significant music and dance knowledge and performance experience. Each of the certificate programs offers a coherent disciplinary context beyond that which is possible in random course election. Graded experiences will be recognized on the final transcript.

Undergraduate students interested in the **Certificate in Jazz Voice** must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

In addition to the online application and other requirements listed below, students must also successfully complete MUSC 1256 (Jazz section) or submit a video recording (DVD) of one jazz standard (with improvisation) from *The New Real Book*.

Coursework may be completed in four semesters if the program permits. Most students should complete all requirements within six semesters. Accepted students may delay certain required coursework by one semester or take courses out of sequence only with Boyer College advisor approval.

There are no exit requirements, comprehensive exams, theses, or practica required. Grading will consist of standard letter grades awarded according to Boyer College and university policy for all coursework. The minimum grade for all coursework is C-. There will be no course auditing, pass/fail grades, or CR options. Evidence of student success will be indicated by courses completed and grades earned.

Admission

Applicants must complete an online application. Admission requires students to be in good standing, and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

All application materials must be submitted by November 30 for Spring semester matriculation and May 15 for Fall semester matriculation.

Only one program may be selected. There will be no concurrent multiple program admission.

Advising and course selection will occur after admission. A grade of C- or higher must be earned in all required courses to receive the certificate.

No certificate program will be recognized as stand-alone.

No certificate program will be available to any applicant after completion of the bachelor's degree.

Certificate completion will be acknowledged on the official transcript only at the time of the awarding of the bachelor's degree.

Campus Location: Main

Program Code: BC-JZVC-CERT

Learn more about the undergraduate certificate in Jazz Voice.

Requirements

The Certificate in Jazz Voice will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

Code	Title	Credit Hours
MUSC 1256	Private Voice for Non-Music Majors	1
MUSC 1257	Private Voice for Non-Music Majors	1
MUST 3770	Topics in Music Theory (take 2 times for 2 credits each)	4
MUSC 3100	Small Jazz Ensemble (take 4 times for 1 credit each)	4
MUSC 3300	Choral Ensemble (take 2 times for 1 credit each)	2
Total Credit Hours		12

Music BS

Overview

The **Bachelor of Science in Music** is offered by the Department of Music Studies.

This program is designed to prepare students for such fields as library science, the publishing industry, communications, the computer software industry, and other new and diverse areas of the music profession.

Special Admissions Requirements

See Music Admission information (p. 314) on the Boyer College of Music and Dance Overview page.

Campus Location: Main

Program Code: BC-MUSC-BS

Contact Information

Edward Latham, Music Studies Department Chair
215-204-8498
elatham@temple.edu (elatham@temple.edu)

Learn more about the Bachelor of Science in Music.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Science in Music is conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124 credits.

University Requirements

- All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.
- All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses for the major are MUST 3196 and MUST 3696.

Program Requirements

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
Music History		
MUST 2703	Music in History	3
MUST 2704	Music in History	3
MUST 3196	History of Pop	3
MUST 3696	Music in History	3
World Music		
MUST 4715	World Music	3
Choral Conducting		
MUSC 2323	Basic Conducting	1
MUSC 2324	Conducting Intermediate	1
Secondary Piano		
MUSC 1405	Secondary Piano for Music Majors	1
MUSC 1406	Secondary Piano for Music Majors	1
MUSC 2405	Secondary Piano for Music Majors	1
MUSC 2406	Secondary Piano for Music Majors	1
Ensembles		
MUST 4700	Latin Amer Mus Ensemble	1
MUST 4710	Early Music Ensemble	1
Take any combination of the following choral ensembles for a total of 2 credits:		2
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	

Foreign Language

Foreign Language I	4
Foreign Language II	4
Foreign Language III	3
Foreign Language IV	3
Internship	
MUST 4785 Music Industry Internship	3
Electives	
Take any combination of the following three subjects for a total of 12 Music Elective credits:	12
MUSC 1000-4999	
MUED 1000-4999	
MUST 1000-4999	
General Electives	22
Total Credit Hours	124

Suggested Academic Plan

Bachelor of Science in Music

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
MUSC 1405	Secondary Piano for Music Majors	1
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUST 1711	Theory I	4
General Elective		3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Breadth Course		3
	Credit Hours	16
Spring		
MUSC 1406	Secondary Piano for Music Majors	1
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUST 1712	Theory II	4
MUST 4715	World Music	3
GenEd Quantitative Literacy Course ^{GQ}		4
GenEd Breadth Course		3
	Credit Hours	16
Year 2		
Fall		
MUSC 2405	Secondary Piano for Music Majors	1
MUST 2711	Theory III	4
MUST 2703	Music in History	3
MUST 4700	Latin Amer Mus Ensemble	1
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
Foreign Language I		4
	Credit Hours	16

Spring		
MUSC 2406	Secondary Piano for Music Majors	1
MUST 2712	Theory IV	4
MUST 2704	Music in History	3
MUST 4710	Early Music Ensemble	1
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Foreign Language II		4
Credit Hours		16
Year 3		
Fall		
MUSC 2323	Basic Conducting	1
MUST 3696	Music in History	3
Foreign Language III		3
GenEd Breadth Course		3
GenEd Breadth Course		3
General Elective		3
Credit Hours		16
Spring		
MUSC 2324	Conducting Intermediate	1
Foreign Language IV		3
GenEd Breadth Course		3
GenEd Breadth Course		3
General Elective		3
Music Elective (select from MUSC, MUED, and MUST 1000-4999)		3
Credit Hours		16
Year 4		
Fall		
MUST 3196	History of Pop	3
General Electives ¹		7
MUST 4785	Music Industry Internship	3
Music Elective (select from MUSC, MUED, and MUST 1000-4999)		3
Credit Hours		16
Spring		
Music Electives (select from MUSC, MUED and MUST 1000-4999)		6
General Electives		6
Credit Hours		12
Total Credit Hours		124

1

FMA 1141 Film, Video and Interactive Foundations I (4 s.h.) is recommended as one of the General Electives.

Music Certificate

Overview

Undergraduate certificate programs in Performance (Performing Arts, Classical and Jazz, and Dance), Music Studies (Theory, History, Composition, and Jazz Studies), and Technology provide opportunities to experience the excitement of Center for the Performing and Cinematic Arts courses. Completing these certificate programs will culminate in significant music and dance knowledge and performance experience. Each of the certificate programs offers a coherent disciplinary context beyond that which is possible in random course election. Graded experiences will be recognized on the final transcript.

Undergraduate students interested in the **Certificate in Music** must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

Students must complete the online application and other requirements listed below. No audition or portfolio is required.

Coursework may be completed in four semesters if the program permits. Most students should complete all requirements within six semesters. Accepted students may delay certain required coursework by one semester or take courses out of sequence only with Boyer College advisor approval.

There are no exit requirements, comprehensive exams, theses, or practica required. Grading will consist of standard letter grades awarded according to Boyer College and university policy for all coursework. The minimum grade for all coursework is C-. There will be no course auditing, pass/fail grades, or CR options. Evidence of student success will be indicated by courses completed and grades earned.

Admission

Applicants must complete an online application. Admission requires students to be in good standing, and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

All application materials must be submitted by November 30 for Spring semester matriculation and May 15 for Fall semester matriculation.

Only one program may be selected. There will be no concurrent multiple program admission.

Advising and course selection will occur after admission. A grade of C- or higher must be earned in all required courses to receive the certificate.

No certificate program will be recognized as stand-alone.

No certificate program will be available to any applicant after completion of the bachelor's degree.

Certificate completion will be acknowledged on the official transcript only at the time of the awarding of the bachelor's degree.

Campus Location: Main

Program Code: BC-MUSC-CERT

Learn more about the undergraduate certificate in Music.

Requirements

The Certificate in Music will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course.

There are two course completion options for the Certificate in Music: Music A and Music B.

Code	Title	Credit Hours
Music A Course Requirements		
MUST 3770	Topics in Music Theory	2
MUST 2703	Music in History	3
Choose one of the following:		3
MUSC 3300	Choral Ensemble (take 3 times for 1 credit each)	
MUSC 1411	Private Piano for Non-Music Majors (take 3 times for 1 credit each)	
MUSC 4520	Ensemble (take 3 times for 1 credit each)	
MUST 2704	Music in History	3
MUST 2733	American Musical Theater	3
Total Credit Hours		14

Code	Title	Credit Hours
Music B Course Requirements		
MUST 1701	Music Theory for Non-Music Majors	2
MUST 1763	American Popular Music	2
Select one of the following:		3
MUSC 3300	Choral Ensemble (take 3 times for 1 credit each)	
MUSC 1411	Private Piano for Non-Music Majors (take 3 times for 1 credit each)	
MUSC 4520	Ensemble (take 3 times for 1 credit each)	
MUST 2112	Pop Song Writing	2

Music Composition Certificate

Overview

Undergraduate certificate programs in Performance (Performing Arts, Classical and Jazz, and Dance), Music Studies (Theory, History, Composition, and Jazz Studies), and Technology provide opportunities to experience the excitement of Center for the Performing and Cinematic Arts courses. Completing these certificate programs will culminate in significant music and dance knowledge and performance experience. Each of the certificate programs offers a coherent disciplinary context beyond that which is possible in random course election. Graded experiences will be recognized on the final transcript.

Undergraduate students interested in the **Certificate in Music Composition** must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

In addition to the online application and other requirements listed below, students must also submit one original composition (minimum 16 measures, PDF format) to boyer@temple.edu.

Coursework may be completed in four semesters if the program permits. Most students should complete all requirements within six semesters. Accepted students may delay certain required coursework by one semester or take courses out of sequence only with Boyer College advisor approval.

There are no exit requirements, comprehensive exams, theses, or practica required. Grading will consist of standard letter grades awarded according to Boyer College and university policy for all coursework. The minimum grade for all coursework is C-. There will be no course auditing, pass/fail grades, or CR options. Evidence of student success will be indicated by courses completed and grades earned.

Admission

Applicants must complete an online application. Admission requires students to be in good standing, and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

All application materials must be submitted by November 30 for Spring semester matriculation and May 15 for Fall semester matriculation.

Only one program may be selected. There will be no concurrent multiple program admission.

Advising and course selection will occur after admission. A grade of C- or higher must be earned in all required courses to receive the certificate.

No certificate program will be recognized as stand-alone.

No certificate program will be available to any applicant after completion of the bachelor's degree.

Certificate completion will be acknowledged on the official transcript only at the time of the awarding of the bachelor's degree.

Campus Location: Main

Program Code: BC-COMP-CERT

Learn more about the undergraduate certificate in Music Composition.

Requirements

The Certificate in Music Composition will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

Code	Title	Credit Hours
MUST 3770	Topics in Music Theory (take 2 times for 3 credits each)	6
MUST 2748	Composition I	2
MUST 2749	Composition II	2
MUST 4717	Counterpoint	3
Total Credit Hours		13

Music Education BM

Overview

Offered by the Department of Music Education and Music Therapy, the **Bachelor of Music in Music Education** focuses on developing music educators at the undergraduate level who will be ready for successful entry into the teaching profession.

Faculty recommendations for student teaching are not automatic. They must be earned by the student through demonstrated potential in the field, a 3.0 GPA, passing an approved Basic Skill Assessment, and passing Praxis exam II. Students not recommended for student teaching may be permitted to graduate after successful completion of additional coursework, but will not be recommended for Pennsylvania State Music Teacher Certification.

Upon successful completion of the four-year program of study, the five-year double major program of study, or the five-year program with Jazz Component, and upon achieving passing scores on the Praxis Series Assessments (Professional Assessments for Beginning Teachers), students qualify for Pennsylvania state certification for public school music teachers, K-12.

Students **must select one of the following concentrations:**

- Bassoon
- Cello
- Clarinet
- Classical Guitar
- Double Bass
- Euphonium
- Flute
- French Horn
- Harp
- Harpsichord
- Oboe
- Percussion
- Piano
- Saxophone
- Trombone
- Trumpet
- Tuba
- Viola
- Violin
- Voice

Special Admissions Requirements

See Music Admissions information (p. 314) on the Boyer College of Music and Dance page.

Campus Location: Main

Program Code: BC-MUED-BMUS

Contact Information

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Learn more about the Bachelor of Music in Music Education.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Music in Music Education is conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126-128 credits (depending on the concentration). This major requires a concentration; the available concentrations are Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Harpsichord, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin and Voice.

University Requirements

- All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.
- All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses for the major are MUED 2696 and MUST 3696.

Program Requirements (Cello, Classical Guitar, Double Bass, Harp, Viola, Violin)

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
Music History		
MUST 2703	Music in History	3
MUST 2704	Music in History	3
MUST 3696	Music in History	3
Music Education		
MUED 1671	Collaboration & Creativity in the New Music Community	3
MUED 2665	Music Learning & Development	3
MUED 2696	Teaching General Music to Inclusive Populations (TGMIP)	3
MUED 3661	Introduction to Teaching Students with Special Needs	3
MUED 3662	Keyboard Harmony - Music Education	3
MUED 4666	Assessment of Music Learning	3
MUED 4667	Teaching Instrumental Music to Inclusive Populations	3
MUED 4668	Senior Student Teaching Seminar	3
MUED 4669	Teaching Choral Music to Inclusive Populations	3
MUED 4689	Student Teaching-Elementary	3
MUED 4789	Student Teaching - Secondary	3
Instrumental Concentration		
MUSC 1501	Instrumental Concentration	2
MUSC 1502	Instrumental Concentration	2
MUSC 2501	Instrumental Concentration	2
MUSC 2502	Instrumental Concentration	2
MUSC 3501	Instrumental Concentration	2
MUSC 3502	Instrumental Concentration	2
Secondary Piano		
MUSC 1405	Secondary Piano for Music Majors	1
MUSC 1406	Secondary Piano for Music Majors	1
MUSC 2405	Secondary Piano for Music Majors	1
MUSC 2406	Secondary Piano for Music Majors	1
Instrumental Pedagogy		
Take any combination of the following seven courses for a total of 6 credits:		6
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	

MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
Vocal Pedagogy		
Select one of the following (MUED 2675 is recommended):		2
MUED 2671	School Choral Ensembles	
MUED 2675	Inclusive Vocal Development: Pre-Kindergarten - Secondary	
Instrumental Conducting		
MUSC 2323	Basic Conducting	1
MUSC 2324	Conducting Intermediate	1
MUSC 4324	Conducting (Instrumental)	2
Jazz Education		
MUED 2673	Jazz Education - Instrumental	2
Ensembles		
Take any combination of the following five courses for a total of 7 credits:		7
MUSC 1428	Accompanying and Piano Ensemble	
MUSC 1429	Accompanying and Piano Ensemble	
MUSC 3510	Marching Band	
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
Total Credit Hours		128

Program Requirements (Bassoon, Clarinet, Euphonium, Flute, French Horn, Harpsichord, Oboe, Percussion, Saxophone, Trombone, Trumpet, Tuba)

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
Music History		
MUST 2703	Music in History	3
MUST 2704	Music in History	3
MUST 3696	Music in History	3
Music Education		
MUED 1671	Collaboration & Creativity in the New Music Community	3
MUED 2665	Music Learning & Development	3
MUED 2696	Teaching General Music to Inclusive Populations (TGMIP)	3
MUED 3661	Introduction to Teaching Students with Special Needs	3
MUED 3662	Keyboard Harmony - Music Education	3
MUED 4666	Assessment of Music Learning	3
MUED 4667	Teaching Instrumental Music to Inclusive Populations	3
MUED 4668	Senior Student Teaching Seminar	3
MUED 4669	Teaching Choral Music to Inclusive Populations	3
MUED 4689	Student Teaching-Elementary	3

MUED 4789	Student Teaching - Secondary	3
Instrumental Concentration		
MUSC 1501	Instrumental Concentration	2
MUSC 1502	Instrumental Concentration	2
MUSC 2501	Instrumental Concentration	2
MUSC 2502	Instrumental Concentration	2
MUSC 3501	Instrumental Concentration	2
MUSC 3502	Instrumental Concentration	2
Secondary Piano		
MUSC 1405	Secondary Piano for Music Majors	1
MUSC 1406	Secondary Piano for Music Majors	1
MUSC 2405	Secondary Piano for Music Majors	1
MUSC 2406	Secondary Piano for Music Majors	1
Instrumental Pedagogy		
Take any combination of the following seven courses for a total of 6 credits:		6
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
Vocal Pedagogy		
Select one of the following (MUED 2675 is recommended):		2
MUED 2671	School Choral Ensembles	
MUED 2675	Inclusive Vocal Development: Pre-Kindergarten - Secondary	
Instrumental Conducting		
MUSC 2323	Basic Conducting	1
MUSC 2324	Conducting Intermediate	1
MUSC 4324	Conducting (Instrumental)	2
Jazz Education		
MUED 2673	Jazz Education - Instrumental	2
Ensembles		
MUSC 3510	Marching Band	1
Take any combination of the following four courses for a total of 6 credits:		6
MUSC 3510	Marching Band	
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	

Total Credit Hours **128**

Program Requirements (Piano Concentration with Band/Orchestra Emphasis)

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4

MUST 2711	Theory III	4
MUST 2712	Theory IV	4
Music History		
MUST 2703	Music in History	3
MUST 2704	Music in History	3
MUST 3696	Music in History	3
Music Education		
MUED 1671	Collaboration & Creativity in the New Music Community	3
MUED 2665	Music Learning & Development	3
MUED 2696	Teaching General Music to Inclusive Populations (TGMIP)	3
MUED 3661	Introduction to Teaching Students with Special Needs	3
MUED 3662	Keyboard Harmony - Music Education	3
MUED 4666	Assessment of Music Learning	3
MUED 4667	Teaching Instrumental Music to Inclusive Populations	3
MUED 4668	Senior Student Teaching Seminar	3
MUED 4669	Teaching Choral Music to Inclusive Populations	3
MUED 4689	Student Teaching-Elementary	3
MUED 4789	Student Teaching - Secondary	3
Piano Concentration		
MUSC 1401	Piano Concentration	2
MUSC 1402	Piano Concentration	2
MUSC 2401	Piano Concentration	2
MUSC 2402	Piano Concentration	2
MUSC 3401	Piano Concentration	2
MUSC 3402	Piano Concentration	2
Instrumental Pedagogy		
Take any combination of the following seven courses for a total of 6 credits:		6
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
Vocal Pedagogy		
MUED 2671	School Choral Ensembles	2
MUED 2675	Inclusive Vocal Development: Pre-Kindergarten - Secondary	2
Choral Conducting		
MUSC 2323	Basic Conducting	1
MUSC 2324	Conducting Intermediate	1
MUSC 4323	Conducting (Choral)	2
Jazz Education		
MUED 2674	Jazz Education - Vocal	2
Ensembles		
MUSC 1428	Accompanying and Piano Ensemble	1
MUSC 1429	Accompanying and Piano Ensemble	1
Take any combination of the following three courses for a total of 4 credits:		4
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
Take any combination of the following three courses for a total of 2 credits:		2
MUSC 4500	Instrumental Ensemble	

MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
Total Credit Hours		126

Program Requirements (Piano Concentration with Choral/General Emphasis)

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
Music History		
MUST 2703	Music in History	3
MUST 2704	Music in History	3
MUST 3696	Music in History	3
Music Education		
MUED 1671	Collaboration & Creativity in the New Music Community	3
MUED 2665	Music Learning & Development	3
MUED 2696	Teaching General Music to Inclusive Populations (TGMIP)	3
MUED 3661	Introduction to Teaching Students with Special Needs	3
MUED 3662	Keyboard Harmony - Music Education	3
MUED 4666	Assessment of Music Learning	3
MUED 4667	Teaching Instrumental Music to Inclusive Populations	3
MUED 4668	Senior Student Teaching Seminar	3
MUED 4669	Teaching Choral Music to Inclusive Populations	3
MUED 4689	Student Teaching-Elementary	3
MUED 4789	Student Teaching - Secondary	3
Piano Concentration		
MUSC 1401	Piano Concentration	2
MUSC 1402	Piano Concentration	2
MUSC 2401	Piano Concentration	2
MUSC 2402	Piano Concentration	2
MUSC 3401	Piano Concentration	2
MUSC 3402	Piano Concentration	2
Instrumental Pedagogy		
Take any combination of the following seven courses for a total of 6 credits:		6
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
Vocal Pedagogy		
MUED 2671	School Choral Ensembles	2
MUED 2675	Inclusive Vocal Development: Pre-Kindergarten - Secondary	2
Choral Conducting		
MUSC 2323	Basic Conducting	1
MUSC 2324	Conducting Intermediate	1
MUSC 4323	Conducting (Choral)	2

Jazz Education		
MUED 2674	Jazz Education - Vocal	2
Diction		
MUSC 1225	English Diction	1
Ensembles		
MUSC 1428	Accompanying and Piano Ensemble	1
MUSC 1429	Accompanying and Piano Ensemble	1
Take any combination of the following three courses for a total of 6 credits:		6
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
Total Credit Hours		127

Program Requirements (Voice Concentration)

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
Music History		
MUST 2703	Music in History	3
MUST 2704	Music in History	3
MUST 3696	Music in History	3
Music Education		
MUED 1671	Collaboration & Creativity in the New Music Community	3
MUED 2665	Music Learning & Development	3
MUED 2696	Teaching General Music to Inclusive Populations (TGMIP)	3
MUED 3661	Introduction to Teaching Students with Special Needs	3
MUED 3662	Keyboard Harmony - Music Education	3
MUED 4666	Assessment of Music Learning	3
MUED 4667	Teaching Instrumental Music to Inclusive Populations	3
MUED 4668	Senior Student Teaching Seminar	3
MUED 4669	Teaching Choral Music to Inclusive Populations	3
MUED 4689	Student Teaching-Elementary	3
MUED 4789	Student Teaching - Secondary	3
Voice Concentration		
MUSC 1201	Voice Concentration	2
MUSC 1202	Voice Concentration	2
MUSC 2201	Voice Concentration	2
MUSC 2202	Voice Concentration	2
MUSC 3201	Voice Concentration	2
MUSC 3202	Voice Concentration	2
Secondary Piano		
MUSC 1405	Secondary Piano for Music Majors	1
MUSC 1406	Secondary Piano for Music Majors	1
MUSC 2405	Secondary Piano for Music Majors	1
MUSC 2406	Secondary Piano for Music Majors	1
Instrumental Pedagogy		
Take any combination of the following seven courses for a total of 4 credits:		4

MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
Vocal Pedagogy		
MUED 2671	School Choral Ensembles	2
MUED 2675	Inclusive Vocal Development: Pre-Kindergarten - Secondary	2
Choral Conducting		
MUSC 2323	Basic Conducting	1
MUSC 2324	Conducting Intermediate	1
MUSC 4323	Conducting (Choral)	2
Jazz Education		
MUED 2674	Jazz Education - Vocal	2
Diction		
MUSC 1225	English Diction	1
Ensembles		
Take any combination of the following three courses for a total of 7 credits:		7
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
Total Credit Hours		128

Suggested Academic Plans

The Bachelor of Music in Music Education consists of several concentrations. The academic plans for those concentrations follow.

- Instrumental Concentrations (p. 384)
- Piano Concentration, Band/Orchestra Emphasis (p. 387)
- Piano Concentration, Choral/General Emphasis (p. 390)
- Voice Concentration (p. 392)

Bachelor of Music in Music Education with Instrumental Concentrations

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MUSC 1501	Instrumental Concentration	2
Select one of the following Ensembles: ¹		1
MUSC 1428	Accompanying and Piano Ensemble	
MUSC 1429	Accompanying and Piano Ensemble	
MUSC 3510	Marching Band	
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
MUST 1711	Theory I	4
MUSC 1405	Secondary Piano for Music Majors	1
Select two of the following Instrumental Pedagogy courses:		2
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	

MUED 1656	Brass II	
MUED 1657	Woodwinds II	
MUED 4666	Assessment of Music Learning	3
GenEd Quantitative Literacy ^{GQ}		4
Credit Hours		17
Spring		
MUSC 1502	Instrumental Concentration	2
Select one of the following Ensembles: ¹		1
MUSC 1428	Accompanying and Piano Ensemble	
MUSC 1429	Accompanying and Piano Ensemble	
MUSC 3510	Marching Band	
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
MUSC 1406	Secondary Piano for Music Majors	1
MUST 1712	Theory II	4
Select two of the following Instrumental Pedagogy courses, but do not select the same courses taken in year 1 fall:		2
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
MUED 3661	Introduction to Teaching Students with Special Needs	3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
Credit Hours		17
Year 2		
Fall		
MUSC 2501	Instrumental Concentration	2
Select one of the following Ensembles: ¹		1
MUSC 1428	Accompanying and Piano Ensemble	
MUSC 1429	Accompanying and Piano Ensemble	
MUSC 3510	Marching Band	
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
MUSC 2405	Secondary Piano for Music Majors	1
MUST 2711	Theory III	4
MUSC 2323	Basic Conducting	1
Select two of the following Instrumental Pedagogy courses, but do not select the same courses taken in year 1:		2
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
MUST 2703	Music in History	3
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
Credit Hours		17

Spring

MUSC 2502	Instrumental Concentration	2
Select one of the following Ensembles: ¹		1
MUSC 1428	Accompanying and Piano Ensemble	
MUSC 1429	Accompanying and Piano Ensemble	
MUSC 3510	Marching Band	
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
MUST 2712	Theory IV	4
MUST 2704	Music in History	3
MUSC 2324	Conducting Intermediate	1
MUED 2665	Music Learning & Development	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		17

Year 3**Fall**

MUSC 3501	Instrumental Concentration	2
Select one of the following Ensembles: ¹		1
MUSC 1428	Accompanying and Piano Ensemble	
MUSC 1429	Accompanying and Piano Ensemble	
MUSC 3510	Marching Band	
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
Select one of the following Vocal Pedagogy courses:		2
MUED 2675	Inclusive Vocal Development: Pre-Kindergarten - Secondary (recommended)	
MUED 2671	School Choral Ensembles	
MUSC 2406	Secondary Piano for Music Majors	1
MUSC 4324	Conducting (Instrumental)	2
MUED 2696	Teaching General Music to Inclusive Populations (TGMIP)	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		17

Spring

MUSC 3502	Instrumental Concentration	2
Select one of the following Ensembles: ¹		1
MUSC 1428	Accompanying and Piano Ensemble	
MUSC 1429	Accompanying and Piano Ensemble	
MUSC 3510	Marching Band	
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
MUST 3696	Music in History	3
MUED 3662	Keyboard Harmony - Music Education	3
MUED 2673	Jazz Education - Instrumental	2
MUED 4667	Teaching Instrumental Music to Inclusive Populations	3
MUED 1671	Collaboration & Creativity in the New Music Community	3
Credit Hours		17

Year 4**Fall**

Select one of the following Ensembles: ¹		1
MUSC 1428	Accompanying and Piano Ensemble	
MUSC 1429	Accompanying and Piano Ensemble	

MUSC 3510	Marching Band	
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUED 4669	Teaching Choral Music to Inclusive Populations	3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		17
Spring		
MUED 4668	Senior Student Teaching Seminar	3
MUED 4689	Student Teaching-Elementary	3
MUED 4789	Student Teaching - Secondary	3
Credit Hours		9
Total Credit Hours		128

1

One semester of MUSC 3510 Marching Band is required for students whose principal instruments are woodwinds, brass, and percussion. Normally this requirement is fulfilled in the fall semester of freshman year. Although the requirement is only one semester, students may register for Marching Band as often as they would like.

Bachelor of Music in Music Education with a Concentration in Piano - Band/Orchestra Emphasis

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
MUSC 1401	Piano Concentration	2
Select one of the following: ¹		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUST 1711	Theory I	4
MUED 2671	School Choral Ensembles	2
Select one of the following Instrumental Pedagogy courses:		1
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
MUED 4666	Assessment of Music Learning	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		17
Spring		
MUSC 1402	Piano Concentration	2
Select one of the following: ¹		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	

MUSC 4310	Graduate Conductors Choir	
MUST 1712	Theory II	4
MUED 2675	Inclusive Vocal Development: Pre-Kindergarten - Secondary	2
Select one of the following Instrumental Pedagogy courses, but do not select the same course taken in year 1 fall:		1
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
MUED 3661	Introduction to Teaching Students with Special Needs	3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
Credit Hours		17

Year 2**Fall**

MUSC 2401	Piano Concentration	2
Select one of the following: ¹		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUST 2711	Theory III	4
MUST 2703	Music in History	3
MUSC 2323	Basic Conducting	1
Select two of the following Instrumental Pedagogy courses, but do not select the same courses taken in year 1:		2
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
MUSC 1428	Accompanying and Piano Ensemble ¹	1
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	

Credit Hours**17****Spring**

MUSC 2402	Piano Concentration	2
MUSC 1429	Accompanying and Piano Ensemble ¹	1
MUSC 2324	Conducting Intermediate	1
MUST 2712	Theory IV	4
MUST 2704	Music in History	3
MUED 2665	Music Learning & Development	3
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	

Credit Hours**17****Year 3****Fall**

MUSC 3401	Piano Concentration	2
Select one of the following: ¹		1
MUSC 3300	Choral Ensemble	

MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUSC 4323	Conducting (Choral)	2
MUED 2696	Teaching General Music to Inclusive Populations (TGMIP)	3
MUED 4669	Teaching Choral Music to Inclusive Populations	3
MUED 3662	Keyboard Harmony - Music Education	3
GenEd Breadth Course		3
Credit Hours		17
Spring		
MUSC 3402	Piano Concentration	2
Select one of the following Ensembles: ¹		1
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
MUST 3696	Music in History	3
Select two of the following Instrumental Pedagogy courses, but do not select the same courses taken in previous semesters:		2
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
MUED 4667	Teaching Instrumental Music to Inclusive Populations	3
MUED 1671	Collaboration & Creativity in the New Music Community	3
MUED 2674	Jazz Education - Vocal	2
Credit Hours		16
Year 4		
Fall		
Select one of the following Ensembles: ¹		1
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Spring		
MUED 4668	Senior Student Teaching Seminar	3
MUED 4689	Student Teaching-Elementary	3
MUED 4789	Student Teaching - Secondary	3
Credit Hours		9
Total Credit Hours		126

1

Seven semesters of ensemble participation are required for a total of 8 credit hours in the Piano Concentration, Band/Orchestra Emphasis: 4 credit hours of Choral Ensembles; 2 credit hours of Instrumental Ensembles; and 2 credit hours of Piano/Accompanying Ensembles.

Bachelor of Music in Music Education with a Concentration in Piano - Choral/General Emphasis

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MUSC 1401	Piano Concentration	2
Select one of the following: ¹		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUST 1711	Theory I	4
MUED 2671	School Choral Ensembles	2
Select one of the following Instrumental Pedagogy courses:		1
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
MUED 4666	Assessment of Music Learning	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		17
Spring		
MUSC 1402	Piano Concentration	2
Select one of the following: ¹		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUST 1712	Theory II	4
MUED 2675	Inclusive Vocal Development: Pre-Kindergarten - Secondary	2
Select one of the following Instrumental Pedagogy courses, but do not select the same course taken in year 1 fall:		1
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
MUED 3661	Introduction to Teaching Students with Special Needs	3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
Credit Hours		17
Year 2		
Fall		
MUSC 2401	Piano Concentration	2
Select one of the following: ¹		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUST 2711	Theory III	4

MUST 2703	Music in History	3
MUSC 2323	Basic Conducting	1
Select two of the following Instrumental Pedagogy courses, but do not select the same courses taken in year 1:		2
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
MUSC 1428	Accompanying and Piano Ensemble ¹	1
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		17
Spring		
MUSC 2402	Piano Concentration	2
MUSC 1429	Accompanying and Piano Ensemble ¹	1
MUSC 2324	Conducting Intermediate	1
MUST 2712	Theory IV	4
MUST 2704	Music in History	3
MUED 2665	Music Learning & Development	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		17
Year 3		
Fall		
MUSC 3401	Piano Concentration	2
Select one of the following: ¹		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUSC 4323	Conducting (Choral)	2
MUED 2696	Teaching General Music to Inclusive Populations (TGMIP)	3
MUED 4669	Teaching Choral Music to Inclusive Populations	3
MUED 2674	Jazz Education - Vocal	2
Select one of the following Instrumental Pedagogy courses, but do not select the same courses taken in previous semesters:		1
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
MUED 3662	Keyboard Harmony - Music Education	3
Credit Hours		17
Spring		
MUSC 3402	Piano Concentration	2
Select one of the following: ¹		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUST 3696	Music in History	3

Select one of the following Instrumental Pedagogy courses, but do not select the same courses taken in previous semesters:		1
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
MUED 4667	Teaching Instrumental Music to Inclusive Populations	3
MUED 1671	Collaboration & Creativity in the New Music Community	3
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
Select one of the following: ¹		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUSC 1225	English Diction	1
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		17
Spring		
MUED 4668	Senior Student Teaching Seminar	3
MUED 4689	Student Teaching-Elementary	3
MUED 4789	Student Teaching - Secondary	3
Credit Hours		9
Total Credit Hours		127

1

Seven semesters of ensemble participation are required for a total of 8 credit hours in the Piano Concentration, Choral/General Emphasis: 6 credit hours of Choral Ensembles and 2 credit hours of Piano/Accompanying Ensembles.

Bachelor of Music in Music Education with a Concentration in Voice

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
MUSC 1201	Voice Concentration	2
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUSC 1405	Secondary Piano for Music Majors	1
MUST 1711	Theory I	4
Select one of the following Instrumental Pedagogy courses:		1
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	

MUED 1656	Brass II	
MUED 1657	Woodwinds II	
MUSC 1225	English Diction	1
MUED 4666	Assessment of Music Learning	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		17
Spring		
MUSC 1202	Voice Concentration	2
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUSC 1406	Secondary Piano for Music Majors	1
MUST 1712	Theory II	4
MUED 2671	School Choral Ensembles	2
MUED 3661	Introduction to Teaching Students with Special Needs	3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
Credit Hours		17
Year 2		
Fall		
MUSC 2201	Voice Concentration	2
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUSC 2405	Secondary Piano for Music Majors	1
MUST 2711	Theory III	4
MUST 2703	Music in History	3
MUSC 2323	Basic Conducting	1
Select two of the following Instrumental Pedagogy courses, but do not select the same course taken in year 1:		2
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
Credit Hours		17
Spring		
MUSC 2202	Voice Concentration	2
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUST 2704	Music in History	3
MUST 2712	Theory IV	4
MUSC 2324	Conducting Intermediate	1
MUED 2665	Music Learning & Development	3

IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		17
Year 3		
Fall		
MUSC 3201	Voice Concentration	2
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUSC 4323	Conducting (Choral)	2
MUSC 2406	Secondary Piano for Music Majors	1
MUED 2696	Teaching General Music to Inclusive Populations (TGMIP)	3
MUED 2674	Jazz Education - Vocal	2
MUED 4669	Teaching Choral Music to Inclusive Populations	3
GenEd Breadth Course		3
Credit Hours		17
Spring		
MUSC 3202	Voice Concentration	2
MUST 3696	Music in History	3
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUED 2675	Inclusive Vocal Development: Pre-Kindergarten - Secondary	2
MUED 3662	Keyboard Harmony - Music Education	3
MUED 4667	Teaching Instrumental Music to Inclusive Populations	3
MUED 1671	Collaboration & Creativity in the New Music Community	3
Credit Hours		17
Year 4		
Fall		
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
Select one of the following Instrumental Pedagogy courses, but do not select the same course taken in previous semesters:		1
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		17
Spring		
MUED 4668	Senior Student Teaching Seminar	3
MUED 4689	Student Teaching-Elementary	3

MUED 4789	Student Teaching - Secondary	3
	Credit Hours	9
	Total Credit Hours	128

Music Education/Jazz BM

Overview

Offered by the Department of Music Education and Music Therapy, the **Bachelor of Music in Music Education/Jazz** focuses on developing music educators at the undergraduate level who will be ready for successful entry into the teaching profession.

Faculty recommendations for student teaching are not automatic. They must be earned by the student through demonstrated potential in the field, a 3.0 GPA, and passing of Praxis exams I and II. Students not recommended for student teaching may be permitted to graduate after successful completion of additional coursework but will not be recommended for Pennsylvania State Music Teacher Certification.

Upon successful completion of this five-year program and upon achieving passing scores on the Praxis Series Assessments (Professional Assessments for Beginning Teachers), students qualify for Pennsylvania state certification for public school music teachers, K-12.

Students **must select one of the following concentrations:**

- Bassoon
- Cello
- Clarinet
- Double Bass
- Euphonium
- Flute
- French Horn
- Guitar
- Harp
- Oboe
- Percussion
- Piano
- Saxophone
- Trombone
- Trumpet
- Tuba
- Viola
- Violin
- Voice

Special Admissions Requirements

See Music Admissions information (p. 314) on the Boyer College of Music and Dance page.

Campus Location: Main

Program Code: BC-MEJZ-BMUS

Contact Information

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Learn more about the Bachelor of Music in Music Education/Jazz.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Music in Music Education/Jazz is conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 158-161 credits (depending on concentration). This major requires a concentration; the available concentrations are Bassoon, Cello, Clarinet, Double Bass, Euphonium, Flute, French Horn, Guitar, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin and Voice.

University Requirements

- All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.
- All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for the major are MUED 2696, MUST 3196, and MUST 3696.

Program Requirements (Bassoon, Cello, Clarinet, Double Bass, Euphonium, Flute, French Horn, Guitar, Harp, Oboe, Percussion, Saxophone, Trombone, Trumpet, Tuba, Viola and Violin)

Code	Title	Credit Hours
General Education courses		32
Senior Project		0
Music Theory		
MUST 1134	Harmony II: Jazz	4
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
Music History		
MUST 2703	Music in History	3
MUST 2704	Music in History	3
MUST 2114	History of Jazz	3
MUST 3196	History of Pop	3
MUST 3696	Music in History	3
Counterpoint		
MUST 4717	Counterpoint	3
Orchestration		
MUST 3713	Orchestration	3
Music Education		
MUED 1671	Collaboration & Creativity in the New Music Community	3
MUED 2665	Music Learning & Development	3
MUED 2696	Teaching General Music to Inclusive Populations (TGMIP)	3
MUED 3661	Introduction to Teaching Students with Special Needs	3
MUED 3662	Keyboard Harmony - Music Education	3
MUED 4666	Assessment of Music Learning	3
MUED 4667	Teaching Instrumental Music to Inclusive Populations	3
MUED 4668	Senior Student Teaching Seminar	3
MUED 4669	Teaching Choral Music to Inclusive Populations	3
MUED 4689	Student Teaching-Elementary	3
MUED 4789	Student Teaching - Secondary	3
Jazz Arranging		
MUST 4112	Jazz Arranging I	3
Jazz Improvisation		
MUST 4113	Jazz Improvisation: Theory and Practice I	2
Music Technology Elective		

Select one of the following:		3
MUST 4712	Computer Synthesis of Music	
MUST 4713	Sound Recording	
MUST 4714	Sound Editing	
MUST 4716	Composing Music for Films	
MUST 4719	MIDI	
MUST 4762	Introduction to Music Technology for Non-Majors	

Jazz Elective

Select any combination of the following six courses for a total of 3 credits:		3
MUST 3770	Topics in Music Theory	
MUST 4110	Seminar in Jazz Composition and Arranging	
MUST 4111	Jazz Style and Analysis	
MUST 4114	Jazz Improvisation: Theory and Practice II	
MUST 4115	Jazz Arranging II	
MUST 4120	Seminar in Advanced Jazz Composition and Arranging	

Instrumental Pedagogy

Select any combination of the following seven courses for a total of 6 credits:		6
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	

Instrumental Concentration

MUSC 1501	Instrumental Concentration	2
MUSC 1502	Instrumental Concentration	2
MUSC 2501	Instrumental Concentration	2
MUSC 2502	Instrumental Concentration	2
MUSC 3501	Instrumental Concentration	2
MUSC 3502	Instrumental Concentration	2
MUSC 4501	Instrumental Concentration	2
MUSC 4502	Instrumental Concentration	2

Vocal Pedagogy

Select one of the following:		2
MUED 2671	School Choral Ensembles	
MUED 2674	Jazz Education - Vocal	
MUED 2675	Inclusive Vocal Development: Pre-Kindergarten - Secondary	

Secondary Piano

MUSC 1405	Secondary Piano for Music Majors	1
MUST 1106	Jazz Secondary Piano	1
MUST 2105	Jazz Secondary Piano	1
MUST 2106	Jazz Secondary Piano	1

Jazz Education

MUED 2673	Jazz Education - Instrumental	2
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Instrumental Conducting

MUSC 2323	Basic Conducting	1
MUSC 2324	Conducting Intermediate	1
MUSC 4324	Conducting (Instrumental)	2

Ensembles

MUSC 3510	Marching Band	1
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Select one of the following:		1
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MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
Select any combination of the following four courses for a total of 3 credits:		3
MUSC 3500	Collegiate Band	
MUSC 3510	Marching Band	
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
Select any combination of the following three courses for a total of 4 credits:		4
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 4520	Ensemble	

Total Credit Hours**160****Program Requirements (Piano Concentration with Band/Orchestra Emphasis)**

Code	Title	Credit Hours
General Education courses		32
Senior Project		0
Music Theory		
MUST 1134	Harmony II: Jazz	4
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
Music History		
MUST 2703	Music in History	3
MUST 2704	Music in History	3
MUST 2114	History of Jazz	3
MUST 3196	History of Pop	3
MUST 3696	Music in History	3
Counterpoint		
MUST 4717	Counterpoint	3
Orchestration		
MUST 3713	Orchestration	3
Music Education		
MUED 1671	Collaboration & Creativity in the New Music Community	3
MUED 2665	Music Learning & Development	3
MUED 2696	Teaching General Music to Inclusive Populations (TGMIP)	3
MUED 3661	Introduction to Teaching Students with Special Needs	3
MUED 3662	Keyboard Harmony - Music Education	3
MUED 4666	Assessment of Music Learning	3
MUED 4667	Teaching Instrumental Music to Inclusive Populations	3
MUED 4668	Senior Student Teaching Seminar	3
MUED 4669	Teaching Choral Music to Inclusive Populations	3
MUED 4689	Student Teaching-Elementary	3
MUED 4789	Student Teaching - Secondary	3
Jazz Arranging		
MUST 4112	Jazz Arranging I	3
Jazz Improvisation		
MUST 4113	Jazz Improvisation: Theory and Practice I	2
Music Technology Elective		

Select one of the following: 3

MUST 4712	Computer Synthesis of Music
MUST 4713	Sound Recording
MUST 4714	Sound Editing
MUST 4716	Composing Music for Films
MUST 4719	MIDI
MUST 4762	Introduction to Music Technology for Non-Majors

Jazz Elective

Select any combination of the following six courses for a total of 3 credits: 3

MUST 3770	Topics in Music Theory
MUST 4110	Seminar in Jazz Composition and Arranging
MUST 4111	Jazz Style and Analysis
MUST 4114	Jazz Improvisation: Theory and Practice II
MUST 4115	Jazz Arranging II
MUST 4120	Seminar in Advanced Jazz Composition and Arranging

Instrumental Pedagogy

Select any combination of the following seven courses for a total of 6 credits: 6

MUED 1651	Percussion
MUED 1652	Woodwinds I
MUED 1653	Upper Strings
MUED 1654	Lower Strings
MUED 1655	Brass I
MUED 1656	Brass II
MUED 1657	Woodwinds II

Piano Concentration

MUSC 1401	Piano Concentration	2
MUSC 1402	Piano Concentration	2
MUSC 2401	Piano Concentration	2
MUSC 2402	Piano Concentration	2
MUSC 3401	Piano Concentration	2
MUSC 3402	Piano Concentration	2
MUSC 4401	Piano Concentration	2
MUSC 4402	Piano Concentration	2

Vocal Pedagogy

Select one of the following: 2

MUED 2671	School Choral Ensembles
MUED 2674	Jazz Education - Vocal
MUED 2675	Inclusive Vocal Development: Pre-Kindergarten - Secondary

Band/Orchestra Piano

MUED 2673	Jazz Education - Instrumental	2
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Choral Conducting

MUSC 2323	Basic Conducting	1
MUSC 2324	Conducting Intermediate	1
MUSC 4323	Conducting (Choral)	2

Ensembles

MUSC 3510	Marching Band	1
MUSC 1428	Accompanying and Piano Ensemble	1
MUSC 1429	Accompanying and Piano Ensemble	1

Select one of the following: 1

MUSC 3300	Choral Ensemble
MUSC 4300	Concert Choir
MUSC 4310	Graduate Conductors Choir

Select any combination of the following four courses for a total of 3 credits:	3
MUSC 3500 Collegiate Band	
MUSC 3510 Marching Band	
MUSC 4500 Instrumental Ensemble	
MUSC 4510 Instrumental Ensemble	
Select any combination of the following three courses for a total of 4 credits:	4
MUSC 3100 Small Jazz Ensemble	
MUSC 3110 Large Jazz Ensemble	
MUSC 4520 Ensemble	
Total Credit Hours	158

Program Requirements (Piano Concentration with Choral/General Emphasis)

Code	Title	Credit Hours
General Education courses		32
Senior Project		0
Music Theory		
MUST 1134	Harmony II: Jazz	4
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
Music History		
MUST 2703	Music in History	3
MUST 2704	Music in History	3
MUST 2114	History of Jazz	3
MUST 3196	History of Pop	3
MUST 3696	Music in History	3
Counterpoint		
MUST 4717	Counterpoint	3
Orchestration		
MUST 3713	Orchestration	3
Music Education		
MUED 1671	Collaboration & Creativity in the New Music Community	3
MUED 2665	Music Learning & Development	3
MUED 2696	Teaching General Music to Inclusive Populations (TGMIP)	3
MUED 3661	Introduction to Teaching Students with Special Needs	3
MUED 3662	Keyboard Harmony - Music Education	3
MUED 4666	Assessment of Music Learning	3
MUED 4667	Teaching Instrumental Music to Inclusive Populations	3
MUED 4668	Senior Student Teaching Seminar	3
MUED 4669	Teaching Choral Music to Inclusive Populations	3
MUED 4689	Student Teaching-Elementary	3
MUED 4789	Student Teaching - Secondary	3
Jazz Arranging		
MUST 4112	Jazz Arranging I	3
Jazz Improvisation		
MUST 4113	Jazz Improvisation: Theory and Practice I	2
Music Technology Elective		
Select one of the following:		3
MUST 4712	Computer Synthesis of Music	
MUST 4713	Sound Recording	

MUST 4714	Sound Editing	
MUST 4716	Composing Music for Films	
MUST 4719	MIDI	
MUST 4762	Introduction to Music Technology for Non-Majors	
Jazz Elective		
Select any combination of the following six courses for a total of 3 credits:		3
MUST 3770	Topics in Music Theory	
MUST 4110	Seminar in Jazz Composition and Arranging	
MUST 4111	Jazz Style and Analysis	
MUST 4114	Jazz Improvisation: Theory and Practice II	
MUST 4115	Jazz Arranging II	
MUST 4120	Seminar in Advanced Jazz Composition and Arranging	
Instrumental Pedagogy		
Select any combination of the following seven courses for a total of 6 credits:		6
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
Piano Concentration		
MUSC 1401	Piano Concentration	2
MUSC 1402	Piano Concentration	2
MUSC 2401	Piano Concentration	2
MUSC 2402	Piano Concentration	2
MUSC 3401	Piano Concentration	2
MUSC 3402	Piano Concentration	2
MUSC 4401	Piano Concentration	2
MUSC 4402	Piano Concentration	2
Vocal Pedagogy		
Select one of the following:		2
MUED 2671	School Choral Ensembles	
MUED 2675	Inclusive Vocal Development: Pre-Kindergarten - Secondary	
Choral/General Piano		
MUED 2674	Jazz Education - Vocal	2
Choral Conducting		
MUSC 2323	Basic Conducting	1
MUSC 2324	Conducting Intermediate	1
MUSC 4323	Conducting (Choral)	2
Ensembles		
MUSC 1428	Accompanying and Piano Ensemble	1
MUSC 1429	Accompanying and Piano Ensemble	1
Select any combination of the following three courses for a total of 5 credits:		5
MUSC 3300	Choral Ensemble (Take four times for four total credits)	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
Select any combination of the following three courses for a total of 4 credits:		4
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	

MUSC 4520

Ensemble

Total Credit Hours**158****Program Requirements (Voice Concentration)**

Code	Title	Credit Hours
General Education courses		32
Senior Project		0
Music Theory		
MUST 1134	Harmony II: Jazz	4
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
Music History		
MUST 2703	Music in History	3
MUST 2704	Music in History	3
MUST 2114	History of Jazz	3
MUST 3196	History of Pop	3
MUST 3696	Music in History	3
Counterpoint		
MUST 4717	Counterpoint	3
Orchestration		
MUST 3713	Orchestration	3
Music Education		
MUED 1671	Collaboration & Creativity in the New Music Community	3
MUED 2665	Music Learning & Development	3
MUED 2696	Teaching General Music to Inclusive Populations (TGMIP)	3
MUED 3661	Introduction to Teaching Students with Special Needs	3
MUED 3662	Keyboard Harmony - Music Education	3
MUED 4666	Assessment of Music Learning	3
MUED 4667	Teaching Instrumental Music to Inclusive Populations	3
MUED 4668	Senior Student Teaching Seminar	3
MUED 4669	Teaching Choral Music to Inclusive Populations	3
MUED 4689	Student Teaching-Elementary	3
MUED 4789	Student Teaching - Secondary	3
Jazz Arranging		
MUST 4112	Jazz Arranging I	3
Jazz Improvisation		
MUST 4113	Jazz Improvisation: Theory and Practice I	2
Music Technology Elective		
Select one of the following:		3
MUST 4712	Computer Synthesis of Music	
MUST 4713	Sound Recording	
MUST 4714	Sound Editing	
MUST 4716	Composing Music for Films	
MUST 4719	MIDI	
MUST 4762	Introduction to Music Technology for Non-Majors	
Jazz Elective		
Select any combination of the following six courses for a total of 3 credits:		3
MUST 3770	Topics in Music Theory	
MUST 4110	Seminar in Jazz Composition and Arranging	

MUST 4111	Jazz Style and Analysis	
MUST 4114	Jazz Improvisation: Theory and Practice II	
MUST 4115	Jazz Arranging II	
MUST 4120	Seminar in Advanced Jazz Composition and Arranging	
Instrumental Pedagogy		
Select any combination of the following seven courses for a total of 4 credits:		4
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
Voice Concentration		
MUSC 1201	Voice Concentration	2
MUSC 1202	Voice Concentration	2
MUSC 2201	Voice Concentration	2
MUSC 2202	Voice Concentration	2
MUSC 3201	Voice Concentration	2
MUSC 3202	Voice Concentration	2
MUSC 4201	Voice Concentration	2
MUSC 4202	Voice Concentration	2
Vocal Pedagogy		
Select any combination of the following three courses for a total of 4 credits:		4
MUED 2671	School Choral Ensembles	
MUED 2673	Jazz Education - Instrumental	
MUED 2675	Inclusive Vocal Development: Pre-Kindergarten - Secondary	
Secondary Piano		
MUSC 1405	Secondary Piano for Music Majors	1
MUST 1106	Jazz Secondary Piano	1
MUST 2105	Jazz Secondary Piano	1
MUST 2106	Jazz Secondary Piano	1
Jazz Education		
MUED 2674	Jazz Education - Vocal	2
Choral Conducting		
MUSC 2323	Basic Conducting	1
MUSC 2324	Conducting Intermediate	1
MUSC 4323	Conducting (Choral)	2
Diction		
MUSC 1225	English Diction	1
Ensembles		
Select any combination of the following three courses for a total of 5 credits:		5
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
Select any combination of the following three courses for a total of 4 credits:		4
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 4520	Ensemble	

Total Credit Hours**161**

Suggested Academic Plans

The Bachelor of Music in Music Education/Jazz consists of several concentrations. The academic plans for those concentrations follow.

- Music Education/Jazz, Instrumental Concentrations (p. 404)
- Music Education/Jazz, Piano Concentration - Band/Orchestra Emphasis (p. 407)
- Music Education/Jazz, Piano Concentration - Choral/General Emphasis (p. 410)
- Music Education/Jazz, Voice Concentration (p. 413)

Bachelor of Music (5 Year) in Music Education/Jazz with Instrumental Concentrations

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MUSC 1501	Instrumental Concentration	2
MUSC 3510	Marching Band ^{1,2}	1
MUSC 1405	Secondary Piano for Music Majors	1
MUST 1711	Theory I (Traditional)	4
MUED 4666	Assessment of Music Learning	3
Select one of the following Vocal Pedagogy courses:		2
MUED 2671	School Choral Ensembles	
MUED 2674	Jazz Education - Vocal	
MUED 2675	Inclusive Vocal Development: Pre-Kindergarten - Secondary	
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		17
Spring		
MUSC 1502	Instrumental Concentration	2
Select one of the following Ensembles: ^{1,2}		1
MUSC 3500	Collegiate Band	
MUSC 3510	Marching Band	
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
MUST 1106	Jazz Secondary Piano	1
MUST 1712	Theory II	4
MUED 3661	Introduction to Teaching Students with Special Needs	3
Select two of the following Instrumental Pedagogy courses:		2
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
Credit Hours		17
Year 2		
Fall		
MUSC 2501	Instrumental Concentration	2
MUST 2105	Jazz Secondary Piano	1
Select one of the following Ensembles: ^{1,2}		1
MUSC 3500	Collegiate Band	
MUSC 3510	Marching Band	

MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
MUST 1134	Harmony II: Jazz	4
MUST 2703	Music in History	3
GenEd Breadth Course		3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		17
Spring		
MUSC 2502	Instrumental Concentration	2
MUST 2106	Jazz Secondary Piano	1
MUST 2704	Music in History	3
MUST 2712	Theory IV (Jazz)	4
Select one of the following Ensembles: ^{1,2}		1
MUSC 3500	Collegiate Band	
MUSC 3510	Marching Band	
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
MUED 2665	Music Learning & Development	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		17
Year 3		
Fall		
MUSC 3501	Instrumental Concentration	2
MUST 2711	Theory III (Traditional)	4
Select one of the following Jazz Ensembles: ²		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 4520	Ensemble	
MUSC 2323	Basic Conducting	1
Select two of the following Instrumental Pedagogy courses, but do not select the same courses taken in previous semesters:		2
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
MUED 2696	Teaching General Music to Inclusive Populations (TGMIP)	3
MUST 4717	Counterpoint	3
Credit Hours		16
Spring		
MUSC 3502	Instrumental Concentration	2
MUST 3696	Music in History	3
Select one of the following Jazz Ensembles: ²		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 4520	Ensemble	
MUSC 2324	Conducting Intermediate	1
Select two of the following Instrumental Pedagogy courses, but do not select the same courses taken in previous semesters:		2
MUED 1651	Percussion	

MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
MUED 4669	Teaching Choral Music to Inclusive Populations	3
MUST 4113	Jazz Improvisation: Theory and Practice I	2
GenEd Breadth Course		3

Credit Hours	17
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Year 4**Fall**

MUSC 4501	Instrumental Concentration	2
MUST 4112	Jazz Arranging I	3
Select one of the following Jazz Ensembles: ²		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 4520	Ensemble	
MUST 3196	History of Pop	3
MUED 1671	Collaboration & Creativity in the New Music Community	3
MUSC 4324	Conducting (Instrumental)	2
Take three credits from the following Jazz Elective list:		3
MUST 3770	Topics in Music Theory	
MUST 4110	Seminar in Jazz Composition and Arranging	
MUST 4111	Jazz Style and Analysis	
MUST 4114	Jazz Improvisation: Theory and Practice II	
MUST 4115	Jazz Arranging II	
MUST 4120	Seminar in Advanced Jazz Composition and Arranging	

Credit Hours	17
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Spring

MUSC 4502	Instrumental Concentration	2
Select one of the following Jazz Ensembles: ²		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 4510	Instrumental Ensemble	
MUED 3662	Keyboard Harmony - Music Education	3
MUED 4667	Teaching Instrumental Music to Inclusive Populations	3
MUST 2114	History of Jazz	3
Select one of the following Music Technology electives:		3
MUST 4712	Computer Synthesis of Music	
MUST 4713	Sound Recording	
MUST 4714	Sound Editing	
MUST 4716	Composing Music for Films	
MUST 4719	MIDI	
MUST 4762	Introduction to Music Technology for Non-Majors	
MUED 2673	Jazz Education - Instrumental	2
Senior Project		0

Credit Hours	17
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Year 5**Fall**

MUST 3713	Orchestration	3
Select one of the following Choral Ensembles: ²		1

MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Spring		
MUED 4668	Senior Student Teaching Seminar	3
MUED 4689	Student Teaching-Elementary	3
MUED 4789	Student Teaching - Secondary	3
Credit Hours		9
Total Credit Hours		160

1

One semester of MUSC 3510 Marching Band is required. Normally this requirement is fulfilled in the fall term of the freshman year. Although the requirement is only one semester, students may register for Marching Band as often as they would like.

2

A total of 8 credit hours of instrumental ensembles are required: 4 credit hours of Traditional Ensembles, including 1 credit hour of MUSC 3510 Marching Band; and 4 credit hours of Jazz Ensembles. A total of 1 credit hour of Choral Ensemble is required.

Bachelor of Music (5 Year) in Music Education/Jazz with a Concentration in Piano - Band/Orchestra Emphasis

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
MUSC 1401	Piano Concentration	2
MUSC 3510	Marching Band ^{1,2}	1
MUST 1711	Theory I (Traditional)	4
MUED 4666	Assessment of Music Learning	3
Select one of the following Vocal Pedagogy courses:		2
MUED 2671	School Choral Ensembles	
MUED 2674	Jazz Education - Vocal	
MUED 2675	Inclusive Vocal Development: Pre-Kindergarten - Secondary	
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Spring		
MUSC 1402	Piano Concentration	2
Select one of the following Ensembles: ^{1,2}		1
MUSC 3500	Collegiate Band	
MUSC 3510	Marching Band	
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
MUST 1712	Theory II (Jazz)	4
Select two of the following Instrumental Pedagogy courses:		2
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	

MUED 1657	Woodwinds II	
MUED 3661	Introduction to Teaching Students with Special Needs	3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	

Credit Hours **16**

Year 2**Fall**

MUSC 2401	Piano Concentration	2
MUSC 1428	Accompanying and Piano Ensemble ²	1
MUST 1134	Harmony II: Jazz (Jazz)	4
MUST 2703	Music in History	3
Select one of the following Ensembles: ^{1,2}		1
MUSC 3500	Collegiate Band	
MUSC 3510	Marching Band	
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
GenEd Breadth Course		3

Credit Hours **17**

Spring

MUSC 2402	Piano Concentration	2
MUSC 1429	Accompanying and Piano Ensemble ²	1
MUST 2704	Music in History	3
MUST 2712	Theory IV	4
Select one of the following Ensembles: ^{1,2}		1
MUSC 3500	Collegiate Band	
MUSC 3510	Marching Band	
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
MUED 2665	Music Learning & Development	3
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	

Credit Hours **17**

Year 3**Fall**

MUSC 3401	Piano Concentration	2
MUST 2711	Theory III (Traditional)	4
MUSC 2323	Basic Conducting	1
MUST 4717	Counterpoint	3
Select one of the following Jazz Ensembles: ²		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 4520	Ensemble	
Select two of the following Instrumental Pedagogy courses, but do not select the same courses taken in previous semesters:		2
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	

MUED 2696	Teaching General Music to Inclusive Populations (TGMIP)	3
Credit Hours		16
Spring		
MUSC 3402	Piano Concentration	2
Select one of the following Jazz Ensembles: ²		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 4520	Ensemble	
MUST 4113	Jazz Improvisation: Theory and Practice I	2
MUST 3696	Music in History	3
Select two of the following Instrumental Pedagogy courses, but do not select the same courses taken in previous semesters:		2
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
MUSC 2324	Conducting Intermediate	1
MUED 4669	Teaching Choral Music to Inclusive Populations	3
GenEd Breadth Course		3
Credit Hours		17
Year 4		
Fall		
MUSC 4401	Piano Concentration	2
MUED 3662	Keyboard Harmony - Music Education	3
Select one of the following Jazz Ensembles: ²		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 4520	Ensemble	
MUST 4112	Jazz Arranging I	3
MUSC 4323	Conducting (Choral)	2
GenEd Breadth Course		3
Take three credits from the following Jazz Elective list:		3
MUST 3770	Topics in Music Theory	
MUST 4110	Seminar in Jazz Composition and Arranging	
MUST 4111	Jazz Style and Analysis	
MUST 4114	Jazz Improvisation: Theory and Practice II	
MUST 4115	Jazz Arranging II	
MUST 4120	Seminar in Advanced Jazz Composition and Arranging	
Credit Hours		17
Spring		
MUSC 4402	Piano Concentration	2
Select one of the following Jazz Ensembles: ²		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 4520	Ensemble	
MUED 4667	Teaching Instrumental Music to Inclusive Populations	3
MUST 2114	History of Jazz	3
MUED 1671	Collaboration & Creativity in the New Music Community	3
MUED 2673	Jazz Education - Instrumental	2
Select one of the following Music Technology electives:		3

MUST 4712	Computer Synthesis of Music	
MUST 4713	Sound Recording	
MUST 4714	Sound Editing	
MUST 4716	Composing Music for Films	
MUST 4719	MIDI	
MUST 4762	Introduction to Music Technology for Non-Majors	
Senior Project		0
Credit Hours		17
Year 5		
Fall		
MUST 3713	Orchestration	3
MUST 3196	History of Pop	3
Select one of the following Choral Ensembles: ²		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Spring		
MUED 4668	Senior Student Teaching Seminar	3
MUED 4689	Student Teaching-Elementary	3
MUED 4789	Student Teaching - Secondary	3
Credit Hours		9
Total Credit Hours		158

1

One semester of MUSC 3510 Marching Band is required. Normally this requirement is fulfilled in the fall term of the freshman year. Although the requirement is only one semester, students may register for Marching Band as often as they would like.

2

Nine semesters of ensemble participation are required for a total of 11 credit hours: 1 credit hour of Choral Ensemble; 4 credit hours of Instrumental Ensembles, including 1 credit hour of MUSC 3510 Marching Band; 2 credit hours of Piano/Accompanying Ensembles; and 4 credit hours of Jazz Ensembles.

Bachelor of Music (5 Year) in Music Education/Jazz with a Concentration in Piano - Choral/General Emphasis

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MUSC 1401	Piano Concentration	2
Select one of the following Choral Ensembles: ¹		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUST 1711	Theory I (Traditional)	4
MUED 4666	Assessment of Music Learning	3
Select one of the following Vocal Pedagogy courses:		2
MUED 2671	School Choral Ensembles	
MUED 2675	Inclusive Vocal Development: Pre-Kindergarten - Secondary	
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16

Spring

MUSC 1402	Piano Concentration	2
Select one of the following Choral Ensembles: ¹		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUST 1712	Theory II (Jazz)	4
Select two of the following Instrumental Pedagogy courses:		2
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
MUED 3661	Introduction to Teaching Students with Special Needs	3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
Credit Hours		16

Year 2**Fall**

MUSC 2401	Piano Concentration	2
MUST 1134	Harmony II: Jazz (Jazz)	4
MUST 2703	Music in History	3
Select one of the following Choral Ensembles: ¹		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUSC 1428	Accompanying and Piano Ensemble ¹	1
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
GenEd Breadth Course		3
Credit Hours		17

Spring

MUSC 2402	Piano Concentration	2
MUSC 1429	Accompanying and Piano Ensemble ¹	1
MUST 2704	Music in History	3
MUST 2712	Theory IV (Jazz)	4
Select one of the following Choral Ensembles: ¹		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUED 2665	Music Learning & Development	3
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
Credit Hours		17

Year 3**Fall**

MUSC 3401	Piano Concentration	2
MUST 2711	Theory III (Traditional)	4
MUSC 2323	Basic Conducting	1
MUST 4717	Counterpoint	3

Select one of the following Jazz Ensembles: ¹		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 4520	Ensemble	
Select two of the following Instrumental Pedagogy courses, but do not select the same courses taken in previous semesters:		2
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
MUED 2696	Teaching General Music to Inclusive Populations (TGMIP)	3
Credit Hours		16
Spring		
MUSC 3402	Piano Concentration	2
Select one of the following Jazz Ensembles: ¹		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 4520	Ensemble	
MUST 4113	Jazz Improvisation: Theory and Practice I	2
MUST 3696	Music in History	3
Select two of the following Instrumental Pedagogy courses, but do not select the same courses taken in previous semesters:		2
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
MUSC 2324	Conducting Intermediate	1
MUED 4669	Teaching Choral Music to Inclusive Populations	3
GenEd Breadth Course		3
Credit Hours		17
Year 4		
Fall		
MUSC 4401	Piano Concentration	2
MUED 3662	Keyboard Harmony - Music Education	3
Select one of the following Jazz Ensembles: ¹		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 4520	Ensemble	
MUST 3196	History of Pop	3
MUST 4112	Jazz Arranging I	3
MUSC 4323	Conducting (Choral)	2
Take three credits from the following Jazz Elective list:		3
MUST 3770	Topics in Music Theory	
MUST 4110	Seminar in Jazz Composition and Arranging	
MUST 4111	Jazz Style and Analysis	
MUST 4114	Jazz Improvisation: Theory and Practice II	
MUST 4115	Jazz Arranging II	

MUST 4120	Seminar in Advanced Jazz Composition and Arranging	
Credit Hours		17
Spring		
MUSC 4402	Piano Concentration	2
Select one of the following Jazz Ensembles: ¹		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 4520	Ensemble	
MUED 4667	Teaching Instrumental Music to Inclusive Populations	3
MUST 2114	History of Jazz	3
MUED 1671	Collaboration & Creativity in the New Music Community	3
MUED 2674	Jazz Education - Vocal	2
Select one of the following Music Technology electives:		3
MUST 4712	Computer Synthesis of Music	
MUST 4713	Sound Recording	
MUST 4714	Sound Editing	
MUST 4716	Composing Music for Films	
MUST 4719	MIDI	
MUST 4762	Introduction to Music Technology for Non-Majors	
Senior Project		0
Credit Hours		17
Year 5		
Fall		
MUST 3713	Orchestration	3
Select one of the following Choral Ensembles: ¹		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Spring		
MUED 4668	Senior Student Teaching Seminar	3
MUED 4689	Student Teaching-Elementary	3
MUED 4789	Student Teaching - Secondary	3
Credit Hours		9
Total Credit Hours		158

1

Nine semesters of ensemble participation are required for a total of 11 credit hours: 5 credit hours of Choral Ensembles; 4 credit hours of Jazz Ensembles; and 2 credit hours of Piano/Accompanying Ensembles.

Bachelor of Music (5 Year) in Music Education/Jazz with a Concentration in Voice

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
MUSC 1201	Voice Concentration	2
MUSC 1405	Secondary Piano for Music Majors	1
MUST 1711	Theory I	4
Select one of the following Choral Ensembles: ¹		1

MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUED 4666	Assessment of Music Learning	3
Select one of the following Vocal Pedagogy courses:		2
MUED 2671	School Choral Ensembles	
MUED 2673	Jazz Education - Instrumental	
MUED 2675	Inclusive Vocal Development: Pre-Kindergarten - Secondary	
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		17
Spring		
MUSC 1202	Voice Concentration	2
MUST 1106	Jazz Secondary Piano	1
MUST 1712	Theory II (Jazz)	4
Select one of the following Choral Ensembles: ¹		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUED 3661	Introduction to Teaching Students with Special Needs	3
Select two of the following Instrumental Pedagogy courses:		2
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		17
Year 2		
Fall		
MUSC 2201	Voice Concentration	2
MUST 2105	Jazz Secondary Piano	1
Select one of the following Choral Ensembles: ¹		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUST 1134	Harmony II: Jazz	4
MUST 2703	Music in History	3
GenEd Breadth Course		3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		17
Spring		
MUSC 2202	Voice Concentration	2
MUST 2106	Jazz Secondary Piano	1
MUST 2712	Theory IV (Jazz)	4
Select one of the following Choral Ensembles: ¹		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	

MUSC 4310	Graduate Conductors Choir	
MUST 2704	Music in History	3
MUED 2665	Music Learning & Development	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		17
Year 3		
Fall		
MUSC 3201	Voice Concentration	2
MUSC 2323	Basic Conducting	1
MUST 2711	Theory III (Traditional)	4
Select one of the following Vocal Pedagogy courses, but do not select the same course taken in a previous semester:		2
MUED 2671	School Choral Ensembles	
MUED 2673	Jazz Education - Instrumental	
MUED 2675	Inclusive Vocal Development: Pre-Kindergarten - Secondary	
Select one of the following Jazz Ensembles: ¹		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 4520	Ensemble	
Select one of the following Instrumental Pedagogy courses, but do not select the same courses taken in previous semesters:		1
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
MUED 2696	Teaching General Music to Inclusive Populations (TGMIP)	3
MUST 4717	Counterpoint	3
Credit Hours		17
Spring		
MUSC 3202	Voice Concentration	2
MUST 3696	Music in History	3
MUSC 2324	Conducting Intermediate	1
MUST 4113	Jazz Improvisation: Theory and Practice I	2
MUSC 1225	English Diction	1
Select one of the following Jazz Ensembles: ¹		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 4520	Ensemble	
Select one of the following Instrumental Pedagogy courses, but do not select the same courses taken in previous semesters:		1
MUED 1651	Percussion	
MUED 1652	Woodwinds I	
MUED 1653	Upper Strings	
MUED 1654	Lower Strings	
MUED 1655	Brass I	
MUED 1656	Brass II	
MUED 1657	Woodwinds II	
MUED 4669	Teaching Choral Music to Inclusive Populations	3
GenEd Breadth Course		3
Credit Hours		17

Year 4		
Fall		
MUSC 4201	Voice Concentration	2
Select one of the following Jazz Ensembles: ¹		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 4520	Ensemble	
MUST 4112	Jazz Arranging I	3
MUED 2674	Jazz Education - Vocal	2
MUED 4667	Teaching Instrumental Music to Inclusive Populations	3
GenEd Breadth Course		3
Take three credits from the following Jazz Elective list:		3
MUST 3770	Topics in Music Theory	
MUST 4110	Seminar in Jazz Composition and Arranging	
MUST 4111	Jazz Style and Analysis	
MUST 4114	Jazz Improvisation: Theory and Practice II	
MUST 4115	Jazz Arranging II	
MUST 4120	Seminar in Advanced Jazz Composition and Arranging	
Credit Hours		17
Spring		
MUSC 4202	Voice Concentration	2
Select one of the following Jazz Ensembles: ¹		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 4520	Ensemble	
MUED 3662	Keyboard Harmony - Music Education	3
MUED 1671	Collaboration & Creativity in the New Music Community	3
Select one of the following Music Technology electives:		3
MUST 4712	Computer Synthesis of Music	
MUST 4713	Sound Recording	
MUST 4714	Sound Editing	
MUST 4716	Composing Music for Films	
MUST 4719	MIDI	
MUST 4762	Introduction to Music Technology for Non-Majors	
MUST 2114	History of Jazz	3
MUSC 4323	Conducting (Choral)	2
Senior Project		0
Credit Hours		17
Year 5		
Fall		
Select one of the following Choral Ensembles: ¹		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUST 3713	Orchestration	3
MUST 3196	History of Pop	3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Spring		
MUED 4668	Senior Student Teaching Seminar	3

MUED 4689	Student Teaching-Elementary	3
MUED 4789	Student Teaching - Secondary	3
Credit Hours		9
Total Credit Hours		161

1

Nine semesters of ensemble participation are required for a total of 9 credit hours: 5 credit hours of Choral Ensembles and 4 credit hours of Jazz Ensembles.

Music History BM

Overview

The **Bachelor of Music in Music History** is offered by the Department of Music Studies.

The Bachelor in Music in Music History emphasizes a historic and analytical approach to the study of music and the development of scholarly research skills.

Students **must select one of the following concentrations**:

- Bassoon
- Cello
- Clarinet
- Classical Guitar
- Double Bass
- Euphonium
- Flute
- French Horn
- Harp
- Harpsichord
- Oboe
- Percussion
- Piano
- Saxophone
- Trombone
- Trumpet
- Tuba
- Viola
- Violin
- Voice

Special Admissions Requirements

See Music Admissions information (p. 314) on the Boyer College of Music and Dance page.

Campus Location: Main

Program Code: BC-MHIS-BMUS

Contact Information

Dr. Edward Latham, Music Studies Department Chair
215-204-8498
elatham@temple.edu

Learn more about the Bachelor of Music in Music History.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Music in Music History is conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124 credits. This major requires a concentration; the available concentrations are Instrumental (options include Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Harpsichord, Oboe, Percussion, Saxophone, Trombone, Trumpet, Tuba, Viola, and Violin), Piano, and Voice.

University Requirements

- All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.
- All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for the major are MUST 3696 and MUST 3796.

Program Requirements (Instrumental Concentration)

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
Music History		
MUST 2703	Music in History	3
MUST 2704	Music in History	3
MUST 3696	Music in History	3
MUST 3796	Music in History	3
Counterpoint		
MUST 4717	Counterpoint	3
Analysis		
MUST 4718	Analysis	3
Advanced Music Studies		
MUST 4701	Music in Global Cultures	3
MUST 4799	Music History: Final Project	3
Basic Conducting		
MUSC 2323	Basic Conducting	1
Secondary Piano		
MUSC 1405	Secondary Piano for Music Majors	1
MUSC 1406	Secondary Piano for Music Majors	1
MUSC 2405	Secondary Piano for Music Majors	1
MUSC 2406	Secondary Piano for Music Majors	1
Instrumental Concentration		
MUSC 1501	Instrumental Concentration	2
MUSC 1502	Instrumental Concentration	2
MUSC 2501	Instrumental Concentration	2
MUSC 2502	Instrumental Concentration	2
Ensembles		
Take any combination of the following four courses for a total of 4 credits:		4
MUSC 1428	Accompanying and Piano Ensemble	
MUSC 1429	Accompanying and Piano Ensemble	
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	

MUSC 4520	Ensemble	
Foreign Language		
Foreign Language I		4
Foreign Language II		4
Foreign Language III		3
Foreign Language IV		3
Electives		
Take any combination of courses in the following subjects for a total of 4 Music Elective credits:		4
MUSC 1000-4999		
MUED 1000-4999		
MUST 1000-4999		
(MUST 3741 Keyboard Harmony or MUST 3713 Orchestration are recommended)		
Music History Electives		6
Non-Canonical Elective - Select one of the following:		3
MUST 1762	Music in Movie Epics	
MUST 2114	History of Jazz	
MUST 3196	History of Pop	
MUST 4715	World Music	
Free Electives (at least one Art History course is recommended)		8
Total Credit Hours		124

Program Requirements (Piano Concentration)

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
Music History		
MUST 2703	Music in History	3
MUST 2704	Music in History	3
MUST 3696	Music in History	3
MUST 3796	Music in History	3
Counterpoint		
MUST 4717	Counterpoint	3
Analysis		
MUST 4718	Analysis	3
Advanced Music Studies		
MUST 4701	Music in Global Cultures	3
MUST 4799	Music History: Final Project	3
Basic Conducting		
MUSC 2323	Basic Conducting	1
Piano Concentration		
MUSC 1401	Piano Concentration	2
MUSC 1402	Piano Concentration	2
MUSC 2401	Piano Concentration	2
MUSC 2402	Piano Concentration	2
Ensembles		
Take any combination of the following four courses for a total of 4 credits:		4
MUSC 1428	Accompanying and Piano Ensemble	

MUSC 1429	Accompanying and Piano Ensemble	
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
Foreign Language		
Foreign Language I		4
Foreign Language II		4
Foreign Language III		3
Foreign Language IV		3
Electives		
Take any combination of courses in the following subjects for a total of 7 Music Elective credits:		7
MUSC 1000-4999		
MUED 1000-4999		
MUST 1000-4999		
(MUST 3741 Keyboard Harmony or MUST 3713 Orchestration are recommended)		
Music History Electives		6
Non-Canonical Elective - Select one of the following:		3
MUST 1762	Music in Movie Epics	
MUST 2114	History of Jazz	
MUST 3196	History of Pop	
MUST 4715	World Music	
Free Electives (at least one Art History course is recommended)		9
Total Credit Hours		124

Program Requirements (Voice Concentration)

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
Music History		
MUST 2703	Music in History	3
MUST 2704	Music in History	3
MUST 3696	Music in History	3
MUST 3796	Music in History	3
Counterpoint		
MUST 4717	Counterpoint	3
Analysis		
MUST 4718	Analysis	3
Advanced Music Studies		
MUST 4701	Music in Global Cultures	3
MUST 4799	Music History: Final Project	3
Basic Conducting		
MUSC 2323	Basic Conducting	1
Secondary Piano		
MUSC 1405	Secondary Piano for Music Majors	1

MUSC 1406	Secondary Piano for Music Majors	1
MUSC 2405	Secondary Piano for Music Majors	1
MUSC 2406	Secondary Piano for Music Majors	1
Voice Concentration		
MUSC 1201	Voice Concentration	2
MUSC 1202	Voice Concentration	2
MUSC 2201	Voice Concentration	2
MUSC 2202	Voice Concentration	2
Ensembles		
Take any combination of the following three courses for a total of 4 credits:		4
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
Foreign Language		
Foreign Language I		4
Foreign Language II		4
Foreign Language III		3
Foreign Language IV		3
Electives		
Take any combination of courses in the following subjects for a total of 7 Music Elective credits:		7
MUSC 1000-4999		
MUED 1000-4999		
MUST 1000-4999		
(MUST 3741 Keyboard Harmony or MUST 3713 Orchestration are recommended)		
Music History Electives		6
Non-Canonical Elective - Select one of the following:		3
MUST 1762	Music in Movie Epics	
MUST 2114	History of Jazz	
MUST 3196	History of Pop	
MUST 4715	World Music	
Free Electives (at least one Art History course is recommended)		5
Total Credit Hours		124

Suggested Academic Plan

Bachelor of Music in Music History

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MUSC 1405	Secondary Piano for Music Majors ¹	1
Choral/Instrumental Ensemble		1
MUST 1711	Theory I	4
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4
Select one of the following:		2
MUSC 1201	Voice Concentration	
MUSC 1401	Piano Concentration	
MUSC 1501	Instrumental Concentration	
Credit Hours		16

Spring		
MUSC 1406	Secondary Piano for Music Majors ¹	1
Choral/Instrumental Ensemble		1
MUST 1712	Theory II	4
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Select one of the following:		2
MUSC 1202	Voice Concentration	
MUSC 1402	Piano Concentration	
MUSC 1502	Instrumental Concentration	
Credit Hours		17
Year 2		
Fall		
MUSC 2405	Secondary Piano for Music Majors ¹	1
Choral/Instrumental Ensemble		1
MUST 2711	Theory III	4
MUST 2703	Music in History	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Select one of the following:		2
MUSC 2201	Voice Concentration	
MUSC 2401	Piano Concentration	
MUSC 2501	Instrumental Concentration	
Credit Hours		17
Spring		
MUSC 2406	Secondary Piano for Music Majors ¹	1
Choral/Instrumental Ensemble		1
MUST 2712	Theory IV	4
MUST 2704	Music in History	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Select one of the following:		2
MUSC 2202	Voice Concentration	
MUSC 2402	Piano Concentration	
MUSC 2502	Instrumental Concentration	
Credit Hours		17
Year 3		
Fall		
MUST 4701	Music in Global Cultures	3
MUST 4717	Counterpoint	3
MUST 3696	Music in History	3
Foreign Language I		4
GenEd Breadth Course		3
Credit Hours		16
Spring		
MUST 3796	Music in History	3
MUST 4718	Analysis	3
Music Elective (select from MUSC, MUED and MUST 1000-4999) ²		3
Foreign Language II		4

Free Elective ³		3
Credit Hours		16
Year 4		
Fall		
Music History Elective		3
MUSC 2323	Basic Conducting	1
MUST 4799	Music History: Final Project	3
Foreign Language III		3
Free Elective		3
Credit Hours		13
Spring		
Music History Elective		3
Foreign Language IV		3
Non-Canonical Elective - Select one of the following:		3
MUST 1762	Music in Movie Epics	
MUST 2114	History of Jazz	
MUST 3196	History of Pop	
MUST 4715	World Music	
Free Elective		3
Credit Hours		12
Total Credit Hours		124

1

Piano concentration students should not take the 4 credits of Secondary Piano shown in this Academic Plan. They should instead take 4 additional credits of free electives.

2

MUST 3741 Keyboard Harmony or MUST 3713 Orchestration are recommended.

3

Art History strongly recommended.

Music History Certificate

Overview

Undergraduate certificate programs in Performance (Performing Arts, Classical and Jazz, and Dance), Music Studies (Theory, History, Composition, and Jazz Studies), and Technology provide opportunities to experience the excitement of Center for the Performing and Cinematic Arts courses. Completing these certificate programs will culminate in significant music and dance knowledge and performance experience. Each of the certificate programs offers a coherent disciplinary context beyond that which is possible in random course election. Graded experiences will be recognized on the final transcript.

Undergraduate students interested in the **Certificate in Music History** must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

Students must complete the online application and other requirements that may be listed below. No audition or portfolio is required.

Coursework may be completed in four semesters if the program permits. Most students should complete all requirements within six semesters. Accepted students may delay certain required coursework by one semester or take courses out of sequence only with Boyer College advisor approval.

There are no exit requirements, comprehensive exams, theses, or practica required. Grading will consist of standard letter grades awarded according to Boyer College and university policy for all coursework. The minimum grade for all coursework is C-. There will be no course auditing, pass/fail grades, or CR options. Evidence of student success will be indicated by courses completed and grades earned.

Admission

Applicants must complete an online application. Admission requires students to be in good standing, and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

All application materials must be submitted by November 30 for Spring semester matriculation and May 15 for Fall semester matriculation.

Only one program may be selected. There will be no concurrent multiple program admission.

Advising and course selection will occur after admission. A grade of C- or higher must be earned in all required courses to receive the certificate.

No certificate program will be recognized as stand-alone.

No certificate program will be available to any applicant after completion of the bachelor's degree.

Certificate completion will be acknowledged on the official transcript only at the time of the awarding of the bachelor's degree.

Campus Location: Main

Program Code: BC-MHIS-CERT

Learn more about the undergraduate certificate in Music History.

Requirements

The Certificate in Music History will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

Code	Title	Credit Hours
MUST 3770	Topics in Music Theory (take 2 times for 2 credits each)	4
MUST 2703	Music in History	3
MUST 2704	Music in History	3
MUST 3696	Music in History	3
Total Credit Hours		13

Music Minor

Overview

The **Minor in Music**, offered by the Department of Music Studies, is a 20-credit hour program for undergraduate students who are not music majors, but wish to enjoy music in the Boyer College of Music and Dance as part of their Temple experience. Students complete 5 credits in music theory for non-majors and then may select from an array of courses in music theory, music history, jazz, technology, private lessons or performance ensembles.

Special Admissions Requirements

Applicants must have completed one semester of coursework at Temple University before official acceptance can occur.

Campus Location: Main

Contact Information

Edward Flanagan, Senior Associate Dean for Student Affairs
215-204-8301
flanagan@temple.edu

Requirements

Code	Title	Credit Hours
Required Courses		
MUST 1701	Music Theory for Non-Music Majors	2
MUST 1705	Music Theory for Non-Music Majors II	3
NOTE: Students MUST complete the required courses before taking electives in music.		
Electives		
A combination of courses in music theory, music history, and/or performance/ensembles. Course of study to be determined with a faculty advisor in the Music Studies Department. Possible courses include but are not limited to:		15
MUST 1711	Theory I	
MUST 1712	Theory II	
MUST 2703	Music in History	

or MUST 2704	Music in History
MUST 2113	History of Pop
MUST 2114	History of Jazz
MUST 1763	American Popular Music
MUST 1704	Music in American Society
MUST 4700	Latin Amer Mus Ensemble
MUST 4710	Early Music Ensemble
MUSC 3300	Choral Ensemble

Total Credit Hours

20

Music Performance Certificate

Overview

Undergraduate certificate programs in Performance (Performing Arts, Classical and Jazz, and Dance), Music Studies (Theory, History, Composition, and Jazz Studies), and Technology provide opportunities to experience the excitement of Center for the Performing and Cinematic Arts courses. Completing these certificate programs will culminate in significant music and dance knowledge and performance experience. Each of the certificate programs offers a coherent disciplinary context beyond that which is possible in random course election. Graded experiences will be recognized on the final transcript.

The **Certificate in Music Performance** is open to Music Technology majors only. For acceptance into this certificate program, applicants must audition for lessons at the Boyer College concentration level. These lessons, once approved, need to be completed in four consecutive semesters. Additionally, students must be enrolled in one required ensemble in each semester in which lessons are received.

Students are accepted to one concentration (Voice, Piano or Instrumental), which cannot be changed. Once begun, lessons and ensembles related to the concentration choice must be completed in four consecutive semesters. All lessons require an end-of-semester jury. The ensembles in this certificate are in addition to any required by the Bachelor of Science in Music Technology program and cannot replace any existing ensemble requirements.

The program's required courses are intended to be completed concurrently with baccalaureate coursework. The program must be completed within four consecutive semesters. There are no exit requirements for the certificate. Certificates cannot be awarded either as a stand-alone program of study or after completion of the bachelor's degree. Certificate completion will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree and will be acknowledged on the official transcript provided that a student successfully completed the program with a grade of C- or better in each course.

The tuition for this certificate program is based on Boyer College tuition rates, degree program and level, course load and residency status.

Students must complete the online application and other requirements as listed below. Boyer College Music Technology major undergraduates in good standing who have completed 15 credits at Temple University may apply.

Admission

Applicants must complete an online application. Admission requires students to be in good standing, and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

All application materials must be submitted by November 30 for Spring semester matriculation and May 15 for Fall semester matriculation.

Only one program may be selected. There will be no concurrent multiple program admission.

Advising and course selection will occur after admission. A grade of C- or higher must be earned in all required courses to receive the certificate.

No certificate program will be recognized as stand-alone.

No certificate program will be available to any applicant after completion of the bachelor's degree.

Certificate completion will be acknowledged on the official transcript only at the time of the awarding of the bachelor's degree.

Campus Location: Main

Program Code: BC-MPER-CERT

Learn more about the undergraduate certificate in Music Performance.

Requirements

The Certificate in Music Performance will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

Code	Title	Credit Hours
Select one of the following: ¹		2
MUSC 1201	Voice Concentration	
MUSC 1401	Piano Concentration	
MUSC 1501	Instrumental Concentration	
Select one of the following: ¹		2
MUSC 1202	Voice Concentration	
MUSC 1402	Piano Concentration	
MUSC 1502	Instrumental Concentration	
Select one of the following: ¹		2
MUSC 2201	Voice Concentration	
MUSC 2401	Piano Concentration	
MUSC 2501	Instrumental Concentration	
Select one of the following: ¹		2
MUSC 2202	Voice Concentration	
MUSC 2402	Piano Concentration	
MUSC 2502	Instrumental Concentration	
Select one of the following:		4
MUSC 1428 & MUSC 1429	Accompanying and Piano Ensemble and Accompanying and Piano Ensemble ²	
MUSC 3100	Small Jazz Ensemble ³	
or MUSC 3120	Vocal Jazz Ensemble	
or MUSC 3300	Choral Ensemble	
or MUSC 4500	Instrumental Ensemble	
Total Credit Hours		12

¹

All four courses must be selected in the same concentration (Voice, Piano or Instrumental).

²

Both courses must be taken two times for a total of 4 credits.

³

One of these courses selected according to the chosen concentration must be taken four times for a total of 4 credits.

Music Technology BS

Overview

The **Bachelor of Science in Music Technology** and its optional concentration in Interdisciplinary Studies (p. 431) are offered by the Department of Music Studies.

Music technology fuses musical skill and technological knowledge to create works, or to pursue employment or graduate education in an extremely wide variety of areas. Some of these include music production, performance, composition, recording and editing, software and hardware development, systems design, equipment installation, video gaming, music editing and publishing, as well as numerous audio fields such as recording and editing concerts, events, films, television and video games, among others. It is not an exaggeration to state that virtually every area of the music industry has been influenced by technology.

The Bachelor of Science degree in Music Technology offers a sequence of courses in general education, music, music performance, music studies, recording technology, music technology, mathematics and computer science. Students who complete the program will be prepared for entry level jobs in the field or to pursue graduate education in music technology at top graduate programs nationally.

Special Admissions Requirements

See Music Admissions information (p. 314) on the Boyer College of Music and Dance page.

Campus Location: Main

Program Code: BC-MUTE-BS

Contact Information

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215-204-8649
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Learn more about the Bachelor of Science in Music Technology.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Science in Music Technology is conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124 credits.

University Requirements

- All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.
- All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for the major are MUST 3196 and either MUST 3696 or MUST 3796.

Program Requirements

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
Secondary Piano		
MUSC 1405	Secondary Piano for Music Majors	1
MUSC 1406	Secondary Piano for Music Majors	1
MUSC 2405	Secondary Piano for Music Majors	1
MUSC 2406	Secondary Piano for Music Majors	1
Conducting		
MUSC 2323	Basic Conducting	1
MUSC 2324	Conducting Intermediate	1
Orchestration		
MUST 3713	Orchestration	3
Music History		
MUST 2703	Music in History	3
MUST 2704	Music in History	3
MUST 3196	History of Pop	3
MUST 3696 or MUST 3796	Music in History	3
Music Technology		

MUST 3763	Analog and Modular Sound Synthesis	3
MUST 3764	Scoring for Film and Digital Media	3
MUST 3765	Scoring and Audio Design for Video Games	3
MUST 4711	Computers in Musical Applications	3
MUST 4712	Computer Synthesis of Music	3
MUST 4713	Sound Recording	3
MUST 4714	Sound Editing	3
MUST 4730	Electronic Music Ensemble (Take 3 times for a total of 3 credits)	3
MUST 4882	Project in Music Technology	3

Music Technology Elective Courses

Select at least one music course from the following list: 3

MUST 4706	Live Recording and Mixing for Broadcast	
MUST 4707	Computer Programming for Musicians	
MUST 4719	MIDI	
MUST 4721	Computer Music Studio	
MUST 4724	Printing Music Scores and Parts	
MUST 4725	Advanced Audio Production	
MUST 4727	Electronic Music Composition: Practice, History, Theory	
MUST 4732	Programming in Max	
MUST 4780	Special Topics Music Studies	
MUST 4785	Music Industry Internship	
MUST 4786	Music Industry Internship	

Mathematics Courses (prerequisite for Computer Science courses)

MATH 1021	College Algebra ¹	4
MATH 1022	Precalculus ¹	4

Computer Science Courses (counted as part of the major)

CIS 1051	Introduction to Problem Solving and Programming in Python	4
CIS 1068	Program Design and Abstraction	4
CIS 2229	Architecture, Operating Systems and Networking	4

Ensembles

Pending a successful audition for the respective department, students may select any combination of the following ensembles at 1 credit each for a total of 2 credits. In subsequent semesters, up to 3 additional credits of ensemble (counted as General Studies Electives) may be taken with re-audition and departmental permission for a grand total of up to 5 credits of ensemble at 1 credit each. 2

MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 3300	Choral Ensemble	
MUSC 3510	Marching Band	
MUSC 4300	Concert Choir	
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
MUST 4700	Latin Amer Mus Ensemble	
MUST 4710	Early Music Ensemble	

Electives

General Studies Elective ²		3
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Total Credit Hours**124**

1

Students placing beyond this level of mathematics through Placement Testing may take any course with advisor permission as an elective in lieu of this course.

2

Electives may be selected in any academic discipline.

Suggested Academic Plan

Bachelor of Science in Music Technology

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
MUSC 1405	Secondary Piano for Music Majors	1
Select one of the following: ¹		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 3300	Choral Ensemble	
MUSC 3510	Marching Band	
MUSC 4300	Concert Choir	
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
MUST 4700	Latin Amer Mus Ensemble	
MUST 4710	Early Music Ensemble	
MUST 1711	Theory I	4
MUST 4711	Computers in Musical Applications	3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Breadth Course		3
Credit Hours		16
Spring		
MUSC 1406	Secondary Piano for Music Majors	1
Select one of the following: ¹		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 3300	Choral Ensemble	
MUSC 3510	Marching Band	
MUSC 4300	Concert Choir	
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
MUST 4700	Latin Amer Mus Ensemble	
MUST 4710	Early Music Ensemble	
MUST 1712	Theory II	4
MUST 4713	Sound Recording	3
GenEd Quantitative Literacy Course ^{GQ}		4
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
MUSC 2405	Secondary Piano for Music Majors	1
MUSC 2323	Basic Conducting	1
MUST 2711	Theory III	4
MUST 4714	Sound Editing	3
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	

MATH 1021	College Algebra ²	4
Credit Hours		16
Spring		
MUSC 2406	Secondary Piano for Music Majors	1
MUSC 2324	Conducting Intermediate	1
MUST 2712	Theory IV	4
MUST 3763	Analog and Modular Sound Synthesis	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
MATH 1022	Precalculus ²	4
Credit Hours		16
Year 3		
Fall		
MUST 2703	Music in History	3
MUST 3764	Scoring for Film and Digital Media	3
MUST 3196	History of Pop	3
MUST 3713	Orchestration	3
MUST 4730	Electronic Music Ensemble	1
CIS 1051	Introduction to Problem Solving and Programming in Python	4
Credit Hours		17
Spring		
GenEd Breadth Course		3
CIS 1068	Program Design and Abstraction	4
MUST 2704	Music in History	3
MUST 3765	Scoring and Audio Design for Video Games	3
MUST 4712	Computer Synthesis of Music	3
MUST 4730	Electronic Music Ensemble	1
Credit Hours		17
Year 4		
Fall		
GenEd Breadth Course		3
GenEd Breadth Course		3
CIS 2229	Architecture, Operating Systems and Networking	4
MUST 3696 or MUST 3796	Music in History or Music in History	3
MUST 4730	Electronic Music Ensemble	1
Credit Hours		14
Spring		
GenEd Breadth Course		3
General Studies Elective ³		3
Music Technology Elective ⁴		3
MUST 4882	Project in Music Technology	3
Credit Hours		12
Total Credit Hours		124

1

Pending a successful audition for the respective department, students may select any combination of the following courses for a total of 2 credits: Small Jazz Ensemble (MUSC 3100), Large Jazz Ensemble (MUSC 3110), Choral Ensemble (MUSC 3300), Marching Band (MUSC 3510), Concert Choir (MUSC 4300), Instrumental Ensemble (MUSC 4500), Instrumental Ensemble (MUSC 4510), Ensemble (MUSC 4520), Latin Amer Mus Ensemble (MUST 4700), Early Music Ensemble (MUST 4710). In subsequent semesters, up to 3 additional credits of ensemble (counted as General Studies Electives) may be taken with re-audition and Departmental permission for a grand total of up to 5 credits of ensemble at 1 credit each.

2

Students placing beyond this level of mathematics through Placement Testing may take any course with advisor permission as an elective in lieu of this course.

3

Electives may be selected in any academic discipline.

4

Music Technology Elective Courses: Live Recording and Mixing for Broadcast (MUST 4706), Computer Programming for Musicians (MUST 4707), MIDI (MUST 4719), Computer Music Studio (MUST 4721), Printing Music Scores and Parts (MUST 4724), Advanced Audio Production (MUST 4725), Electronic Music Composition: Practice, History, Theory (MUST 4727), Programming in Max (MUST 4732), Special Topics Music Studies (MUST 4780), Music Industry Internship (MUST 4785), Music Industry Internship (MUST 4786)

Music Technology BS with Interdisciplinary Studies Concentration

Overview

The **Bachelor of Science in Music Technology with an optional concentration in Interdisciplinary Studies** is offered by the Department of Music Studies.

Music Technology fuses musical skill and technological knowledge to create works, or to pursue employment or graduate education in an extremely wide variety of areas. Some of these include music production, performance, composition, recording and editing, software and hardware development, systems design, equipment installation, video gaming, music editing and publishing, as well as numerous audio fields such as recording and editing concerts, events, films, television and video games, among others. It is not an exaggeration to state that virtually every area of the music industry has been influenced by technology.

The Bachelor of Science degree in Music Technology with **optional concentration in Interdisciplinary Studies** offers a sequence of courses in general education, music, music performance, music studies, recording technology and music technology, along with a generous number of electives to provide flexibility within the curriculum to shape the program in ways that complement individual professional interests within the field. Students who complete the program will be prepared for entry level jobs in the field or to pursue graduate education in music technology at top graduate programs nationally.

Special Admissions Requirements

See Music Admissions information (p. 314) on the Boyer College of Music and Dance page.

Campus Location: Main

Program Code: BC-MUTE-BS

Contact Information

Edward Latham, Music Studies Department Chair
215-204-8498
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Steve Kreinberg
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Learn more about the Bachelor of Science in Music Technology.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Science in Music Technology is conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124 credits.

University Requirements

- All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.
- All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for the major are MUST 3196 and either MUST 3696 or MUST 3796

Program Requirements

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
Secondary Piano		
MUSC 1405	Secondary Piano for Music Majors	1
MUSC 1406	Secondary Piano for Music Majors	1
MUSC 2405	Secondary Piano for Music Majors	1
MUSC 2406	Secondary Piano for Music Majors	1
Conducting		
MUSC 2323	Basic Conducting	1
MUSC 2324	Conducting Intermediate	1
Orchestration		
MUST 3713	Orchestration	3
Music History		
MUST 2703	Music in History	3
MUST 2704	Music in History	3
MUST 3196	History of Pop	3
MUST 3696 or MUST 3796	Music in History	3
Music Technology		
MUST 3763	Analog and Modular Sound Synthesis	3
MUST 3764	Scoring for Film and Digital Media	3
MUST 3765	Scoring and Audio Design for Video Games	3
MUST 4707	Computer Programming for Musicians	3
MUST 4711	Computers in Musical Applications	3
MUST 4712	Computer Synthesis of Music	3
MUST 4713	Sound Recording	3
MUST 4714	Sound Editing	3
MUST 4730	Electronic Music Ensemble (Take 3 times for a total of 3 credits)	3
MUST 4725	Advanced Audio Production	3
MUST 4882	Project in Music Technology	3
Performance and Music Elective Courses		
Select at least 8 credits of music courses in the Boyer College, including any of the following Music Technology courses		8
MUST 4706	Live Recording and Mixing for Broadcast	
MUST 4719	MIDI	
MUST 4721	Computer Music Studio	
MUST 4724	Printing Music Scores and Parts	
MUST 4727	Electronic Music Composition: Practice, History, Theory	
MUST 4732	Programming in Max	
MUST 4780	Special Topics Music Studies	

MUST 4785	Music Industry Internship	
MUST 4786	Music Industry Internship	
Ensembles		
Pending a successful audition for the respective department, students may select any combination of the following ensembles at 1 credit each for a total of 2 credits. In subsequent semesters, up to 3 additional credits of ensemble (counted as General Studies Electives or Performance and Music Electives) may be taken with re-audition and departmental permission for a grand total of up to 5 credits of ensemble at 1 credit each.		2
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 3300	Choral Ensemble	
MUSC 3510	Marching Band	
MUSC 4300	Concert Choir	
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
MUST 4700	Latin Amer Mus Ensemble	
MUST 4710	Early Music Ensemble	
Electives		
Electives may be selected in any academic discipline		12
Total Credit Hours		124

Suggested Academic Plan

Bachelor of Science in Music Technology with a Concentration in Interdisciplinary Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
MUSC 1405	Secondary Piano for Music Majors	1
Select one of the following: ¹		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 3300	Choral Ensemble	
MUSC 3510	Marching Band	
MUSC 4300	Concert Choir	
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
MUST 4700	Latin Amer Mus Ensemble	
MUST 4710	Early Music Ensemble	
MUST 1711	Theory I	4
MUST 4711	Computers in Musical Applications	3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Breadth Course		3
Credit Hours		16
Spring		
MUSC 1406	Secondary Piano for Music Majors	1
Select one of the following: ¹		1
MUSC 3100	Small Jazz Ensemble	
MUSC 3110	Large Jazz Ensemble	
MUSC 3300	Choral Ensemble	
MUSC 3510	Marching Band	
MUSC 4300	Concert Choir	

MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
MUST 4700	Latin Amer Mus Ensemble	
MUST 4710	Early Music Ensemble	
MUST 1712	Theory II	4
MUST 4713	Sound Recording	3
GenEd Quantitative Literacy Course ^{GQ 2}		4
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
MUSC 2405	Secondary Piano for Music Majors	1
MUSC 2323	Basic Conducting	1
MUST 2711	Theory III	4
MUST 4714	Sound Editing	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
General Studies Elective ^{3, 4}		3
Credit Hours		15
Spring		
MUSC 2406	Secondary Piano for Music Majors	1
MUSC 2324	Conducting Intermediate	1
MUST 2712	Theory IV	4
MUST 4712	Computer Synthesis of Music	3
MUST 4725	Advanced Audio Production	3
Performance and Music Elective ⁴		2
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		17
Year 3		
Fall		
MUST 2703	Music in History	3
MUST 3713	Orchestration	3
MUST 3764	Scoring for Film and Digital Media	3
MUST 4707	Computer Programming for Musicians	3
MUST 4730	Electronic Music Ensemble	1
GenEd Breadth Course		3
Credit Hours		16
Spring		
MUST 2704	Music in History	3
MUST 3763	Analog and Modular Sound Synthesis	3
MUST 3196	History of Pop	3
MUST 3765	Scoring and Audio Design for Video Games	3
MUST 4730	Electronic Music Ensemble	1
General Studies Elective ^{3, 4}		3
Credit Hours		16
Year 4		
Fall		
MUST 3696 or MUST 3796	Music in History or Music in History	3
MUST 4730	Electronic Music Ensemble	1

Performance and Music Elective ⁴	3
GenEd Breadth Course	3
GenEd Breadth Course	3
General Studies Elective ^{3, 4}	3
Credit Hours	16
Spring	
MUST 4882 Project in Music Technology	3
Performance and Music Elective ⁴	3
GenEd Breadth Course	3
General Studies Elective ^{3, 4}	3
Credit Hours	12
Total Credit Hours	124

1

Pending a successful audition for the respective department, students may select any combination of the following courses for a total of 2 credits: Small Jazz Ensemble (MUSC 3100), Large Jazz Ensemble (MUSC 3110), Choral Ensemble (MUSC 3300), Marching Band (MUSC 3510), Concert Choir (MUSC 4300), Instrumental Ensemble (MUSC 4500, MUSC 4510, MUSC 4520), Latin American Ensemble (MUST 4700), Early Music Ensemble (MUST 4710). In subsequent semesters, up to 3 additional credits of ensemble (counted as General Studies Electives or Music and Performance Electives) may be taken with re-audition and Departmental permission for a grand total of up to 5 credits of ensemble at 1 credit each.

2

A student placing into MATH 0701 is required to complete successfully MATH 0701 before enrolling in a GenEd Quantitative Literacy (GQ) course or GenEd Science & Technology (GS1, GS2) course.

3

Electives may be selected in any academic discipline.

4

Any permissible Boyer course numbered 1000 – 4999 in departments Music (MUSC), Music Education (MUED), or Music Studies (MUST), including the following Music Technology elective courses: Live Recording and Mixing for Broadcast (MUST 4706), MIDI (MUST 4719), Computer Music Studio (MUST 4721), Printing Music Scores and Parts (MUST 4724), Electronic Music Composition: Practice, History, Theory (MUST 4727), Programming in Max (MUST 4732), Special Topics Music Studies (MUST 4780) (Music Technology Topic), Music Industry Internship (MUST 4785), Music Industry Internship (MUST 4786)

Music Technology Certificate

Overview

Undergraduate certificate programs in Performance (Performing Arts, Classical and Jazz, and Dance), Music Studies (Theory, History, Composition, and Jazz Studies), and Technology provide opportunities to experience the excitement of Center for the Performing and Cinematic Arts courses. Completing these certificate programs will culminate in significant music and dance knowledge and performance experience. Each of the certificate programs offers a coherent disciplinary context beyond that which is possible in random course election. Graded experiences will be recognized on the final transcript.

Undergraduate students interested in the **Certificate in Music Technology** must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

Students must complete the online application and other requirements that may be listed below. No audition or portfolio is required.

Coursework may be completed in four semesters if the program permits. Most students should complete all requirements within six semesters. Accepted students may delay certain required coursework by one semester or take courses out of sequence only with Boyer College advisor approval.

There are no exit requirements, comprehensive exams, theses, or practica required. Grading will consist of standard letter grades awarded according to Boyer College and university policy for all coursework. The minimum grade for all coursework is C-. There will be no course auditing, pass/fail grades, or CR options. Evidence of student success will be indicated by courses completed and grades earned.

Admission

Applicants must complete an online application. Admission requires students to be in good standing, and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

All application materials must be submitted by November 30 for Spring semester matriculation and May 15 for Fall semester matriculation.

Only one program may be selected. There will be no concurrent multiple program admission.

Advising and course selection will occur after admission. A grade of C- or higher must be earned in all required courses to receive the certificate.

No certificate program will be recognized as stand-alone.

No certificate program will be available to any applicant after completion of the bachelor's degree.

Certificate completion will be acknowledged on the official transcript only at the time of the awarding of the bachelor's degree.

Campus Location: Main

Program Code: BC-MUTE-CERT

Learn more about the undergraduate certificate in Music Technology.

Requirements for non-Boyer Students

The Certificate in Music Technology will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the non-Boyer student successfully completes the following courses with a grade of C- or better in each course:

Code	Title	Credit Hours
FMA 1172	Introduction to Film and Video Analysis	3
MUST 4713	Sound Recording	3
MUST 4714	Sound Editing	3
MUST 4725	Advanced Audio Production	3
Total Credit Hours		12

Requirements for Boyer Students

The Certificate in Music Technology will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the Boyer student successfully completes the following courses with a grade of C- or better in each course:

Code	Title	Credit Hours
MUST 4713	Sound Recording	3
MUST 4714	Sound Editing	3
MUST 4762	Introduction to Music Technology for Non-Majors	3
Select one of the following:		3
MUST 3764	Scoring for Film and Digital Media	
MUST 3765	Scoring and Audio Design for Video Games	
MUST 4725	Advanced Audio Production	
MUST 4731	Arts Enterprise	
MUST 4732	Programming in Max	
Total Credit Hours		12

Music Theory (Jazz) Certificate

Overview

Undergraduate certificate programs in Performance (Performing Arts, Classical and Jazz, and Dance), Music Studies (Theory, History, Composition, and Jazz Studies), and Technology provide opportunities to experience the excitement of Center for the Performing and Cinematic Arts courses. Completing these certificate programs will culminate in significant music and dance knowledge and performance experience. Each of the certificate programs offers a coherent disciplinary context beyond that which is possible in random course election. Graded experiences will be recognized on the final transcript.

Undergraduate students interested in the **Certificate in Music Theory (Jazz)** must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

Students must complete the online application and other requirements that may be listed below. No audition or portfolio is required.

Coursework may be completed in four semesters if the program permits. Most students should complete all requirements within six semesters. Accepted students may delay certain required coursework by one semester or take courses out of sequence only with Boyer College advisor approval.

There are no exit requirements, comprehensive exams, theses, or practica required. Grading will consist of standard letter grades awarded according to Boyer College and university policy for all coursework. The minimum grade for all coursework is C-. There will be no course auditing, pass/fail grades, or CR options. Evidence of student success will be indicated by courses completed and grades earned.

Admission

Applicants must complete an online application. Admission requires students to be in good standing, and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

All application materials must be submitted by November 30 for Spring semester matriculation and May 15 for Fall semester matriculation.

Only one program may be selected. There will be no concurrent multiple program admission.

Advising and course selection will occur after admission. A grade of C- or higher must be earned in all required courses to receive the certificate.

No certificate program will be recognized as stand-alone.

No certificate program will be available to any applicant after completion of the bachelor's degree.

Certificate completion will be acknowledged on the official transcript only at the time of the awarding of the bachelor's degree.

Campus Location: Main

Program Code: BC-MTJZ-CERT

Learn more about the undergraduate certificate in Music Theory (Jazz).

Requirements

The Certificate in Music Theory (Jazz) will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

Code	Title	Credit Hours
MUST 1711	Theory I (Jazz)	4
MUST 1712	Theory II (Jazz)	4
MUST 2712	Theory IV	4
MUST 3770	Topics in Music Theory	2
Total Credit Hours		14

Music Theory (Traditional) Certificate

Overview

Undergraduate certificate programs in Performance (Performing Arts, Classical and Jazz, and Dance), Music Studies (Theory, History, Composition, and Jazz Studies), and Technology provide opportunities to experience the excitement of Center for the Performing and Cinematic Arts courses. Completing these certificate programs will culminate in significant music and dance knowledge and performance experience. Each of the certificate programs offers a coherent disciplinary context beyond that which is possible in random course election. Graded experiences will be recognized on the final transcript.

Undergraduate students interested in the **Certificate in Music Theory (Traditional)** must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

Students must complete the online application and other requirements that may be listed below. No audition or portfolio is required.

Coursework may be completed in four semesters if the program permits. Most students should complete all requirements within six semesters. Accepted students may delay certain required coursework by one semester or take courses out of sequence only with Boyer College advisor approval.

There are no exit requirements, comprehensive exams, theses, or practica required. Grading will consist of standard letter grades awarded according to Boyer College and university policy for all coursework. The minimum grade for all coursework is C-. There will be no course auditing, pass/fail grades, or CR options. Evidence of student success will be indicated by courses completed and grades earned.

Admission

Applicants must complete an online application. Admission requires students to be in good standing, and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

All application materials must be submitted by November 30 for Spring semester matriculation and May 15 for Fall semester matriculation.

Only one program may be selected. There will be no concurrent multiple program admission.

Advising and course selection will occur after admission. A grade of C- or higher must be earned in all required courses to receive the certificate.

No certificate program will be recognized as stand-alone.

No certificate program will be available to any applicant after completion of the bachelor's degree.

Certificate completion will be acknowledged on the official transcript only at the time of the awarding of the bachelor's degree.

Campus Location: Main

Program Code: BC-MTHR-CERT

Learn more about the undergraduate certificate in Music Theory (Traditional).

Requirements

The Certificate in Music Theory (Traditional) will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

Code	Title	Credit Hours
MUST 1711	Theory I (Traditional)	4
MUST 1712	Theory II (Traditional)	4
MUST 2711	Theory III	4
MUST 4717	Counterpoint	3
Total Credit Hours		15

Music Therapy BM

Overview

The **Bachelor of Music in Music Therapy** is offered by the Department of Music Education and Music Therapy. This program, fully approved by the American Music Therapy Association, is designed to prepare students for entry-level clinical positions in music therapy. Upon successful completion of the degree, graduates are eligible to take the national examination of the Certification Board for Music Therapists and thereby qualify for professional certification in the field.

Music Therapy is a **four-and-a-half-year** degree program, including post-academic clinical training. The Music Therapy clinical training continues one semester beyond the second semester of the senior year.

Students **must select one of the following concentrations:**

- Bassoon
- Cello
- Clarinet
- Classical Guitar
- Double Bass
- Euphonium
- Flute
- French Horn
- Harp
- Harpsichord
- Oboe
- Percussion

- Piano
- Saxophone
- Trombone
- Trumpet
- Tuba
- Viola
- Violin
- Voice

Clinical Training

A total of 1200 hours of supervised clinical training is required prior to graduation. Refer to the program requirements (p. 439) for details.

Special Admissions Requirements

See Music Admissions information (p. 314) on the Boyer College of Music and Dance page.

Campus Location: Main

Program Code: BC-MTHE-BMUS

Licensure/Certification

Board Certification as a Music Therapist demonstrates that you have completed comprehensive competency testing based on your education and clinical training and that you have met an objective standard that ensures you are prepared to practice music therapy. Certification is required to practice as a music therapist in the following states: California, Connecticut, Georgia, Nevada, New Jersey, New York, North Dakota, Oklahoma, Oregon, Rhode Island, Utah, Virginia, and Wisconsin.

The Certification Board of Music Therapists administers an examination that students must pass in order to become certified. Temple University's Bachelor of Music in Music Therapy and Master of Music in Music Therapy programs, both accredited by the American Music Therapy Association (AMTA), meet the educational requirements to sit for the certification examination. Students must also complete a clinical internship following graduation before sitting for the certification examination.

<https://www.cbmt.org/state-requirements/>

Contact Information

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Learn more about the Bachelor of Music in Music Therapy.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Music in Music Therapy is conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 130 credits. This major requires a concentration; the available concentrations are Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Harpsichord, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, and Voice.

University Requirements

- All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.
- All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses for the major are MUST 3196, MUST 3696, and MUED 4696.

Clinical Training

A total of 1200 hours of supervised clinical training is required prior to graduation.

Students must be continually enrolled in MUED 4685 Music Therapy Clinical Internship for a total of 1000 hours. A student beginning an internship in Year 4 Spring will also need to register for this in the Year 4 Summer session and possibly Year 5 Fall; credits can be distributed across semesters differently but must total 6.

Music Therapy Grades

Grades below C in any music therapy course may not be applied toward degree requirements in music therapy. All students are permitted to repeat a course one time. Students who need to repeat a course a second time must obtain the approval of the dean/designee of their home school or college and be registered with assistance. Except as permitted by this policy, no students may repeat a course a third time.

Students who have exhausted course attempts for course(s) required for their major will be required to change majors.

Program Requirements

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
Music History		
MUST 2704	Music in History	3
MUST 3196	History of Pop	3
MUST 3696	Music in History	3
Intermediate Conducting		
MUSC 2323	Basic Conducting	1
MUSC 2324	Conducting Intermediate	1
Psychology		
PSY 1001	Introduction to Psychology	3
PSY 2201	Foundations of Psychopathology	3
PSY 2301	Foundations of Developmental Psychology	3
Functional Piano, Voice, and Guitar		
MUED 3631	Functional Voice I ¹	1
MUED 3632	Functional Voice II ¹	1
MUED 3633	Functional Piano I ¹	1
MUED 3634	Functional Piano II ¹	1
MUED 3635	Functional Guitar I ¹	1
MUED 3636	Functional Guitar II ¹	1
Music Therapy		
MUED 3689	Fieldwork in Music Therapy	2
MUED 3789	Fieldwork in Music Therapy II	2
MUED 3889	Fieldwork in Music Therapy III	2
MUED 4611	Music Therapy Overview	3
MUED 4613	Music Therapy Foundations	3
MUED 4614	Psychiatric Music Therapy	3
MUED 4616	Developmental Music Therapy	3
MUED 4618	Music Therapy Ethics	2
MUED 4619	Medical/Rehabilitative Music Therapy	3
MUED 4641	Music Therapy Experiences I: Creative Methods	1
MUED 4642	Music Therapy Experiences II: Recreative Methods	1
MUED 4643	Music Therapy Experiences III: Receptive Methods	1
MUED 4685	Music Therapy Clinical Internship ²	6
MUED 4696	Music Therapy Research	3
Concentration		

Select the courses specific to your concentration:

MUSC 1201 or MUSC 1401 or MUSC 1501	Voice Concentration Piano Concentration Instrumental Concentration	2
MUSC 1202 or MUSC 1402 or MUSC 1502	Voice Concentration Piano Concentration Instrumental Concentration	2
MUSC 2201 or MUSC 2401 or MUSC 2501	Voice Concentration Piano Concentration Instrumental Concentration	2
MUSC 2202 or MUSC 2402 or MUSC 2502	Voice Concentration Piano Concentration Instrumental Concentration	2
Secondary Piano		
MUSC 1405	Secondary Piano for Music Majors ¹	1
MUST 1106	Jazz Secondary Piano ¹	1
MUST 2105	Jazz Secondary Piano	1
MUST 2106	Jazz Secondary Piano	1
MUST 3105	Jazz Class Piano	1
Guitar		
MUED 1658	Guitar I ¹	1
MUED 1659	Guitar II ¹	1
Voice		
MUSC 1211	Voice Class ¹	1
MUSC 1212	Voice Class ¹	1
Ensembles		
Consult with advisor to select the appropriate Ensemble courses		4
Total Credit Hours		130

1

Voice Concentrations

- In lieu of MUSC 1211 and MUSC 1212, classical singers can take MUST 2112 or MUST 2114; jazz singers can take MUST 2112 or MUST 4112.
- Classical and jazz singers must take MUED 3631 and MUED 3632, unless waived by examination.

Piano Concentrations

- In lieu of MUSC 1405, classical pianists can take MUST 2112 or MUST 2114; jazz pianists can take MUST 2112 or MUST 4112.
- In lieu of MUSC 1405 and MUST 1106, classical pianists must take two credits of jazz piano; jazz pianists must take two credits of jazz electives.
- Both classical and jazz pianists must take MUED 3633 and MUED 3634 unless waived upon examination by instructor.

Guitar Concentrations

- In lieu of MUED 1658 and MUED 1659, classical guitarists can take MUST 2112 or MUST 2114; jazz guitarists can take MUST 2112 or MUST 4112.
- Both classical and jazz guitarists must take MUED 3635 and MUED 3636, unless waived upon examination by the instructor.

2

Must be continually enrolled in MUED 4685 Music Therapy Clinical Internship for a total of 1000 hours. A student beginning an internship in Spring will also need to register for this in the Summer session and possibly Fall; credits can be distributed across semesters differently but must total 6.

Suggested Academic Plan

Bachelor of Music in Music Therapy

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MUSC 1405	Secondary Piano for Music Majors ¹	1
MUSC 1211	Voice Class ¹	1

MUED 4611	Music Therapy Overview	3
MUED 1658	Guitar I ¹	1
Ensemble		1
MUST 1711	Theory I	4
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
Select one of the following:		2
MUSC 1201	Voice Concentration	
MUSC 1401	Piano Concentration	
MUSC 1501	Instrumental Concentration	
Credit Hours		17
Spring		
MUST 1106	Jazz Secondary Piano ¹	1
MUSC 1212	Voice Class ¹	1
MUED 1659	Guitar II ¹	1
Ensemble		1
MUST 1712	Theory II	4
GenEd Quantitative Literacy Course ^{GQ}		4
PSY 1001	Introduction to Psychology	3
Select one of the following:		2
MUSC 1202	Voice Concentration	
MUSC 1402	Piano Concentration	
MUSC 1502	Instrumental Concentration	
Credit Hours		17
Year 2		
Fall		
MUST 2105	Jazz Secondary Piano	1
MUED 3635	Functional Guitar I ¹	1
MUSC 2323	Basic Conducting	1
Ensemble		1
MUST 2711	Theory III	4
MUED 4641	Music Therapy Experiences I: Creative Methods	1
MUED 4616	Developmental Music Therapy	3
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
Select one of the following:		2
MUSC 2201	Voice Concentration	
MUSC 2401	Piano Concentration	
MUSC 2501	Instrumental Concentration	
Credit Hours		17
Spring		
MUST 2106	Jazz Secondary Piano	1
MUED 3636	Functional Guitar II ¹	1
MUSC 2324	Conducting Intermediate	1
Ensemble		1
MUST 2712	Theory IV	4
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
PSY 2301	Foundations of Developmental Psychology	3
MUED 4642	Music Therapy Experiences II: Recreative Methods	1
Select one of the following:		2
MUSC 2202	Voice Concentration	

MUSC 2402	Piano Concentration	
MUSC 2502	Instrumental Concentration	
Credit Hours		17
Year 3		
Fall		
MUED 3633	Functional Piano I ¹	1
MUED 3631	Functional Voice I ¹	1
MUST 3196	History of Pop	3
MUED 4614	Psychiatric Music Therapy	3
MUED 4643	Music Therapy Experiences III: Receptive Methods	1
MUED 3689	Fieldwork in Music Therapy	2
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		17
Spring		
MUED 3634	Functional Piano II ¹	1
MUED 3632	Functional Voice II ¹	1
MUED 3789	Fieldwork in Music Therapy II	2
MUST 2704	Music in History	3
PSY 2201	Foundations of Psychopathology	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
MUED 4696	Music Therapy Research	3
MUST 3696	Music in History	3
MUED 3889	Fieldwork in Music Therapy III	2
MUED 4619	Medical/Rehabilitative Music Therapy	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		17
Spring		
MUED 4613	Music Therapy Foundations	3
MUST 3105	Jazz Class Piano	1
MUED 4618	Music Therapy Ethics	2
MUED 4685	Music Therapy Clinical Internship ²	2
Credit Hours		8
Summer		
MUED 4685	Music Therapy Clinical Internship ²	2
Credit Hours		2
Year 5		
Fall		
MUED 4685	Music Therapy Clinical Internship ²	2
Credit Hours		2
Total Credit Hours		130

1

Voice Concentrations

- In lieu of MUSC 1211 and MUSC 1212, classical singers can take MUST 2112 or MUST 2114; jazz singers can take MUST 2112 or MUST 4112.
- Classical and jazz singers must take MUED 3631 and MUED 3632, unless waived by examination.

Piano Concentrations

- In lieu of MUSC 1405, classical pianists can take MUST 2112 or MUST 2114; jazz pianists can take MUST 2112 or MUST 4112.
- In lieu of MUSC 1405 and MUST 1106, classical pianists must take two credits of jazz piano; jazz pianists must take two credits of jazz electives.
- Both classical and jazz pianists must take MUED 3633 and MUED 3634 unless waived upon examination by instructor.

Guitar Concentrations

- In lieu of MUED 1658 and MUED 1659, classical guitarists can take MUST 2112 or MUST 2114; jazz guitarists can take MUST 2112 or MUST 4112.
- Both classical and jazz guitarists must take MUED 3635 and MUED 3636, unless waived upon examination by the instructor.

2

Must be continually enrolled in MUED 4685 Music Therapy Clinical Internship for a total of 1000 hours. A student beginning an internship in Spring will also need to register for this in the Summer session and possibly Fall; credits can be distributed across semesters differently but must total 6.

Music Therapy/Jazz BM

Overview

The **Bachelor of Music in Music Therapy/Jazz** is offered by the Department of Music Education and Music Therapy. This program, fully approved by the American Music Therapy Association, is designed to prepare students for entry-level clinical positions in music therapy. Upon successful completion of the degree, graduates are eligible to take the national examination of the Certification Board for Music Therapists and thereby qualify for professional certification in the field.

Music Therapy is a **four-and-a-half-year** degree program, including post-academic clinical training. The Music Therapy clinical training continues one semester beyond the second semester of the senior year.

Students **must select one of the following concentrations**:

- Bassoon
- Cello
- Clarinet
- Double Bass
- Euphonium
- Flute
- French Horn
- Guitar
- Oboe
- Percussion
- Piano
- Saxophone
- Trombone
- Trumpet
- Tuba
- Viola
- Violin
- Voice

Clinical Training

A total of 1200 hours of supervised clinical training is required prior to graduation. Refer to the program requirements (p. 445) for details.

Special Admissions Requirements

See Music Admissions information (p. 314) on the Boyer College of Music and Dance page.

Campus Location: Main

Program Code: BC-MTHJ-BMUS

Licensure/Certification

Board Certification as a Music Therapist demonstrates that you have completed comprehensive competency testing based on your education and clinical training and that you have met an objective standard that ensures you are prepared to practice music therapy. Certification is required to practice as a music therapist in the following states: California, Connecticut, Georgia, Nevada, New Jersey, New York, North Dakota, Oklahoma, Oregon, Rhode Island, Utah, Virginia, and Wisconsin.

The Certification Board of Music Therapists administers an examination that students must pass in order to become certified. Temple University's Bachelor of Music in Music Therapy and Master of Music in Music Therapy programs, both accredited by the American Music Therapy Association (AMTA), meet the educational requirements to sit for the certification examination. Students must also complete a clinical internship following graduation before sitting for the certification examination.

<https://www.cbmt.org/state-requirements>

Contact Information

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215-204-8310
alison.reynolds@temple.edu

Michael Zanders, Coordinator of Undergraduate Music Therapy Program
215-204-8311
michael.zanders@temple.edu

Learn more about the Bachelor of Music in Music Therapy/Jazz.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Music in Music Therapy/Jazz is conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 130 credits. This major requires a concentration; the available concentrations are Bassoon, Cello, Clarinet, Double Bass, Euphonium, Flute, French Horn, Guitar, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, and Voice.

University Requirements

- All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.
- All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses for the major are MUST 3196, MUST 3696, and MUED 4696.

Clinical Training

A total of 1200 hours of supervised clinical training is required prior to graduation.

Students must be continually enrolled in MUED 4685 Music Therapy Clinical Internship for a total of 1000 hours. A student beginning an internship in Year 4 Spring will also need to register for this in the Year 4 Summer session and possibly Year 5 Fall; credits can be distributed across semesters differently but must total 6.

Music Therapy Grades

Grades below C in any music therapy course may not be applied toward degree requirements in music therapy. All students are permitted to repeat a course one time. Students who need to repeat a course a second time must obtain the approval of the dean/designee of their home school or college and be registered with assistance. Except as permitted by this policy, no students may repeat a course a third time.

Students who have exhausted course attempts for course(s) required for their major will be required to change majors.

Program Requirements

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4

MUST 2711	Theory III	4
MUST 2712	Theory IV	4
Music History		
MUST 2704	Music in History	3
MUST 3196	History of Pop	3
MUST 3696	Music in History	3
Intermediate Conducting		
MUSC 2323	Basic Conducting	1
MUSC 2324	Conducting Intermediate	1
Psychology		
PSY 1001	Introduction to Psychology	3
PSY 2201	Foundations of Psychopathology	3
PSY 2301	Foundations of Developmental Psychology	3
Functional Piano, Voice, and Guitar		
MUED 3631	Functional Voice I ¹	1
MUED 3632	Functional Voice II ¹	1
MUED 3633	Functional Piano I ¹	1
MUED 3634	Functional Piano II ¹	1
MUED 3635	Functional Guitar I ¹	1
MUED 3636	Functional Guitar II ¹	1
Music Therapy		
MUED 3689	Fieldwork in Music Therapy	2
MUED 3789	Fieldwork in Music Therapy II	2
MUED 3889	Fieldwork in Music Therapy III	2
MUED 4611	Music Therapy Overview	3
MUED 4613	Music Therapy Foundations	3
MUED 4614	Psychiatric Music Therapy	3
MUED 4616	Developmental Music Therapy	3
MUED 4618	Music Therapy Ethics	2
MUED 4619	Medical/Rehabilitative Music Therapy	3
MUED 4641	Music Therapy Experiences I: Creative Methods	1
MUED 4642	Music Therapy Experiences II: Recreative Methods	1
MUED 4643	Music Therapy Experiences III: Receptive Methods	1
MUED 4685	Music Therapy Clinical Internship ²	6
MUED 4696	Music Therapy Research	3
Concentration		
Select the courses specific to your concentration:		
MUSC 1201	Voice Concentration	2
or MUSC 1401	Piano Concentration	
or MUSC 1501	Instrumental Concentration	
MUSC 1202	Voice Concentration	2
or MUSC 1402	Piano Concentration	
or MUSC 1502	Instrumental Concentration	
MUSC 2201	Voice Concentration	2
or MUSC 2401	Piano Concentration	
or MUSC 2501	Instrumental Concentration	
MUSC 2202	Voice Concentration	2
or MUSC 2402	Piano Concentration	
or MUSC 2502	Instrumental Concentration	
Secondary Piano		
MUSC 1405	Secondary Piano for Music Majors ¹	1
MUST 1106	Jazz Secondary Piano ¹	1

MUST 2105	Jazz Secondary Piano	1
MUST 2106	Jazz Secondary Piano	1
MUST 3105	Jazz Class Piano	1
Guitar		
MUED 1658	Guitar I ¹	1
MUED 1659	Guitar II ¹	1
Voice		
MUSC 1211	Voice Class ¹	1
MUSC 1212	Voice Class ¹	1
Ensembles		
Consult with advisor to select the appropriate Ensemble courses		4
Total Credit Hours		130

1

Voice Concentration

- In lieu of MUSC 1211 and MUSC 1212, classical singers can take MUST 2112 or MUST 2114; jazz singers can take MUST 2112 or MUST 4112.
- Classical and jazz singers must take MUED 3631 and MUED 3632, unless waived by examination.

Piano Concentration

- In lieu of MUSC 1405, classical pianists can take MUST 2112 or MUST 2114; jazz pianists can take MUST 2112 or MUST 4112.
- In lieu of MUSC 1405 and MUST 1106, classical pianists must take two credits of jazz piano; jazz pianists must take two credits of jazz electives.
- Both classical and jazz pianists must take MUED 3633 and MUED 3634 unless waived upon examination by instructor.

Guitar Concentration

- In lieu of MUED 1658 and MUED 1659, classical guitarists can take MUST 2112 or MUST 2114; jazz guitarists can take MUST 2112 or MUST 4112.
- Both classical and jazz guitarists must take MUED 3635 and MUED 3636, unless waived upon examination by the instructor.

2

Must be continually enrolled in MUED 4685 Music Therapy Clinical Internship for a total of 1000 hours. A student beginning an internship in Spring will also need to register for this in the Summer session and possibly Fall; credits can be distributed across semesters differently but must total 6.

Suggested Academic Plan

Bachelor of Music in Music Therapy/Jazz

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MUSC 1405	Secondary Piano for Music Majors ¹	1
MUSC 1211	Voice Class ¹	1
MUED 4611	Music Therapy Overview	3
MUED 1658	Guitar I ¹	1
Ensemble		1
MUST 1711	Theory I	4
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Select one of the following:		2
MUSC 1201	Voice Concentration	
MUSC 1401	Piano Concentration	
MUSC 1501	Instrumental Concentration	
Credit Hours		17
Spring		
MUST 1106	Jazz Secondary Piano ¹	1
MUSC 1212	Voice Class ¹	1
MUED 1659	Guitar II ¹	1
Ensemble		1

MUST 1712	Theory II (Jazz)	4
PSY 1001	Introduction to Psychology	3
GenEd Quantitative Literacy Course ^{GQ}		4
Select one of the following:		2
MUSC 1202	Voice Concentration	
MUSC 1402	Piano Concentration	
MUSC 1502	Instrumental Concentration	
Credit Hours		17
Year 2		
Fall		
MUST 2105	Jazz Secondary Piano	1
MUED 3635	Functional Guitar I ¹	1
MUSC 2323	Basic Conducting	1
Ensemble		1
MUST 2711	Theory III (Jazz)	4
MUED 4641	Music Therapy Experiences I: Creative Methods	1
MUED 4616	Developmental Music Therapy	3
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
Select one of the following:		2
MUSC 2201	Voice Concentration	
MUSC 2401	Piano Concentration	
MUSC 2501	Instrumental Concentration	
Credit Hours		17
Spring		
MUST 2106	Jazz Secondary Piano	1
MUED 3636	Functional Guitar II ¹	1
MUSC 2324	Conducting Intermediate	1
Ensemble		1
MUST 2712	Theory IV (Jazz)	4
PSY 2301	Foundations of Developmental Psychology	3
MUED 4642	Music Therapy Experiences II: Recreative Methods	1
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
Select one of the following:		2
MUSC 2202	Voice Concentration	
MUSC 2402	Piano Concentration	
MUSC 2502	Instrumental Concentration	
Credit Hours		17
Year 3		
Fall		
MUED 3633	Functional Piano I ¹	1
MUED 3631	Functional Voice I ¹	1
MUST 3196	History of Pop	3
MUED 4614	Psychiatric Music Therapy	3
MUED 4643	Music Therapy Experiences III: Receptive Methods	1
MUED 3689	Fieldwork in Music Therapy	2
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		17
Spring		
MUED 3634	Functional Piano II ¹	1

MUED 3632	Functional Voice II ¹	1
MUED 3789	Fieldwork in Music Therapy II	2
MUST 2704	Music in History	3
PSY 2201	Foundations of Psychopathology	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
MUED 4696	Music Therapy Research	3
MUED 3889	Fieldwork in Music Therapy III	2
MUST 3696	Music in History	3
MUED 4619	Medical/Rehabilitative Music Therapy	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		17
Spring		
MUED 4613	Music Therapy Foundations	3
MUST 3105	Jazz Class Piano	1
MUED 4618	Music Therapy Ethics	2
MUED 4685	Music Therapy Clinical Internship ²	2
Credit Hours		8
Summer		
MUED 4685	Music Therapy Clinical Internship ²	2
Credit Hours		2
Year 5		
Fall		
MUED 4685	Music Therapy Clinical Internship ²	2
Credit Hours		2
Total Credit Hours		130

1

Voice Concentration

- In lieu of MUSC 1211 and MUSC 1212, classical singers can take MUST 2112 or MUST 2114; jazz singers can take MUST 2112 or MUST 4112.
- Classical and jazz singers must take MUED 3631 and MUED 3632, unless waived by examination.

Piano Concentration

- In lieu of MUSC 1405, classical pianists can take MUST 2112 or MUST 2114; jazz pianists can take MUST 2112 or MUST 4112.
- In lieu of MUSC 1405 and MUST 1106, classical pianists must take two credits of jazz piano; jazz pianists must take two credits of jazz electives.
- Both classical and jazz pianists must take MUED 3633 and MUED 3634 unless waived upon examination by instructor.

Guitar Concentration

- In lieu of MUED 1658 and MUED 1659, classical guitarists can take MUST 2112 or MUST 2114; jazz guitarists can take MUST 2112 or MUST 4112.
- Both classical and jazz guitarists must take MUED 3635 and MUED 3636, unless waived upon examination by the instructor.

2

Must be continually enrolled in MUED 4685 Music Therapy Clinical Internship for a total of 1000 hours. A student beginning an internship in Spring will also need to register for this in the Summer session and possibly Fall; credits can be distributed across semesters differently but must total 6.

Orchestral Music Certificate

Overview

Undergraduate certificate programs in Performance (Performing Arts, Classical and Jazz, and Dance), Music Studies (Theory, History, Composition, and Jazz Studies), and Technology provide opportunities to experience the excitement of Center for the Performing and Cinematic Arts courses. Completing

these certificate programs will culminate in significant music and dance knowledge and performance experience. Each of the certificate programs offers a coherent disciplinary context beyond that which is possible in random course election. Graded experiences will be recognized on the final transcript.

Undergraduate students interested in the **Certificate in Orchestral Music** must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

In addition to the online application and other requirements listed below, students must also submit a video recording (DVD) of one movement of a solo work from standard classical repertoire.

Coursework may be completed in four semesters if the program permits. Most students should complete all requirements within six semesters. Accepted students may delay certain required coursework by one semester or take courses out of sequence only with Boyer College advisor approval.

There are no exit requirements, comprehensive exams, theses, or practica required. Grading will consist of standard letter grades awarded according to Boyer College and university policy for all coursework. The minimum grade for all coursework is C-. There will be no course auditing, pass/fail grades, or CR options. Evidence of student success will be indicated by courses completed and grades earned.

Admission

Applicants must complete an online application. Admission requires students to be in good standing, and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

All application materials must be submitted by November 30 for Spring semester matriculation and May 15 for Fall semester matriculation.

Only one program may be selected. There will be no concurrent multiple program admission.

Advising and course selection will occur after admission. A grade of C- or higher must be earned in all required courses to receive the certificate.

No certificate program will be recognized as stand-alone.

No certificate program will be available to any applicant after completion of the bachelor's degree.

Certificate completion will be acknowledged on the official transcript only at the time of the awarding of the bachelor's degree.

Campus Location: Main

Program Code: BC-ORMU-CERT

Learn more about the undergraduate certificate in Orchestral Music.

Requirements

The Certificate in Orchestral Music will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

Code	Title	Credit Hours
MUST 3770	Topics in Music Theory (take 2 times for 2 credits each)	4
MUSC 3551	Applied Lesson - Instrumental (take 2 times for 3 credits each)	6
MUSC 4500	Instrumental Ensemble (take 2 times for 1 credit each)	2
MUSC 4520	Ensemble (take 2 times for 1 credit each)	2
Total Credit Hours		14

Performance BM

Overview

The **Bachelor of Music in Performance** is offered by the Department of Instrumental Studies.

Students **must select one of the following concentrations:**

- Bassoon
- Cello
- Clarinet
- Classical Guitar
- Double Bass

- Euphonium
- Flute
- French Horn
- Harp
- Harpsichord
- Oboe
- Percussion
- Piano
- Saxophone
- Trombone
- Trumpet
- Tuba
- Viola
- Violin
- Voice

The following information pertains to all concentrations **except for** Classical Guitar, Harpsichord, Piano and Voice. Refer to the Classical Guitar (p. 458), Harpsichord (p. 464), Piano (p. 467) and Voice (p. 471) pages for their requirements.

The instrumental concentrations within the Performance Major center on intensive coaching and private study with a renowned faculty of teachers, many of whom are members of The Philadelphia Orchestra and other professional performing organizations. Opportunity to perform a vast repertoire abounds in the number and types of ensemble experiences available. The programs of study provide the training necessary to compete in the professional performance world.

Special Admissions Requirements

See Music Admissions information (p. 314) on the Boyer College of Music and Dance page.

Campus Location: Main

Program Code: BC-PERF-BMUS

Contact Information

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Learn more about the Bachelor of Music in Performance.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Music in Performance with an Instrumental Concentration (options include Bassoon, Cello, Clarinet, Double Bass, Euphonium, Flute, French Horn, Harp, Oboe, Percussion, Saxophone, Trombone, Trumpet, Tuba, Viola, and Violin) is conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124 credits.

University Requirements

- All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.
- All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for the major are MUST 3696 and MUST 3796.

Program Requirements (Instrumental Concentration)

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
Instrumental Concentration		
MUSC 1503	Instrumental Major	4
MUSC 1504	Instrumental Major	4
MUSC 2503	Instrumental Major	4
MUSC 2504	Instrumental Major	4
MUSC 3503	Instrumental Major	4
MUSC 3504	Instrumental Major	4
MUSC 4503	Instrumental Major	4
MUSC 4584	Instrumental Major	4
Secondary Piano		
MUSC 1405	Secondary Piano for Music Majors	1
MUSC 1406	Secondary Piano for Music Majors	1
MUSC 2405	Secondary Piano for Music Majors	1
MUSC 2406	Secondary Piano for Music Majors	1
Orchestral Repertoire		
MUSC 4570	Orchestral Repertoire (Take three times for three total credits)	3
Intermediate Conducting		
MUSC 2323	Basic Conducting	1
MUSC 2324	Conducting Intermediate	1
Music History		
MUST 2703	Music in History	3
MUST 2704	Music in History	3
MUST 3696	Music in History	3
MUST 3796	Music in History	3
Ensembles		
MUSC 4500	Instrumental Ensemble (Take eight times for eight total credits)	8
Take any combination of the following three courses for a total of 8 credits:		8
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
MUST 4710	Early Music Ensemble	
Electives		
Music Elective(s) - Take any combination of the following courses for a total of at least 3 credits:		3
MUSC 1211	Voice Class	

or MUSC 1212	Voice Class	
MUSC 3300	Choral Ensemble	
MUSC 4323	Conducting (Choral)	
or MUSC 4324	Conducting (Instrumental)	
MUED 2665	Music Learning & Development	
MUST 1118	Business of Music I	
MUST 2114	History of Jazz	
MUST 3741	Keyboard Harmony	
or MUED 3662	Keyboard Harmony - Music Education	
MUST 3713	Orchestration	
MUST 3748	Composition Junior Seminar I	
MUST 3749	Composition Junior Seminar II	
MUST 4712	Computer Synthesis of Music	
MUST 4713	Sound Recording	
MUST 4714	Sound Editing	
MUST 4716	Composing Music for Films	
MUST 4717	Counterpoint	
MUST 4718	Analysis	
MUST 4719	MIDI	
MUST 4722	Advanced Orchestration	
MUST 4762	Introduction to Music Technology for Non-Majors	
Free Electives (If you take more than 3 credits of Music electives, adjust the total of free electives accordingly.)		0-4
Total Credit Hours		124

Program Requirements (Double Bass Concentration)

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
Instrumental Concentration		
MUSC 1503	Instrumental Major	4
MUSC 1504	Instrumental Major	4
MUSC 2503	Instrumental Major	4
MUSC 2504	Instrumental Major	4
MUSC 3503	Instrumental Major	4
MUSC 3504	Instrumental Major	4
MUSC 4503	Instrumental Major	4
MUSC 4584	Instrumental Major	4
Secondary Piano		
MUSC 1405	Secondary Piano for Music Majors	1
MUSC 1406	Secondary Piano for Music Majors	1
MUSC 2405	Secondary Piano for Music Majors	1
MUSC 2406	Secondary Piano for Music Majors	1
Orchestral Repertoire		
MUSC 4570	Orchestral Repertoire (Take three times for three total credits)	3
Intermediate Conducting		
MUSC 2323	Basic Conducting	1
MUSC 2324	Conducting Intermediate	1

Music History		
MUST 2703	Music in History	3
MUST 2704	Music in History	3
MUST 3696	Music in History	3
MUST 3796	Music in History	3
Ensembles		
MUSC 4500	Instrumental Ensemble (Take eight times for eight total credits)	8
Take any combination of the following three courses for a total of 4 credits:		4
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
MUST 4710	Early Music Ensemble	
Electives		
Music Elective(s) - Take any combination of the following courses for a total of at least 7 credits:		7
MUSC 1211	Voice Class	
or MUSC 1212	Voice Class	
MUSC 3300	Choral Ensemble	
MUSC 4323	Conducting (Choral)	
or MUSC 4324	Conducting (Instrumental)	
MUED 2665	Music Learning & Development	
MUST 1118	Business of Music I	
MUST 2114	History of Jazz	
MUST 3741	Keyboard Harmony	
or MUED 3662	Keyboard Harmony - Music Education	
MUST 3713	Orchestration	
MUST 3748	Composition Junior Seminar I	
MUST 3749	Composition Junior Seminar II	
MUST 4712	Computer Synthesis of Music	
MUST 4713	Sound Recording	
MUST 4714	Sound Editing	
MUST 4716	Composing Music for Films	
MUST 4717	Counterpoint	
MUST 4718	Analysis	
MUST 4719	MIDI	
MUST 4722	Advanced Orchestration	
MUST 4762	Introduction to Music Technology for Non-Majors	
Free Electives (If you take more than 7 credits of Music electives, adjust the total of free electives accordingly.)		0-4
Total Credit Hours		124

Program Requirements (Saxophone Concentration)

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
Instrumental Concentration		
MUSC 1503	Instrumental Major	4
MUSC 1504	Instrumental Major	4
MUSC 2503	Instrumental Major	4
MUSC 2504	Instrumental Major	4

MUSC 3503	Instrumental Major	4
MUSC 3504	Instrumental Major	4
MUSC 4503	Instrumental Major	4
MUSC 4584	Instrumental Major	4
Secondary Piano		
MUSC 1405	Secondary Piano for Music Majors	1
MUSC 1406	Secondary Piano for Music Majors	1
MUSC 2405	Secondary Piano for Music Majors	1
MUSC 2406	Secondary Piano for Music Majors	1
Orchestral Repertoire		
MUSC 4570	Orchestral Repertoire	1
Intermediate Conducting		
MUSC 2323	Basic Conducting	1
MUSC 2324	Conducting Intermediate	1
Music History		
MUST 2703	Music in History	3
MUST 2704	Music in History	3
MUST 3696	Music in History	3
MUST 3796	Music in History	3
Ensembles		
MUSC 4500	Instrumental Ensemble (Take eight times for eight total credits)	8
Take any combination of the following two courses for a total of 8 credits:		8
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
Electives		
Music Elective(s) - Take any combination of the following courses for a total of at least 5 credits:		5
MUSC 1211	Voice Class	
or MUSC 1212	Voice Class	
MUSC 3300	Choral Ensemble	
MUSC 4323	Conducting (Choral)	
or MUSC 4324	Conducting (Instrumental)	
MUED 2665	Music Learning & Development	
MUST 1118	Business of Music I	
MUST 2114	History of Jazz	
MUST 3741	Keyboard Harmony	
or MUED 3662	Keyboard Harmony - Music Education	
MUST 3713	Orchestration	
MUST 3748	Composition Junior Seminar I	
MUST 3749	Composition Junior Seminar II	
MUST 4710	Early Music Ensemble	
MUST 4712	Computer Synthesis of Music	
MUST 4713	Sound Recording	
MUST 4714	Sound Editing	
MUST 4716	Composing Music for Films	
MUST 4717	Counterpoint	
MUST 4718	Analysis	
MUST 4719	MIDI	
MUST 4722	Advanced Orchestration	
MUST 4762	Introduction to Music Technology for Non-Majors	
Free Electives (If you take more than 5 credits of Music electives, adjust the total of free electives accordingly.)		0-4
Total Credit Hours		124

Suggested Academic Plan

Bachelor of Music in Performance with an Instrument Concentration

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
MUSC 1503	Instrumental Major	4
MUSC 4500	Instrumental Ensemble	1
Select one of the following:		1
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
MUST 4710	Early Music Ensemble	
MUSC 1405	Secondary Piano for Music Majors	1
MUST 1711	Theory I	4
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
Credit Hours		15
Spring		
MUSC 1504	Instrumental Major	4
MUSC 4500	Instrumental Ensemble	1
Select one of the following:		1
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
MUST 4710	Early Music Ensemble	
MUSC 1406	Secondary Piano for Music Majors	1
MUSC 4570	Orchestral Repertoire	1
MUST 1712	Theory II	4
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Year 2		
Fall		Credit Hours
MUSC 2503	Instrumental Major	4
MUSC 4500	Instrumental Ensemble	1
Select one of the following:		1
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
MUST 4710	Early Music Ensemble	
MUSC 2405	Secondary Piano for Music Majors	1
MUST 2711	Theory III	4
MUST 2703	Music in History	3
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
Credit Hours		17
Spring		
MUSC 2504	Instrumental Major	4
MUSC 4500	Instrumental Ensemble	1
Select one of the following:		1
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
MUST 4710	Early Music Ensemble	
MUSC 2406	Secondary Piano for Music Majors	1

MUST 2712	Theory IV	4
MUST 2704	Music in History	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		17
Year 3		
Fall		
MUSC 3503	Instrumental Major	4
MUSC 4500	Instrumental Ensemble	1
Select one of the following:		1
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
MUST 4710	Early Music Ensemble	
MUSC 2323	Basic Conducting	1
MUST 3696	Music in History	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Spring		
MUSC 3504	Instrumental Major	4
MUSC 4500	Instrumental Ensemble	1
Select one of the following:		1
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
MUST 4710	Early Music Ensemble	
MUSC 2324	Conducting Intermediate	1
MUSC 4570	Orchestral Repertoire	1
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		14
Year 4		
Fall		
MUSC 4503	Instrumental Major	4
MUSC 4500	Instrumental Ensemble	1
Select one of the following:		1
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
MUST 4710	Early Music Ensemble	
Music Elective		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
MUSC 4584	Instrumental Major	4
MUSC 4500	Instrumental Ensemble	1
Select one of the following:		1
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
MUST 4710	Early Music Ensemble	
MUSC 4570	Orchestral Repertoire	1
MUST 3796	Music in History	3

Free Elective	4
Credit Hours	14
Total Credit Hours	124

Code	Title	Credit Hours
Suggested Music Electives		
MUED 2665	Music Learning & Development	3
MUSC 1211	Voice Class	1
or MUSC 1212	Voice Class	
MUSC 3300	Choral Ensemble	1
MUSC 4323	Conducting (Choral)	2
or MUSC 4324	Conducting (Instrumental)	
MUST 1118	Business of Music I	2
MUST 2114	History of Jazz	3
MUST 3713	Orchestration	3
MUST 3741	Keyboard Harmony	3
or MUED 3662	Keyboard Harmony - Music Education	
MUST 3748	Composition Junior Seminar I	2
MUST 3749	Composition Junior Seminar II	2
MUST 4710	Early Music Ensemble	1
MUST 4712	Computer Synthesis of Music	3
MUST 4713	Sound Recording	3
MUST 4714	Sound Editing	3
MUST 4716	Composing Music for Films	3
MUST 4717	Counterpoint	3
MUST 4718	Analysis	3
MUST 4719	MIDI	3
MUST 4722	Advanced Orchestration	2
MUST 4762	Introduction to Music Technology for Non-Majors	3

Double Bass performance majors must enroll for 8 credit hours of MUSC 4500 and 4 credit hours of any combination of MUSC 4510, MUSC 4520, and MUST 4710. It is suggested that MUST 4710 Early Music Ensemble be one of these credit hours. Instead of the other 4 credit hours of ensemble shown in the above Academic Plan, Double Bass majors must take 4 credit hours of music electives.

Saxophone performance majors may register for up to 4 credit hours of ensembles in MUSC 3110 with prior approval of the Instrumental Department chair and director of the Jazz program. The 2 credit hours of MUSC 4570 Orchestral Repertoire classes are to be replaced by music elective(s).

Performance BM with Classical Guitar Concentration

Overview

The **Bachelor of Music in Performance** is offered by the Department of Instrumental Studies.

Students **must select one of the following concentrations**:

- Bassoon
- Cello
- Clarinet
- Classical Guitar
- Double Bass
- Euphonium
- Flute
- French Horn
- Harp
- Harpsichord

- Oboe
- Percussion
- Piano
- Saxophone
- Trombone
- Trumpet
- Tuba
- Viola
- Violin
- Voice

Classical Guitar Concentration

The following information pertains to the **Classical Guitar concentration**. Refer to the Harpsichord (p. 464), Piano, (p. 467) Voice (p. 471) and the other instruments (p. 450) pages for their requirements.

The instrumental concentrations within the Performance Major center on intensive coaching and private study with a renowned faculty of teachers, many of whom are members of The Philadelphia Orchestra and other professional performing organizations. Opportunity to perform a vast repertoire abounds in the number and types of ensemble experiences available. The programs of study provide the training necessary to compete in the professional performance world.

Special Admissions Requirements

See Music Admissions information (p. 314) on Boyer College of Music and Dance page.

Campus Location: Main

Program Code: BC-PERF-BMUS

Contact Information

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Jeffrey Solow, Academic Advisor for Strings
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Learn more about the Bachelor of Music in Performance.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Music in Performance with a Classical Guitar Concentration is conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124 credits.

University Requirements

- All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.
- All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for the major are MUST 3696 and MUST 3796.

Program Requirements

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
Instrumental Concentration		
MUSC 1503	Instrumental Major	4
MUSC 1504	Instrumental Major	4
MUSC 2503	Instrumental Major	4
MUSC 2504	Instrumental Major	4
MUSC 3503	Instrumental Major	4
MUSC 3504	Instrumental Major	4
MUSC 4503	Instrumental Major	4
MUSC 4584	Instrumental Major	4
Secondary Piano		
MUSC 1405	Secondary Piano for Music Majors	1
MUSC 1406	Secondary Piano for Music Majors	1
MUSC 2405	Secondary Piano for Music Majors	1
MUSC 2406	Secondary Piano for Music Majors	1
Intermediate Conducting		
MUSC 2323	Basic Conducting	1
MUSC 2324	Conducting Intermediate	1
Music History		
MUST 2703	Music in History	3
MUST 2704	Music in History	3
MUST 3696	Music in History	3
MUST 3796	Music in History	3
Seminar in Guitar Performance		
MUSC 4560	Seminar in Guitar Performance and Literature (Take eight times for eight total credits)	8
Ensembles		
Take any combination of the following three courses for a total of 4 credits:		4
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
Take any combination of the following three courses for a total of 4 credits:		4
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
Music Electives		
Select from the following courses for a total of 10 credits:		10
MUED 2665	Music Learning & Development	
MUSC 1211	Voice Class	
or MUSC 1212	Voice Class	

MUSC 3300	Choral Ensemble
MUSC 4323	Conducting (Choral)
or MUSC 4324	Conducting (Instrumental)
MUSC 4570	Orchestral Repertoire
MUST 1118	Business of Music I
MUST 2114	History of Jazz
MUST 3713	Orchestration
MUST 3741	Keyboard Harmony
or MUED 3662	Keyboard Harmony - Music Education
MUST 3748	Composition Junior Seminar I
MUST 3749	Composition Junior Seminar II
MUST 4710	Early Music Ensemble
MUST 4712	Computer Synthesis of Music
MUST 4713	Sound Recording
MUST 4714	Sound Editing
MUST 4716	Composing Music for Films
MUST 4717	Counterpoint
MUST 4718	Analysis
MUST 4719	MIDI
MUST 4722	Advanced Orchestration
MUST 4762	Introduction to Music Technology for Non-Majors

Total Credit Hours**124**

Suggested Academic Plan

Bachelor of Music in Performance with a Concentration in Classical Guitar

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MUSC 1503	Instrumental Major	4
MUSC 4560	Seminar in Guitar Performance and Literature	1
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUST 1711	Theory I	4
MUSC 1405	Secondary Piano for Music Majors	1
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
Credit Hours		15
Spring		
MUSC 1504	Instrumental Major	4
MUSC 4560	Seminar in Guitar Performance and Literature	1
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUST 1712	Theory II	4
MUSC 1406	Secondary Piano for Music Majors	1
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		15

Year 2		
Fall		
MUSC 2503	Instrumental Major	4
MUSC 4560	Seminar in Guitar Performance and Literature	1
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUST 2711	Theory III	4
MUST 2703	Music in History	3
MUSC 2405	Secondary Piano for Music Majors	1
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		17
Spring		
MUSC 2504	Instrumental Major	4
MUSC 4560	Seminar in Guitar Performance and Literature	1
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUST 2712	Theory IV	4
MUST 2704	Music in History	3
MUSC 2406	Secondary Piano for Music Majors	1
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		17
Year 3		
Fall		
MUSC 3503	Instrumental Major	4
Select one of the following:		1
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
MUST 3696	Music in History	3
MUSC 2323	Basic Conducting	1
Music Elective		2
MUSC 4560	Seminar in Guitar Performance and Literature	1
GenEd Breadth Course		3
Credit Hours		15
Spring		
MUSC 3504	Instrumental Major	4
Select one of the following:		1
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
MUSC 2324	Conducting Intermediate	1
Music Elective		2
MUSC 4560	Seminar in Guitar Performance and Literature	1
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15

Year 4**Fall**

MUSC 4503	Instrumental Major	4
Select one of the following:		1
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
Music Elective		3
MUSC 4560	Seminar in Guitar Performance and Literature	1
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15

Spring

MUSC 4584	Instrumental Major	4
Select one of the following:		1
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
MUST 3796	Music in History	3
Music Elective		3
MUSC 4560	Seminar in Guitar Performance and Literature	1
GenEd Breadth Course		3
Credit Hours		15
Total Credit Hours		124

Code	Title	Credit Hours
Suggested Music Electives		
MUED 2665	Music Learning & Development	3
MUSC 1211	Voice Class	1
or MUSC 1212	Voice Class	
MUSC 3300	Choral Ensemble	1
MUSC 4323	Conducting (Choral)	2
or MUSC 4324	Conducting (Instrumental)	
MUSC 4570	Orchestral Repertoire	1
MUST 1118	Business of Music I	2
MUST 2114	History of Jazz	3
MUST 3713	Orchestration	3
MUST 3741	Keyboard Harmony	3
or MUED 3662	Keyboard Harmony - Music Education	
MUST 3748	Composition Junior Seminar I	2
MUST 3749	Composition Junior Seminar II	2
MUST 4710	Early Music Ensemble	1
MUST 4712	Computer Synthesis of Music	3
MUST 4713	Sound Recording	3
MUST 4714	Sound Editing	3
MUST 4716	Composing Music for Films	3
MUST 4717	Counterpoint	3
MUST 4718	Analysis	3
MUST 4719	MIDI	3
MUST 4722	Advanced Orchestration	2
MUST 4762	Introduction to Music Technology for Non-Majors	3

Performance BM with Harpsichord Concentration

Overview

The **Bachelor of Music in Performance** is offered by the Department of Instrumental Studies.

Students **must select one of the following concentrations**:

- Bassoon
- Cello
- Clarinet
- Classical Guitar
- Double Bass
- Euphonium
- Flute
- French Horn
- Harp
- Harpsichord
- Oboe
- Percussion
- Piano
- Saxophone
- Trombone
- Trumpet
- Tuba
- Viola
- Violin
- Voice

Harpsichord Concentration

The following information pertains to the **Harpsichord concentration**. Refer to the Classical Guitar (p. 458), Piano, (p. 467) Voice (p. 471) and the other instruments (p. 450) pages for their requirements.

The Harpsichord Concentration is administered by the Department of Keyboard Instruction.

The Department of Keyboard Instruction offers a variety of programs of study to meet the individual needs of potential solo artists, chamber musicians, accompanists and teachers, and provides a keyboard concentration for those majoring in music education, music therapy, music history, music theory, composition and jazz studies. Weekly private lessons are reinforced by regular performance classes, and a series of master classes taught by faculty members and guest artists focuses on special topics essential to the keyboard performer.

The Department of Keyboard Instruction emphasizes training for careers in performance and collaborative piano in both chamber music and opera coaching.

Special Admissions Requirements

See Music Admissions information (p. 314) on Boyer College of Music and Dance page.

Campus Location: Main

Program Code: BC-PERF-BMUS

Contact Information

Charles Abramovic, Keyboard Instruction Department Chair
215-204-8646
charles.abramovic@temple.edu

Learn more about the Bachelor of Music in Performance.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Music in Performance with a Harpsichord Concentration is conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124 credits.

University Requirements

- All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.
- All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses for the major are MUST 3696 and MUST 3796.

Program Requirements

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
Harpsichord Concentration		
MUSC 1603	Harpsichord Major	4
MUSC 1604	Harpsichord Major	4
MUSC 2603	Harpsichord Major	4
MUSC 2604	Harpsichord Major	4
MUSC 3603	Harpsichord Major	4
MUSC 3604	Harpsichord Major	4
MUSC 4603	Harpsichord Major	4
MUSC 4684	Harpsichord Major	4
Music History		
MUST 2703	Music in History	3
MUST 2704	Music in History	3
MUST 3696	Music in History	3
MUST 3796	Music in History	3
Listening & Learning		
MUSC 3443	Listening & Learning Skills for Pianists I	3
MUSC 3444	Listening & Learning Skills for Pianists II	3
Keyboard Literature		
MUSC 3422	Keyboard Literature	3
MUSC 3423	Keyboard Literature	3
Piano Pedagogy		
MUSC 1415	Introduction to Piano Pedagogy	2
MUSC 3415	Pedagogy of Children	2
Ensembles		
MUSC 1428	Accompanying and Piano Ensemble (Take three times for three total credits)	3
MUSC 1429	Accompanying and Piano Ensemble (Take three times for three total credits)	3
MUSC 4510	Instrumental Ensemble (Take two times for two total credits)	2
Take any combination of the following three courses for a total of 4 credits:		4
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
Electives		
Take a total of four Music Elective credits within the following subject areas:		4
MUSC 1000-4999		

MUED 1000-4999

MUST 1000-4999

Total Credit Hours**124****Suggested Academic Plan****Bachelor of Music in Performance with a Concentration in Harpsichord****Suggested Plan for New Students Starting in the 2023-2024 Academic Year****Year 1**

Fall		Credit Hours
MUSC 1603	Harpsichord Major	4
MUSC 1428	Accompanying and Piano Ensemble	1
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUST 1711	Theory I	4
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Breadth Course		3
Credit Hours		17

Spring

MUSC 1604	Harpsichord Major	4
MUSC 1429	Accompanying and Piano Ensemble	1
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUST 1712	Theory II	4
GenEd Breadth Course		3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		17

Year 2

Fall		
MUSC 2603	Harpsichord Major	4
MUSC 1428	Accompanying and Piano Ensemble	1
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUST 2711	Theory III	4
MUST 2703	Music in History	3
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
Credit Hours		16

Spring

MUSC 2604	Harpsichord Major	4
MUSC 1429	Accompanying and Piano Ensemble	1
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	

MUST 2712	Theory IV	4
MUST 2704	Music in History	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		16
Year 3		
Fall		
MUSC 3603	Harpichord Major	4
MUSC 1428	Accompanying and Piano Ensemble	1
MUSC 1415	Introduction to Piano Pedagogy	2
MUSC 3443	Listening & Learning Skills for Pianists I	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Spring		
MUSC 3604	Harpichord Major	4
MUSC 1429	Accompanying and Piano Ensemble	1
MUSC 3415	Pedagogy of Children	2
MUSC 3444	Listening & Learning Skills for Pianists II	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
MUSC 4603	Harpichord Major	4
MUSC 4510	Instrumental Ensemble	1
MUSC 3422	Keyboard Literature	3
MUST 3696	Music in History	3
Music Elective		2
Credit Hours		13
Spring		
MUSC 4684	Harpichord Major	4
MUSC 4510	Instrumental Ensemble	1
MUSC 3423	Keyboard Literature	3
MUST 3796	Music in History	3
Music Elective		2
Credit Hours		13
Total Credit Hours		124

Performance BM with Piano Concentration

Overview

The **Bachelor of Music in Performance** is offered by the Department of Instrumental Studies.

Students **must select one of the following concentrations**:

- Bassoon
- Cello
- Clarinet
- Classical Guitar
- Double Bass
- Euphonium
- Flute

- French Horn
- Harp
- Harpsichord
- Oboe
- Percussion
- Piano
- Saxophone
- Trombone
- Trumpet
- Tuba
- Viola
- Violin
- Voice

Piano Concentration

The following information pertains to the **Piano concentration**. Refer to the Classical Guitar (p. 458), Harpsichord (p. 464), Voice (p. 471) and the other instruments (p. 450) pages for their requirements.

The Piano Concentration is administered by the Department of Keyboard Instruction.

The Department of Keyboard Instruction offers a variety of programs of study to meet the individual needs of potential solo artists, chamber musicians, accompanists and teachers, and provides a keyboard concentration for those majoring in music education, music therapy, music history, music theory, composition and jazz studies. Weekly private lessons are reinforced by regular performance classes, and a series of master classes taught by faculty members and guest artists focuses on special topics essential to the keyboard performer.

Special Admissions Requirements

See Music Admissions information (p. 314) on Boyer College of Music and Dance page.

Campus Location: Main

Program Code: BC-PERF-BMUS

Contact Information

Charles Abramovic, Keyboard Instruction Department Chair
215-204-8646
charles.abramovic@temple.edu

Learn more about the Bachelor of Music in Performance.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Music in Performance with a Piano Concentration is conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124 credits.

University Requirements

- All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.
- All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses for the major are MUST 3696 and MUST 3796.

Program Requirements

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4

MUST 2711	Theory III	4
MUST 2712	Theory IV	4
Piano Concentration		
MUSC 1403	Piano Major	4
MUSC 1404	Piano Major	4
MUSC 2403	Piano Major	4
MUSC 2404	Piano Major	4
MUSC 3403	Piano Major	4
MUSC 3404	Piano Major	4
MUSC 4403	Piano Major	4
MUSC 4484	Piano Major	4
Music History		
MUST 2703	Music in History	3
MUST 2704	Music in History	3
MUST 3696	Music in History	3
MUST 3796	Music in History	3
Listening & Learning		
MUSC 3611	Harpsichord for Pianists	3
MUSC 3443	Listening & Learning Skills for Pianists I	3
Keyboard Literature		
MUSC 3422	Keyboard Literature	3
MUSC 3423	Keyboard Literature	3
Piano Pedagogy		
MUSC 1415	Introduction to Piano Pedagogy	2
MUSC 3415	Pedagogy of Children	2
Ensembles		
MUSC 1428	Accompanying and Piano Ensemble (Take three times for three total credits)	3
MUSC 1429	Accompanying and Piano Ensemble (Take three times for three total credits)	3
MUSC 4510	Instrumental Ensemble (Take two times for two total credits)	2
Take any combination of the following three courses for a total of 4 credits:		4
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
Electives		
Take a total of two Music Elective credits within the following subject areas:		2
MUSC 1000-4999		
MUED 1000-4999		
MUST 1000-4999		
Free Electives (If you take more than 2 credits of Music Electives, adjust the total of free electives accordingly.)		0-2
Total Credit Hours		124

Suggested Academic Plan

Bachelor of Music in Performance with a Concentration in Piano

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MUSC 1403	Piano Major	4
MUSC 1428	Accompanying and Piano Ensemble	1
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	

MUSC 4310	Graduate Conductors Choir	
MUST 1711	Theory I	4
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
Credit Hours		17
Spring		
MUSC 1404	Piano Major	4
MUSC 1429	Accompanying and Piano Ensemble	1
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUST 1712	Theory II	4
GenEd Breadth Course		3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		17
Year 2		
Fall		
MUSC 2403	Piano Major	4
MUSC 1428	Accompanying and Piano Ensemble	1
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUST 2711	Theory III	4
MUST 2703	Music in History	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		16
Spring		
MUSC 2404	Piano Major	4
MUSC 1429	Accompanying and Piano Ensemble	1
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUST 2712	Theory IV	4
MUST 2704	Music in History	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		16
Year 3		
Fall		
MUSC 3403	Piano Major	4
MUSC 1428	Accompanying and Piano Ensemble	1
MUSC 1415	Introduction to Piano Pedagogy	2
MUSC 3443	Listening & Learning Skills for Pianists I	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16

Spring		
MUSC 3404	Piano Major	4
MUSC 1429	Accompanying and Piano Ensemble	1
MUSC 3415	Pedagogy of Children	2
MUSC 3611	Harpichord for Pianists	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
MUSC 4403	Piano Major	4
MUSC 4510	Instrumental Ensemble	1
MUSC 3422	Keyboard Literature	3
MUST 3696	Music in History	3
Music Elective		2
Credit Hours		13
Spring		
MUSC 4484	Piano Major	4
MUSC 4510	Instrumental Ensemble	1
MUSC 3423	Keyboard Literature	3
MUST 3796	Music in History	3
Free Elective		2
Credit Hours		13
Total Credit Hours		124

Performance BM with Voice Concentration

Overview

The **Bachelor of Music in Performance** is offered by the Department of Instrumental Studies.

Students **must select one of the following concentrations**:

- Bassoon
- Cello
- Clarinet
- Classical Guitar
- Double Bass
- Euphonium
- Flute
- French Horn
- Harp
- Harpsichord
- Oboe
- Percussion
- Piano
- Saxophone
- Trombone
- Trumpet
- Tuba
- Viola
- Violin
- Voice

Voice Concentration

The following information pertains to the **Voice concentration**. Refer to the Classical Guitar (p. 458), Harpsichord (p. 464), Piano (p. 467) and the other instruments (p. 450) pages for their requirements.

The Voice concentration, which is administered by the Department of Vocal Arts, is for performance students who elect a concentration in Voice. The training, provided by the Vocal Arts Department, emphasizes vocal technique and repertoire in a challenging program of vocal development. Performance progress is closely guided through private lessons, participation in various Boyer College choirs, juries and recital performances. The program of study prepares singers for careers in concert and recital performance, opera and private teaching.

Special Admissions Requirements

See Music Admissions information (p. 314) on Boyer College of Music and Dance page.

Campus Location: Main

Program Code: BC-PERF-BMUS

Contact Information

Paul Rardin, Chair
215-204-4742
rardin@temple.edu

Dr. Christine Anderson, Coordinator, Voice Studios
215-204-8375
christine.anderson@temple.edu

Learn more about the Bachelor of Music in Performance.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Music in Performance with a Voice Concentration is conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124 credits.

University Requirements

- All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.
- All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for the major are MUST 3696 and MUSC 4296.

Program Requirements

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
Voice Concentration		
MUSC 1203	Voice Major	3
MUSC 1204	Voice Major	3
MUSC 2203	Voice Major	3
MUSC 2204	Voice Major	3
MUSC 3203	Voice Major	3
MUSC 3204	Voice Major	3
MUSC 4203	Voice Major	3
MUSC 4284	Voice Major	3

Secondary Piano		
MUSC 1405	Secondary Piano for Music Majors	1
MUSC 1406	Secondary Piano for Music Majors	1
MUSC 2405	Secondary Piano for Music Majors	1
MUSC 2406	Secondary Piano for Music Majors	1
Basic Conducting		
MUSC 2323	Basic Conducting	1
Music History		
MUST 2703	Music in History	3
MUST 2704	Music in History	3
MUST 3696	Music in History	3
Diction		
MUSC 1225	English Diction	1
MUSC 1226	German Diction	1
MUSC 1227	Italian Diction	1
MUSC 1228	French Diction	1
Foreign Language		
FREN 1001	Introduction to French I	4
Select two of the following:		8
GER 1001	Introduction to German I	
GER 1002	Introduction to German II	
ITAL 1001	Italian Language I	
ITAL 1002	Italian Language II	
Opera Workshop		
MUSC 4228	Opera Workshop	3
MUSC 4229	Opera Workshop	2
Vocal Repertoire		
MUSC 3267	Vocal Repertoire	2
MUSC 3268	Vocal Repertoire	2
Vocal Pedagogy		
MUSC 4296	Vocal Pedagogy	3
Ensembles		
Take any combination of the following three courses for a total of 7 credits:		7
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir (Electives)	
Electives		
Free Electives		3
Total Credit Hours		124

Suggested Academic Plan

Bachelor of Music in Performance with a Concentration in Voice

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MUSC 1203	Voice Major	3
MUSC 1405	Secondary Piano for Music Majors	1
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	

MUST 1711	Theory I	4
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
MUSC 1225	English Diction	1
GenEd Breadth Course		3
Credit Hours		17
Spring		
MUSC 1204	Voice Major	3
MUSC 1406	Secondary Piano for Music Majors	1
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUST 1712	Theory II	4
MUSC 1226	German Diction	1
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
MUSC 2203	Voice Major	3
MUSC 2405	Secondary Piano for Music Majors	1
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUST 2711	Theory III	4
MUST 2703	Music in History	3
MUSC 1227	Italian Diction	1
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		16
Spring		
MUSC 2204	Voice Major	3
MUSC 2406	Secondary Piano for Music Majors	1
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUST 2712	Theory IV	4
MUST 2704	Music in History	3
MUSC 1228	French Diction	1
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		17
Year 3		
Fall		
MUSC 3203	Voice Major	3
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	

MUSC 3267	Vocal Repertoire	2
MUSC 2323	Basic Conducting	1
GenEd Breadth Course		3
Select one of the following:		4
ITAL 1001	Italian Language I	
GER 1001	Introduction to German I	
Credit Hours		14
Spring		
MUSC 3204	Voice Major	3
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUSC 3268	Vocal Repertoire	2
Electives		3
GenEd Breadth Course		3
Select one of the following:		4
ITAL 1002	Italian Language II	
GER 1002	Introduction to German II	
Credit Hours		16
Year 4		
Fall		
MUSC 4203	Voice Major	3
Select one of the following:		1
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUSC 4228	Opera Workshop	3
GenEd Breadth Course		3
FREN 1001	Introduction to French I	4
Credit Hours		14
Spring		
MUSC 4284	Voice Major	3
MUST 3696	Music in History	3
MUSC 4296	Vocal Pedagogy	3
MUSC 4229	Opera Workshop	2
GenEd Breadth Course		3
Credit Hours		14
Total Credit Hours		124

Performing Arts Certificate

Overview

Undergraduate certificate programs in Performance (Performing Arts, Classical and Jazz, and Dance), Music Studies (Theory, History, Composition, and Jazz Studies), and Technology provide opportunities to experience the excitement of Center for the Performing and Cinematic Arts courses. Completing these certificate programs will culminate in significant music and dance knowledge and performance experience. Each of the certificate programs offers a coherent disciplinary context beyond that which is possible in random course election. Graded experiences will be recognized on the final transcript.

Undergraduate students interested in the **Certificate in Performing Arts** must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

Students must complete the online application and other requirements that may be listed below. No audition or portfolio is required.

Coursework may be completed in four semesters if the program permits. Most students should complete all requirements within six semesters. Accepted students may delay certain required coursework by one semester or take courses out of sequence only with Boyer College advisor approval.

There are no exit requirements, comprehensive exams, theses, or practica required. Grading will consist of standard letter grades awarded according to Boyer College and university policy for all coursework. The minimum grade for all coursework is C-. There will be no course auditing, pass/fail grades, or CR options. Evidence of student success will be indicated by courses completed and grades earned.

Admission

Applicants must complete an online application. Admission requires students to be in good standing, and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

All application materials must be submitted by November 30 for Spring semester matriculation and May 15 for Fall semester matriculation.

Only one program may be selected. There will be no concurrent multiple program admission.

Advising and course selection will occur after admission. A grade of C- or higher must be earned in all required courses to receive the certificate.

No certificate program will be recognized as stand-alone.

No certificate program will be available to any applicant after completion of the bachelor's degree.

Certificate completion will be acknowledged on the official transcript only at the time of the awarding of the bachelor's degree.

Campus Location: Main

Program Code: BC-PFAR-CERT

Learn more about the undergraduate certificate in Performing Arts.

Requirements

The Certificate in Performing Arts will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

Code	Title	Credit Hours
THTR 1008	Poetry as Performance	3
Select one of the following:		3
FMA 1171	Media & Culture	
FMA 1172	Introduction to Film and Video Analysis	
Select one of the following:		4
MUSC 3100	Small Jazz Ensemble (take 4 times for 1 credit each)	
MUSC 3300	Choral Ensemble (take 4 times for 1 credit each)	
MUSC 4500	Instrumental Ensemble (take 4 times for 1 credit each)	
DANC 1811	Movement Improvisation I	2
Total Credit Hours		12

Piano Pedagogy BM

The Bachelor of Music in Piano Pedagogy program is not accepting admissions applications.

Suggested Academic Plan

Bachelor of Music in Piano Pedagogy

Year 1		Credit Hours
Fall		
MUSC 1403	Piano Major ¹	4
MUSC 1428	Accompanying and Piano Ensemble	1
MUSC 1415	Introduction to Piano Pedagogy	2
MUSC 3421	Suzuki for Pianists	2
MUST 1711	Theory I	4

ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		17
Spring		
MUSC 1404	Piano Major ¹	4
MUSC 1429	Accompanying and Piano Ensemble	1
MUSC 2415	Pedagogy of Technique	2
Choral Ensemble		1
MUST 1712	Theory II	4
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16
Year 2		
Fall		
MUSC 2403	Piano Major ¹	4
MUSC 1428	Accompanying and Piano Ensemble	1
MUST 2711	Theory III	4
MUST 2703	Music in History	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		15
Spring		
MUSC 2404	Piano Major ¹	4
MUSC 2416	Creative Activities for the Piano Teacher	2
MUST 2712	Theory IV	4
MUST 2704	Music in History	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		16
Year 3		
Fall		
MUSC 3403	Piano Major ¹	4
MUSC 3422	Keyboard Literature	3
MUSC 3415	Pedagogy of Children	2
MUST 4717	Counterpoint	3
MUST 3696	Music in History	3
Credit Hours		15
Spring		
MUSC 3404	Piano Major ¹	4
MUSC 3423	Keyboard Literature	3
MUSC 3416	Pedagogy of the College Non-Music Major	2
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 4		
Fall		
MUSC 4403	Piano Major ¹	4
MUSC 1428	Accompanying and Piano Ensemble	1
MUST 2105	Jazz Secondary Piano	1
MUST 3741	Keyboard Harmony	3
GenEd Breadth Course		3

GenEd Breadth Course		3
	Credit Hours	15
Spring		
MUSC 4484	Piano Major ¹	4
MUSC 1429	Accompanying and Piano Ensemble	1
MUSC 2406	Secondary Piano for Music Majors	1
MUST 3796	Music in History	3
GenEd Breadth Course		3
GenEd Breadth Course		3
	Credit Hours	15
	Total Credit Hours	124

¹Piano major sequence requires a minimum of four (4) hours of daily practice.

Theory BM

Overview

The **Bachelor of Music in Theory** is offered by the Department of Music Studies.

The Bachelor in Music in Theory program prepares its majors to be well-rounded practical musicians able to apply skills and knowledge to performance, composition, analysis, research and teaching.

Students **must select one of the following concentrations:**

- Bassoon
- Cello
- Clarinet
- Classical Guitar
- Double Bass
- Euphonium
- Flute
- French Horn
- Harp
- Harpsichord
- Oboe
- Percussion
- Piano
- Saxophone
- Trombone
- Trumpet
- Tuba
- Viola
- Violin
- Voice

Special Admissions Requirements

See Music Admissions information (p. 314) on the Boyer College of Music and Dance page.

Campus Location: Main

Program Code: BC-THRY-BMUS

Contact Information

Edward Latham, Music Studies Department Chair
215-204-8498

elatham@temple.edu

Learn more about the Bachelor of Music in Theory.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The Bachelor of Music in Theory is conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 123 credits. This major requires a concentration; the available concentrations are Instrumental (options include Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Harpsichord, Oboe, Percussion, Saxophone, Trombone, Trumpet, Tuba, Viola, and Violin), Piano, and Voice.

University Requirements

- All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.
- All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for the major are MUST 3696 and MUST 3896.

Program Requirements (Instrumental Concentration)

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
MUST 3896	Theory Seminar II (Take two times for six total credits)	6
Music History		
MUST 2703	Music in History	3
MUST 2704	Music in History	3
MUST 3696	Music in History	3
Counterpoint		
MUST 4717	Counterpoint	3
Orchestration		
MUST 3713	Orchestration	3
Keyboard Harmony		
MUST 3741	Keyboard Harmony	3
Analysis		
MUST 4718	Analysis	3
Basic Conducting		
MUSC 2323	Basic Conducting	1
Secondary Piano		
MUSC 1405	Secondary Piano for Music Majors	1
MUSC 1406	Secondary Piano for Music Majors	1
MUSC 2405	Secondary Piano for Music Majors	1
MUSC 2406	Secondary Piano for Music Majors	1
MUSC 3405	Secondary Piano for Music Majors	1
MUSC 3406	Secondary Piano for Music Majors	1
Composition		
MUST 2748	Composition I	2
Voice		
MUSC 1211	Voice Class	1
MUSC 1212	Voice Class	1

German		
GER 1001	Introduction to German I	4
GER 1002	Introduction to German II	4
GER 1003		3
GER 2001	Intermediate I	3
Instrumental Concentration		
MUSC 1501	Instrumental Concentration	2
MUSC 1502	Instrumental Concentration	2
MUSC 2501	Instrumental Concentration	2
MUSC 2502	Instrumental Concentration	2
MUSC 3501	Instrumental Concentration	2
MUSC 3502	Instrumental Concentration	2
Ensembles		
Take any combination of the following eight courses for a total of 5 credits:		5
MUSC 1428	Accompanying and Piano Ensemble (Take any one five times)	
MUSC 1429	Accompanying and Piano Ensemble	
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
Electives		
Free Electives		6
Total Credit Hours		123

Program Requirements (Piano Concentration)

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
MUST 3896	Theory Seminar II (Take two times for six total credits)	6
Music History		
MUST 2703	Music in History	3
MUST 2704	Music in History	3
MUST 3696	Music in History	3
Counterpoint		
MUST 4717	Counterpoint	3
Orchestration		
MUST 3713	Orchestration	3
Keyboard Harmony		
MUST 3741	Keyboard Harmony	3
Analysis		
MUST 4718	Analysis	3
Basic Conducting		
MUSC 2323	Basic Conducting	1
Secondary Piano		
MUSC 1405	Secondary Piano for Music Majors	1

MUSC 1406	Secondary Piano for Music Majors	1
MUSC 2405	Secondary Piano for Music Majors	1
MUSC 2406	Secondary Piano for Music Majors	1
MUSC 3405	Secondary Piano for Music Majors	1
MUSC 3406	Secondary Piano for Music Majors	1
Composition		
MUST 2748	Composition I	2
Voice		
MUSC 1211	Voice Class	1
MUSC 1212	Voice Class	1
German		
GER 1001	Introduction to German I	4
GER 1002	Introduction to German II	4
GER 1003		3
GER 2001	Intermediate I	3
Piano Concentration		
MUSC 1401	Piano Concentration	2
MUSC 1402	Piano Concentration	2
MUSC 2401	Piano Concentration	2
MUSC 2402	Piano Concentration	2
MUSC 3401	Piano Concentration	2
MUSC 3402	Piano Concentration	2
Ensembles		
Take any combination of the following eight courses for a total of 5 credits:		5
MUSC 1428	Accompanying and Piano Ensemble	
MUSC 1429	Accompanying and Piano Ensemble	
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
Electives		
Free Electives		6
Total Credit Hours		123

Program Requirements (Voice Concentration)

Code	Title	Credit Hours
General Education courses		32
Music Theory		
MUST 1711	Theory I	4
MUST 1712	Theory II	4
MUST 2711	Theory III	4
MUST 2712	Theory IV	4
MUST 3896	Theory Seminar II (Take two times for six total credits)	6
Music History		
MUST 2703	Music in History	3
MUST 2704	Music in History	3
MUST 3696	Music in History	3
Counterpoint		
MUST 4717	Counterpoint	3

Orchestration		
MUST 3713	Orchestration	3
Keyboard Harmony		
MUST 3741	Keyboard Harmony	3
Analysis		
MUST 4718	Analysis	3
Basic Conducting		
MUSC 2323	Basic Conducting	1
Secondary Piano		
MUSC 1405	Secondary Piano for Music Majors	1
MUSC 1406	Secondary Piano for Music Majors	1
MUSC 2405	Secondary Piano for Music Majors	1
MUSC 2406	Secondary Piano for Music Majors	1
MUSC 3405	Secondary Piano for Music Majors	1
MUSC 3406	Secondary Piano for Music Majors	1
Composition		
MUST 2748	Composition I	2
Voice		
MUSC 1211	Voice Class	1
MUSC 1212	Voice Class	1
German		
GER 1001	Introduction to German I	4
GER 1002	Introduction to German II	4
GER 1003		3
GER 2001	Intermediate I	3
Voice Concentration		
MUSC 1201	Voice Concentration	2
MUSC 1202	Voice Concentration	2
MUSC 2201	Voice Concentration	2
MUSC 2202	Voice Concentration	2
MUSC 3201	Voice Concentration	2
MUSC 3202	Voice Concentration	2
Ensembles		
Take any combination of the following eight courses for a total of 5 credits:		5
MUSC 1428	Accompanying and Piano Ensemble	
MUSC 1429	Accompanying and Piano Ensemble	
MUSC 3300	Choral Ensemble	
MUSC 4300	Concert Choir	
MUSC 4310	Graduate Conductors Choir	
MUSC 4500	Instrumental Ensemble	
MUSC 4510	Instrumental Ensemble	
MUSC 4520	Ensemble	
Electives		
Free Electives		6
Total Credit Hours		123

Suggested Academic Plan

Bachelor of Music in Theory

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MUSC 1211	Voice Class	1
MUSC 1405	Secondary Piano for Music Majors	1
Choral/Instrumental Ensemble		1
MUST 1711	Theory I	4
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4
Select one of the following:		2
MUSC 1201	Voice Concentration	
MUSC 1401	Piano Concentration	
MUSC 1501	Instrumental Concentration	
Credit Hours		17
Spring		
MUSC 1212	Voice Class	1
MUSC 1406	Secondary Piano for Music Majors	1
Choral/Instrumental Ensemble		1
MUST 1712	Theory II	4
GenEd Breadth Course		3
GenEd Breadth Course		3
Select one of the following:		2
MUSC 1202	Voice Concentration	
MUSC 1402	Piano Concentration	
MUSC 1502	Instrumental Concentration	
Credit Hours		15
Year 2		
Fall		
MUSC 2405	Secondary Piano for Music Majors	1
Choral/Instrumental Ensemble		1
MUST 2703	Music in History	3
MUST 2711	Theory III	4
GenEd Breadth Course		3
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
Select one of the following:		2
MUSC 2201	Voice Concentration	
MUSC 2401	Piano Concentration	
MUSC 2501	Instrumental Concentration	
Credit Hours		17
Spring		
MUSC 2406	Secondary Piano for Music Majors	1
Choral/Instrumental Ensemble		1
MUST 2704	Music in History	3
MUST 2712	Theory IV	4
GenEd Breadth Course		3

IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Select one of the following:		2
MUSC 2202	Voice Concentration	
MUSC 2402	Piano Concentration	
MUSC 2502	Instrumental Concentration	
Credit Hours		17
Year 3		
Fall		
MUSC 3405	Secondary Piano for Music Majors	1
Choral/Instrumental Ensemble		1
MUST 3696	Music in History	3
MUST 4717	Counterpoint	3
GenEd Breadth Course		3
GER 1001	Introduction to German I	4
Select one of the following:		2
MUSC 3201	Voice Concentration	
MUSC 3401	Piano Concentration	
MUSC 3501	Instrumental Concentration	
Credit Hours		17
Spring		
MUSC 3406	Secondary Piano for Music Majors	1
MUST 3896	Theory Seminar II	3
MUST 4718	Analysis	3
GER 1002	Introduction to German II	4
GenEd Breadth Course		3
Select one of the following:		2
MUSC 3202	Voice Concentration	
MUSC 3402	Piano Concentration	
MUSC 3502	Instrumental Concentration	
Credit Hours		16
Year 4		
Fall		
MUSC 2323	Basic Conducting	1
MUST 3713	Orchestration	3
MUST 3741	Keyboard Harmony	3
MUST 2748	Composition I	2
GER 1003		3
Credit Hours		12
Spring		
MUST 3896	Theory Seminar II	3
GER 2001	Intermediate I	3
Free Elective		3
Free Elective		3
Credit Hours		12
Total Credit Hours		123

School of Theater, Film and Media Arts

Overview

The School of Theater, Film and Media Arts is part of the Center for the Performing and Cinematic Arts at Temple University.

History

The School of Theater, Film and Media Arts, comprised of the Department of Theater and the Department of Film and Media Arts, was initially formed as the Division of Theater, Film and Media Arts (DTFMA) during the summer of 2012 as part of a university-wide academic realignment initiative. All of Temple's distinguished fine and performing arts schools and programs were aligned under a new administrative consortium, the Center for the Arts, linking DTFMA with the distinguished Boyer College of Music and Dance and the renowned Tyler School of Art.

Theater was initially organized as an extracurricular activity at Temple until 1931, when formal courses in the discipline were developed and offered, gaining full status as the Department of Theater in 1967.

Radio-Television became an instructional division in 1947, and extensive film offerings were added in 1967. That year, both Radio-Television-Film and Theater became part of a new School of Communications and Theater which also included Journalism, Advertising and Strategic Communication. The school was restructured in 1995 and Radio-Television-Film became two departments: the Department of Broadcast, Television and Mass Media (BTMM) and the Department of Film and Media Arts.

On July 1, 2012, as a part of the realignment, the School of Communications and Theater was renamed the School of Media and Communication and the Division of Theater, Film and Media Arts was created.

In October 2015, the Center for the Arts was renamed the Center for the Performing and Cinematic Arts and DTFMA was renamed the School of Theater, Film and Media Arts.

The School of Theater, Film and Media Arts houses two outstanding departments with professional and undergraduate degree programs historically ranked in the top tier nationally and internationally.

Department Information

The Department of Film and Media Arts is located in Annenberg Hall, which includes television and film production areas (studios and editing, graphics, and film labs) as well as extensive video and film editing areas, a 75-seat multimedia screening room, photographic labs, two news writing labs and smart classrooms. The Film and Media Arts department offers both the BFA and BA degrees, as well as a minor in Screen Studies. FMA faculty have received the Oscar, Emmy, Guggenheim, Rockefeller, NEA, Fulbright, Sundance and international film awards and are authors of some of the important texts in the field. The department also brings in guest media makers and visiting professors from diverse backgrounds for special lectures and workshops. Students may select elective courses from throughout the university, including in such areas as creative writing, theater and fine arts. A highly-recognized graduate program offers undergraduates numerous opportunities to work on advanced productions and participate in advanced research, exhibition and creative work in the field.

The Department of Theater is located in Tomlinson Hall, which features two theaters, as well as rehearsal rooms, costume, and scene shops. With both graduate and undergraduate programs, the Department of Theater offers countless opportunities for creative and academic collaboration between all levels. These include the BA in Theater which features optional strong professional concentrations in Acting, Directing, and Design and Production, the BFA in Musical Theater, the BFA in Technical Production and Management, and an accelerated +1 program in Theater Education that culminates in a BA in Theater and a MEd in Secondary Education. In addition, Master of Fine Arts degrees are offered in Acting, Design, Directing, Playwriting, and Musical Theater Collaboration. The graduate program has distinguished itself as one of the foremost theater training and performance institutions in the nation, and as an important contributor to the Philadelphia theater landscape.

Special Programs

Internship Program

Although the requirements may vary, internships are available to junior and senior students. Internships are for academic credit and must involve professional activity related to the student's course of study. The internships must be approved by the administrator or faculty member charged with supervising internships.

Los Angeles Internship & Study Program

Offered by the Film and Media Arts Department, the Los Angeles Internship and Study Program is open to students from any major on both the upper-level undergraduate (63 credit hours completed) and graduate levels who have an interest in working within the Hollywood entertainment industry. This program is offered as an 8-credit summer program that runs from May through the end of July. It includes an on-site internship and ten weeks of concurrent coursework. Additionally, the program is offered in the fall and spring semesters as a full-time program of study combined with an internship component. For more information, please contact Alison Crouse at 215-204-5910.

Administration

Robert T. Stroker, Dean and Vice Provost for the Arts at Temple University
1301 W. Norris Street
Philadelphia, PA 19122
<https://tfma.temple.edu/>

Student Contact Information

Douglas C. Wager, Associate Dean
215-204-6127
dwager@temple.edu

Chet Pancake, Film and Media Arts Department Chair
215-204-5910
tue89498@temple.edu

FMA Office - Help Desk
215-204-3859

Alison Crouse, FMA Office Manager and Director of Los Angeles Study Away
215-204-5910
crousea@temple.edu

Fred Duer, Theater Department Chair
215-204-8413
fmduer@temple.edu

Karen Austin, Theater Office Manager
215-204-8414
karen.austin@temple.edu

Undergraduate Programs

- Acting Certificate (p. 489)
- Entertainment Industry Studies Certificate (p. 490)
- Film and Media Arts BA (p. 490)
- Film and Media Arts BA with Cinematography Concentration (p. 495)
- Film and Media Arts BA with Post Production Concentration (p. 499)
- Film and Media Arts BA with Producing Concentration (p. 503)
- Film and Media Arts BA with Screen Studies Concentration (p. 507)
- Film and Media Arts BFA with Directing Concentration (p. 511)
- Film and Media Arts BFA with Media Arts Concentration (p. 517)
- Film and Media Arts BFA with Screenwriting Concentration (p. 521)
- Film Certificate (p. 525)
- Media Arts Certificate (p. 526)
- Musical Theater BFA (p. 527)
- Screen Studies Certificate (p. 531)
- Screen Studies Minor (p. 531)
- Stage Management Certificate (p. 532)
- Technical Production and Management BFA (p. 533)
- Theater and Community Engagement Certificate (p. 537)
- Theater BA (p. 537)
- Theater Education Certificate (p. 548)
- Theater Minor (p. 549)
- Voice and Speech for the Actor Certificate (p. 551)

Academic Policies and Regulations

Please see the Undergraduate Academic Policies (p. 1835) section of this *Bulletin*. Students are responsible for complying with all university-wide academic policies as well as those of the School of Theater, Film and Media Arts in the Center for the Performing and Cinematic Arts that appear below.

Academic Standing

A matriculated undergraduate student in the university is in Academic Good Standing if enrolled in a baccalaureate degree-seeking program.

Please see the University's policy on Academic Standing (p. 1840) for detailed information about Academic Warning, Academic Probation, and Academic Dismissal.

Credits Not Applied Toward the Degree

Credits earned in the following courses are not applied toward a degree in the Center for the Performing and Cinematic Arts' School of Theater, Film & Media Arts: lower-level courses in Military Science, Topical Studies, RCC, ELECT, and Mathematics 0015.

Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List (p. 1849) policy for specific GPA and credit-hour requirements.

Re-enrollment

Students returning to Temple University after an absence of one semester (unless an approved Leave of Absence application was filed prior to the leave) must use the *Undergraduate Bulletin* in effect at the time of readmission or any subsequent *Undergraduate Bulletin*. Credits more than 10 years old may not be applied toward a degree. For the re-enrollment form, please visit: <https://admissions.temple.edu/apply/request-re-enroll>.

Transfer Students

Refer to the Undergraduate Admissions (p. 27) section of this *Bulletin* for general information on transferring courses to Temple. In addition to these criteria, each department will evaluate any credit to be transferred into a major. This evaluation generally is done at the first meeting with a faculty advisor during the first semester. The maximum number of credit hours allowed to transfer in the major are: 21 hours in Film and Media Arts and 20 hours in Theater.

Requirements for Graduation

The School of Theater, Film and Media Arts requires 124 credits to graduate; completion of the university General Education (GenEd) (p. 83) requirements; and completion of departmental requirements, including two writing-intensive courses in the major.

Minimum and maximum credit requirements within each major are listed with the departmental requirements.

Students who are planning to graduate must schedule an official graduation review with an academic advisor and complete the application for graduation one semester prior to the anticipated graduation date. Appointments may be made in the Center for the Performing and Cinematic Arts Academic Advising Office, Mitten Hall, Suite 200 W.

Program Descriptions

1. The total number of credit hours at graduation may be greater for some students based on initial placement exams, transfer evaluations, individual curricular choices, and academic progress.
2. Students must fulfill the necessary prerequisites for any given course or course sequence. See the Prerequisites and Co-requisites Policy (p. 1860) in the university-wide Academic Policies section of this *Bulletin*.

Advising

Center for the Performing and Cinematic Arts Academic Advising
Mitten Hall, Suite 200 W
1913 N. Broad Street
Philadelphia, PA 19122
215-204-2227

Students can schedule appointments through the "Appointment System" box in Student Tools on TUPortal.

Academic advisors attempt to avoid errors when advising students about their program requirements, but schools and colleges cannot assume liability for errors in advising. Therefore, students must assume primary responsibility for knowing the requirements for their degree and for acquiring current information about their academic status.

Most students will be eligible to register for classes online via Self Service Banner through the TUportal. All students should meet with an advisor prior to their eligible registration period.

Students preparing to graduate must confer with an academic advisor to ensure degree completion. It is strongly recommended that students meet with an advisor in their junior year to complete a graduation review.

Faculty Advising and Mentoring

Students in Theater and Film and Media Arts are advised by professional academic advisors and faculty advisors. Students make advising appointments in the Center for the Performing and Cinematic Arts Academic Advising Office located on the second floor of Mitten Hall, Suite 200 W. Consult the Directors of Undergraduate Affairs in Film and Media Arts or Theater for assignment to the appropriate advisor.

Faculty

Mounia Akl, Assistant Professor of Instruction, Department of Film and Media Arts, School of Theater, Film and Media Arts; MFA, Columbia University.

Nora Alter, Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; PhD, University of Pennsylvania.

Warren F. Bass, Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; MFA, Columbia University.

Chris Cagle, Associate Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; PhD, Brown University.

Marie Anne Chiment, Professor, Department of Theater, School of Theater, Film and Media Arts; MFA, New York University Tisch School of the Arts.

Roderick L. Coover, Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; PhD, University of Chicago.

Peter P. d'Agostino, Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; MA, San Francisco State University.

Neal Dhand, Assistant Professor of Instruction, Department of Film and Media Arts, School of Theater, Film and Media Arts; MFA, Rochester Institute of Technology.

Sarah Drury, Associate Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; MA, New York University Tisch School of the Arts.

Fred M. Duer, Professor, Department of Theater, School of Theater, Film and Media Arts; MFA, Ohio University.

LeAnn Erickson, Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; MFA, University of Iowa.

Marcus Giamatti, Associate Professor, Department of Theater, School of Theater, Film and Media Arts; MFA, Yale University.

Lindsay Goss, Assistant Professor, Department of Theater, School of Theater, Film and Media Arts; PhD, Brown University.

Steven Gross, Associate Professor, Department of Theater, School of Theater, Film and Media Arts; PhD, Yale University.

David Ingram, Associate Professor of Instruction, Department of Theater, School of Theater, Film and Media Arts; MFA, New York University Tisch School of the Arts.

Lynne Innerst, Associate Professor, Department of Theater, School of Theater, Film and Media Arts; MFA, University of Southern California.

Melanie Julian, Associate Professor of Practice, Department of Theater, School of Theater, Film and Media Arts; MFA, Point Park University.

Michael J. Kuetemeyer, Associate Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; MFA, Temple University.

Andrew Laine, Associate Professor of Practice, Department of Theater, School of Theater, Film and Media Arts; MFA, University of Texas at Austin.

King Lu, Assistant Professor of Instruction, Department of Film and Media Arts, School of Theater, Film and Media Arts; MFA, Columbia University.

Brandon McShaffrey, Assistant Professor of Instruction, Department of Theater, School of Theater, Film and Media Arts; MFA, Temple University.

Matthew Miller, Professor of Practice, Department of Theater, School of Theater, Film and Media Arts; MFA, University of North Carolina at Chapel Hill.

Kartik Nair, Assistant Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; PhD, New York University.

Jason Norris, Instructor, Department of Theater, School of Theater, Film and Media Arts; MFA, University of Texas at Austin.

Amy R. Olk, Assistant Professor of Instruction, Department of Film and Media Arts, School of Theater, Film and Media Arts; MFA, Temple University.

Chet Pancake, Associate Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; MFA, School of the Art Institute of Chicago.

David A. Parry, Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; MS, Massachusetts Institute of Technology.

Louis J. Pepe, Associate Professor of Instruction, Department of Film and Media Arts, School of Theater, Film and Media Arts; MFA, Temple University.

Peter R. Reynolds, Associate Professor of Practice, Department of Theater, School of Theater, Film and Media Arts; MFA, Temple University.

Amina S. Robinson, Assistant Professor of Instruction, Department of Theater, School of Theater, Film and Media Arts; MFA, Temple University.

Donna Snow, Associate Professor, Department of Theater, School of Theater, Film and Media Arts; MFA, American Conservatory Theater.

Jennifer Stafford, Assistant Professor, Department of Theater, School of Theater, Film and Media Arts; MFA, New York University Tisch School of the Arts.

Elisabeth Subrin, Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; MFA, School of the Art Institute of Chicago.

Rea Tajiri, Associate Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; MFA, California Institute of the Arts.

Douglas C. Wager, Professor, Department of Theater, School of Theater, Film and Media Arts; MFA, Boston University.

Kimmika Williams-Witherspoon, Associate Professor, Department of Theater, School of Theater, Film and Media Arts; PhD, Temple University.

Ashley S. Young, Instructor, Department of Film and Media Arts, School of Theater, Film and Media Arts; PhD, University of Southern California.

Acting Certificate

Overview

The **Certificate in Acting**, offered by the Department of Theater, allows undergraduates from other disciplines to pursue their interest in acting. For myriad reasons, interested undergraduates pursue a major outside of Theater and the performing arts, but their passion for acting remains from experiences in middle school and high school productions, clubs, camps and childhood. The Certificate in Acting allows a student to continue acting training with professional actors and faculty from the Department of Theater at Temple University and the rich theatrical community of Philadelphia. Skills acquired from the Certificate in Acting complement requisite expertise in most professions. Confidence in public speaking and presentation, creativity, collaboration, professionalism and empathy are just some of the qualities enhanced through the study of acting.

Theater offers the undergraduate Certificate in Acting on the Main Campus only. The certificate consists of a four-course, 12-credit sequence.

Students must be concurrently enrolled in a baccalaureate degree and the certificate to earn the certificate.

Campus Location: Main

Program Code: CA-ACTG-CERT

Contact Information

Students interested in declaring this certificate in the Department of Theater can do so by contacting a TFMA advisor for next steps.

To seek assistance in monitoring their progress with the certificate declared, students are asked to meet with Melanie Julian (melanie.julian@temple.edu, 215-204-1324). Meetings should take place regularly from the time of declaration to applying for graduation within their home school/college.

Learn more about the undergraduate certificate in Acting.

Requirements

A grade of C- or higher must be earned in all required courses.

Code	Title	Credit Hours
THTR 1211	Fundamentals of Acting	3
Select one of the following:		3
THTR 2241	Basic Movement	
THTR 2251	Dance for the Actor	
THTR 2221	Voice for the Actor	
THTR 2231	Speech for the Actor	
Select one of the following:		3
THTR 1008	Poetry as Performance	

THTR 2262	Improvisation	
THTR 3231	Acting for Commercials, Industrials and Voice-Overs	
Select one of the following:		3
THTR 2201	Acting Styles	
THTR 2262	Improvisation	
THTR 3231	Acting for Commercials, Industrials and Voice-Overs	
Total Credit Hours		12

Entertainment Industry Studies Certificate

Overview

The **Certificate in Entertainment Industry Studies**, offered by the Department of Film and Media Arts, offers students both an overview of and an internship in the Los Angeles Entertainment Industries, as well as two introductory film courses in Philadelphia. Students will gain first-hand entertainment industry experience in addition to two hands-on filmmaking or film studies courses in the Film and Media Arts program. The certificate requires four courses, two of which must be taken in the Los Angeles Study Away Program.

FMA students are not eligible for this certificate.

Campus Location: Main

Program Code: CA-EIS-CERT

Contact Information

TFMA Academic Advising
Mitten Hall, Suite 200 West
cpcaadvising@temple.edu

Learn more about the undergraduate certificate in Entertainment Industry Studies.

Requirements

Code	Title	Credit Hours
Students take the following two courses in the Film and Media Arts Summer Los Angeles Study Away program (they must apply to the program):		
FMA 3085	Internship	4
FMA 3770	Topics in Film Study (Entertainment Industry Perspectives)	4
Students take two of the following courses on Main Campus:		6-8
FMA 1141	Film, Video and Interactive Foundations I	
FMA 1142	Film, Video and Interactive Foundations II ¹	
FMA 1171	Media & Culture	
FMA 1172	Introduction to Film and Video Analysis	
Total Credit Hours		14-16

1

Students must earn a 'C' in FMA 1141 in order to enroll in FMA 1142.

Students may take the two out of the four courses on Main Campus at anytime.

Students may only attend the Film and Media Arts Summer Los Angeles Study Away program after they have completed 60 credits. Information about the Film and Media Arts Summer Los Angeles Study Away program is available at <https://tfma.temple.edu/study-away/la>.

Film and Media Arts BA

Overview

The Department of Film and Media Arts offers both the Bachelor of Arts (BA) and Bachelor of Fine Arts (BFA) in Film and Media Arts (FMA). The FMA program focuses on the development of creative expression and technical skills in film, video, audio, digital media, and new technologies, and the theoretical understanding of media and culture. The program recognizes and explores the creative tension between individual expression and the social, political and economic forces that shape culture at large through the creation and study of film, video and new media.

Students are trained in developing meaningful content as well as craft, theory and practice. In learning independent and mainstream approaches to production and theory, graduates will be prepared to develop their own independent productions and to assume a creative role in the motion picture, television and media industries.

Initially students declare either the Bachelor of Arts in Film and Media Arts or the Bachelor of Arts in Film and Media Arts with an optional Concentration in Screen Studies. In the spring of their sophomore year (60 credits), students may apply to enter one of three upper-level optional BFA concentrations in Directing, Media Arts or Screenwriting or one of three upper-level optional BA concentrations in Cinematography, Producing or Post Production.

The **Bachelor of Arts in Film and Media Arts** is designed for students who wish to have a more general approach to the major. After completing the FMA core, students must take one production or writing course in either Filmmaking, Videography, Experimental Video or Screenwriting, along with one 2000-level or higher studies course. Students then design their own program with approval of their advisors, choosing a range of middle- and upper-level courses that complete a balanced approach to media study and production or a self directed emphasis in camera, lighting, sound, animation, directing, writing, producing or new media studies or production. The program requires at least one middle-level writing-intensive course, one advanced writing-intensive course, one advanced studies course and one advanced course in studies or production.

Campus Location: Main

Program Code: CA-FMA-BA

To Apply for a BFA in Film and Media Arts with Concentrations in Directing, Media Arts or Screenwriting

To be considered, students need to complete 60 credits by the end of their sophomore year, earn an average of 3.0 in six foundational and intermediate courses (see each program page for details), submit a BFA application to the department, and provide a portfolio. The BFA application must be submitted to the department no later than the deadline announced on the Film and Media Studies Undergraduate Listserv in the spring semester in which the student reaches sixty credits. Students with less than an average of 3.0 in the six courses or who have only completed five of the six courses may petition the department for admission to one of the BFA concentrations. (See concentration faculty advisor.) Students who were not admitted to one of the BFA concentrations can continue in the BA in Film and Media Arts or the BA in Film and Media Arts with a Concentration in Screen Studies or apply for one of the three upper-level BA concentrations.

To Apply for a BA in Film and Media Arts with Concentrations in Cinematography, Producing or Post Production

To be considered, students need to complete 60 credits by the end of their sophomore year, earn an average of 3.0 in six foundational and intermediate courses (see each program page for details), submit a BA with Concentration application to the department, and provide a portfolio. The BA with Concentration application must be submitted to the department no later than the deadline announced on the Film and Media Studies Undergraduate Listserv in the spring semester in which the student reaches sixty credits. If a student has less than an average of 3.0 in these courses, the student may petition the department for admission into one of the three upper-level concentrations or choose to remain in their initial program—either the BA in Film and Media Arts or the BA in Film and Media Arts with a Concentration in Screen Studies.

Transfer Students Applying to the BFA in Film and Media Arts with Concentrations in Directing, Media Arts or Screenwriting, or the BA in Film and Media Arts with Concentrations in Cinematography, Producing or Post Production

All internal and external transfer students who have transferred no equivalent FMA courses may apply to the BFA or the BA with an upper-level concentration in their second year as a Film and Media Arts student, provided they have completed all application requirements and a creative portfolio. Transfer students who have courses equivalent to the FMA core will be evaluated on a case-by-case basis and may be able to apply for the BFA or the BA with an upper-level concentration in their first year as a Film and Media Arts student. Please see advisor for a long-term academic plan. All transfer students should be aware that completing either the BFA or the BA with an upper-level concentration may extend their time at Temple.

Exceptional cases for direct admission to the BFA or BA with upper-level concentrations will be evaluated on a case-by-case basis by the Concentration Faculty Advisor.

Los Angeles Study-Away Program

The Department of Film and Media Arts offers a department-run study-away academic and internship program in Los Angeles every semester. Students may apply to attend in fall, spring and summer of their junior and senior years. They may complete an online course, FMA 2670 with the topic *Hollywood Head Start*, before attending the Los Angeles Program, which may reduce program costs. Students interested in this option should apply to the Los Angeles Program through the Study-Away Office.

Special Considerations for Directing and Screenwriting BFA Students

Because it is a more structured curriculum than that of the other Film and Media Arts sequences, students in the BFA in FMA's concentrations in Directing and Screenwriting who wish to participate in the Los Angeles Program must carefully plan ahead. They should meet with the BFA Director

well before the semester they plan to attend the Los Angeles Program. BFA in FMA students in the Directing and Screenwriting concentrations have the following options:

- **Option 1** is open to BFA students in the **Directing and Screenwriting concentrations**. They may attend the Los Angeles Program during the summer semester after their junior or senior years. To reduce summer cost, students may earn four of the eight hours normally required for the summer semester by completing an online course, FMA 2670 with the topic *Hollywood Head Start*, during the fall or spring semesters. Students interested in this option should apply to the Los Angeles Program through the Study-Away Office.
- **Option 2** is open to BFA students in the **Directing concentration**. These students may seek permission from the Director to attend the Los Angeles Program during the spring of their junior year. They must 1) find a Los Angeles internship that will replace the normally required FMA 3241 BFA Junior Directing Projects, 2) demonstrate from their performance in prior BFA courses that they can complete online the required FMA 3343 Screenwriting II, and 3) submit a plan to complete all otherwise required courses and credits to earn the BFA. These must be approved by the BFA Director.
- **Option 3** is open to BFA students in the **Screenwriting concentration**. These students may seek permission from the BFA Director to attend the Los Angeles Program during the spring of their junior year, or the fall or spring of their senior year. They must 1) demonstrate from their performance in prior BFA courses that they can complete online the required FMA 3343 Screenwriting II, and 2) submit a plan to complete all otherwise required courses and credits to earn the BFA. These must be approved by the BFA Director.

Other Internships and Special Programs

FMA has an extensive internship program throughout the year in Philadelphia. Additionally, many organizations in New York, New Jersey, Delaware and Washington, D.C. provide regular opportunities for student professional internships. Temple University offers Temple-run special programs for study and research in Rome and Tokyo.

Contact Information

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Learn more about the Bachelor of Arts in Film and Media Arts.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Arts in Film and Media Arts

Summary of Requirements for the Degree

The Bachelor of Arts degree may be conferred upon a student majoring in Film and Media Arts by recommendation of the faculty and upon satisfactory completion of a minimum of 121 credit hours. Students must complete:

1. University requirements:
 - New students are required to complete the General Education (GenEd (p. 83)) curriculum.
 - All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed below and identified with the code "WI".
2. No more than 21 FMA credits can be transferred to the major.
3. Students must earn a grade of "C-" or better in all Film and Media Arts courses that count towards the degree.
4. Students may take up to 6 internship credits in Film and Media Arts.
5. Students may count at least 42 FMA credits and a maximum of 66 FMA credits toward the 121 credit hours required for the degree.

Meeting 42 Credit Requirement

The following represents requirements for completing the BA in Film and Media Arts. Because some of these courses are variable credits, they may not add up to the 42 credits required for the degree. In that case, students must take additional FMA electives at the 2000+ level to reach the required 42 credits.

FMA Foundation Courses

Film and Media Arts students will complete the following courses by the end of the sophomore year:

Code	Title	Credit Hours
FMA 1141	Film, Video and Interactive Foundations I	4
FMA 1142	Film, Video and Interactive Foundations II	4
FMA 1171	Media & Culture	3
FMA 1172	Introduction to Film and Video Analysis	3

Major Requirements

Code	Title	Credit Hours
Select one of the following:		4
FMA 2241	Filmmaking	
FMA 2242	Videography	
FMA 2451	Experimental Video and Multi-Media	
FMA 2396	Screenwriting I ¹	
Select one of the following:		3-4
FMA 1451	Survey of New Media	
FMA 2675	Film History I (1895-1950)	
FMA 2676	Film History II (1950-Present)	
FMA 2678	History of Experimental Film and Video Art	
Two FMA 2000+ level Studies or Production Electives ¹		6-8
FMA 3000+ Writing-Intensive Elective (WI)		4
FMA 3000+ level Studies Elective ²		3-4
FMA 3000+ level Production or Studies Elective ²		3-4
Total FMA Credit Hours		42

¹
If FMA 2396 is not taken, then one of the 2000+ Studies or Production electives must be Writing Intensive.

²
For which the student has completed the prerequisites.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Film and Media Arts

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
FMA 1141	Film, Video and Interactive Foundations I	4
FMA 1171	Media & Culture	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		15
Spring		
FMA 1142	Film, Video and Interactive Foundations II	4
FMA 1172	Introduction to Film and Video Analysis	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Elective		3
Credit Hours		16

Year 2**Fall**

Select one of the following: 3-4

FMA 1451	Survey of New Media
FMA 2675	Film History I (1895-1950)
FMA 2676	Film History II (1950-Present)
FMA 2678	History of Experimental Film and Video Art

Select one of the following: 4

FMA 2241	Filmmaking	
FMA 2242	Videography	
FMA 2451	Experimental Video and Multi-Media	
FMA 2396	Screenwriting I	
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
GenEd Breadth Course		3

Credit Hours 16-17**Spring**

FMA 2000+ Studies or Production Elective		3-4
FMA 2000+ Studies or Production Elective ¹		3-4
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3

Credit Hours 15-17**Year 3****Fall**

FMA 3000+ Studies Elective		3-4
GenEd Breadth Course		3-4
Electives		9

Credit Hours 15-17**Spring**

Select one of the following:		3-4
FMA 3085	Internship	
FMA 3000+ Studies or Production Elective		
Electives		12

Credit Hours 15-16**Year 4****Fall**

FMA 3000+ Writing-Intensive Elective ^{WI}		4
Electives		12

Credit Hours 16**Spring**

FMA Elective		3-4
Electives		10

Credit Hours 13-14**Total Credit Hours 121-128**

1

Must select a writing intensive course if FMA 2396 is not taken.

Film and Media Arts BA with Cinematography Concentration

Overview

The Department of Film and Media Arts offers both the Bachelor of Arts (BA) and Bachelor of Fine Arts (BFA) in Film and Media Arts (FMA). The FMA program focuses on the development of creative expression and technical skills in film, video, audio, digital media, and new technologies, and the theoretical understanding of media and culture. The program recognizes and explores the creative tension between individual expression and the social, political and economic forces that shape culture at large through the creation and study of film, video and new media.

Students are trained in developing meaningful content as well as craft, theory and practice. In learning independent and mainstream approaches to production and theory, graduates will be prepared to develop their own independent productions and to assume a creative role in the motion picture, television and media industries.

Initially students declare either the Bachelor of Arts in Film and Media Arts or the Bachelor of Arts in Film and Media Arts with an optional Concentration in Screen Studies. In the spring of their sophomore year (60 credits), students may apply to enter one of three upper-level optional BFA concentrations in Directing, Media Arts or Screenwriting or one of three upper-level optional BA concentrations in Cinematography, Producing or Post Production.

The **Bachelor of Arts in Film and Media Arts with an optional Concentration in Cinematography** is a liberal arts degree that prepares students to enter graduate film programs or pursue professional careers in the film and television production with a focus on Cinematography. Students will complete advanced work in Cinematography in a two-semester master class capstone.

Students interested in the Cinematography Concentration must have the following courses completed by the end of their sophomore year:

Code	Title	Credit Hours
FMA 1141	Film, Video and Interactive Foundations I	4
FMA 1142	Film, Video and Interactive Foundations II	4
FMA 1171	Media & Culture	3
FMA 1172	Introduction to Film and Video Analysis	3
FMA 2241	Filmmaking	4
FMA 2242	Videography	4

Campus Location: Main

Program Code: CA-FMA-BA

To Apply for a BA in Film and Media Arts with Concentrations in Cinematography, Producing or Post Production

To be considered, students need to complete 60 credits by the end of their sophomore year, earn an average of 3.0 in six foundational and intermediate courses (see each program page for details), submit a BA with Concentration application to the department, and provide a portfolio. The BA with Concentration application must be submitted to the department no later than the deadline announced on the Film and Media Studies Undergraduate Listserv in the spring semester in which the student reaches sixty credits. If a student has less than an average of 3.0 in these courses, the student may petition the department for admission into one of the three upper-level concentrations or choose to remain in their initial program—either the BA in Film and Media Arts or the BA in Film and Media Arts with a Concentration in Screen Studies.

Transfer Students Applying to the BFA in Film and Media Arts with Concentrations in Directing, Media Arts or Screenwriting, or the BA in Film and Media Arts with Concentrations in Cinematography, Producing or Post-Production

All internal and external transfer students who have transferred no equivalent FMA courses may apply to the BFA or the BA with an upper-level concentration in their second year as a Film and Media Arts student, provided they have completed all application requirements and a creative portfolio. Transfer students who have courses equivalent to the FMA core will be evaluated on a case-by-case basis and may be able to apply for the BFA or the BA with an upper-level concentration in their first year as a Film and Media Arts student. Please see advisor for a long-term academic plan. All transfer students should be aware that completing either the BFA or the BA with an upper-level concentration may extend their time at Temple.

Exceptional cases for direct admission to the BFA or BA with upper-level concentrations will be evaluated on a case-by-case basis by the Concentration Faculty Advisor.

Los Angeles Study-Away Program

The Department of Film and Media Arts offers a department-run study-away academic and internship program in Los Angeles every semester. Students may apply to attend in fall, spring and summer of their junior and senior years. They may complete an online course, FMA 2670 with the topic *Hollywood*

Head Start, before attending the Los Angeles Program, which may reduce program costs. Students interested in this option should apply to the Los Angeles Program through the Study-Away Office.

Other Internships and Special Programs

FMA has an extensive internship program throughout the year in Philadelphia. Additionally, many organizations in New York, New Jersey, Delaware and Washington, D.C. provide regular opportunities for student professional internships. Temple University offers Temple-run special programs for study and research in Rome and Tokyo.

Contact Information

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Learn more about the Bachelor of Arts in Film and Media Arts.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Arts in Film and Media Arts with Concentration in Cinematography

Summary of Requirements for the Degree

The Bachelor of Arts degree may be conferred upon a student majoring in Film and Media Arts with a concentration in Cinematography by recommendation of the faculty and upon satisfactory completion of a minimum of 120 credit hours. Students must complete:

- University requirements:
 - New students are required to complete the General Education (GenEd (p. 83)) curriculum.
 - All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed below and identified with the code "WI".
- No more than 21 FMA credits can be transferred to the major.
- A student must earn a grade of "C-" or better in all Film and Media Arts courses that count towards the degree.
- Students may take up to 8 internship credits in Film and Media Arts. An LA internship may be taken in lieu of FMA 4246 Cinematography Master Class II in the final spring semester, although the recommended time for those who intend to go to Los Angeles would be summer following the spring semester of the junior or senior year.
- Students may count a maximum of 66 FMA credit hours toward the 120 credit hours required for the degree.

FMA Foundation Courses

Film and Media Arts students will complete the following courses by the end of the sophomore year:

Code	Title	Credit Hours
FMA 1141	Film, Video and Interactive Foundations I	4
FMA 1142	Film, Video and Interactive Foundations II	4
FMA 1171	Media & Culture	3
FMA 1172	Introduction to Film and Video Analysis	3

Concentration Requirements

Courses required after completion of FMA Foundation Courses:

Code	Title	Credit Hours
FMA 2241	Filmmaking	4
FMA 2242	Videography	4
Select one of the following:		4
FMA 2551	Editing Film and Video	
FMA 2396	Screenwriting I (WI) ¹	
Select one of the following:		3-4
THTR 2512	Lighting Design I	
THTR 2431	Lighting and Sound Technology	

FMA 4341	Screen Directing	
Select one of the following:		3-4
FMA 1451	Survey of New Media	
FMA 2675	Film History I (1895-1950)	
FMA 2676	Film History II (1950-Present)	
FMA 2678	History of Experimental Film and Video Art	
FMA 2000+ Free Elective ¹		3-4
FMA 3000+ Writing Intensive Elective (WI)		4
FMA 3244	Lighting for Film and Video	4
Select one of the following:		4
FMA 3000+ Major Elective ²		
FMA 3246	Documentary Workshop I	
FMA 2674	History of Photography	
FMA 3085	Internship	
FMA 2244	Still Photography for Filmmakers	
FMA 3473	Moving Camera	4
FMA 4245	Cinematography Master Class I	4
FMA 4246	Cinematography Master Class II ³	4
Total FMA Credit Hours		59-62

1

If FMA 2396 is not taken, then free elective must be Writing Intensive.

2

It is strongly recommended that students complete FMA 3245 in the spring of their junior year.

3

Students can participate in the LA Internship Program in lieu of a second semester of master class.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Film and Media Arts with Concentration in Cinematography

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
FMA 1141	Film, Video and Interactive Foundations I	4
FMA 1171	Media & Culture	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		15
Spring		
FMA 1142	Film, Video and Interactive Foundations II	4
FMA 1172	Introduction to Film and Video Analysis	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Elective		3
Credit Hours		16
Year 2		
Fall		
FMA 2241	Filmmaking	4

IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Select one of the following:		3-4
FMA 1451	Survey of New Media	
FMA 2675	Film History I (1895-1950)	
FMA 2676	Film History II (1950-Present)	
FMA 2678	History of Experimental Film and Video Art	
Credit Hours		13-14
Spring		
FMA 2242	Videography	4
Elective		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Select one of the following:		4
FMA 2551	Editing Film and Video ¹	
FMA 2396	Screenwriting I ¹	
Credit Hours		17
Year 3		
Fall		
FMA 3244	Lighting for Film and Video	4
Elective		3
GenEd Breadth Course		3
Select one of the following:		4
FMA 3000+ Major Elective		
FMA 3246	Documentary Workshop I	
FMA 2674	History of Photography	
FMA 2244	Still Photography for Filmmakers	
FMA 3085	Internship	
Credit Hours		14
Spring		
FMA 3473	Moving Camera	4
FMA 2000+ Writing Intensive Studies Elective ^{WI 2}		4
GenEd Breadth Course		3
GenEd Breadth Course		3
Select one of the following:		3-4
THTR 2512	Lighting Design I	
THTR 2431	Lighting and Sound Technology	
FMA 4341	Screen Directing	
Credit Hours		17-18
Year 4		
Fall		
FMA 4245	Cinematography Master Class I	4
FMA 3000+ Advanced Writing Intensive Course ^{WI}		4
Electives		6
Credit Hours		14
Spring		
FMA 4246	Cinematography Master Class II ³	4
FMA 2000+ Free Elective		4

Electives	6
Credit Hours	14
Total Credit Hours	120-122

1
FMA 2396 Screenwriting I counts as a Writing Intensive course. FMA 2551 Editing Film and Video does not.

2
Students who have already completed their 2000-level Writing Intensive requirement by taking FMA 2396 Screenwriting I may take any 2000+ FMA course as an elective. Students who have not completed their 2000-level Writing Intensive requirement must take a 2000-level Writing Intensive course.

3
Students can participate in the LA Internship Program in lieu of a second semester of master class.

Film and Media Arts BA with Post Production Concentration

Overview

The Department of Film and Media Arts offers both the Bachelor of Arts (BA) and Bachelor of Fine Arts (BFA) in Film and Media Arts (FMA). The FMA program focuses on the development of creative expression and technical skills in film, video, audio, digital media, and new technologies, and the theoretical understanding of media and culture. The program recognizes and explores the creative tension between individual expression and the social, political and economic forces that shape culture at large through the creation and study of film, video and new media.

Students are trained in developing meaningful content as well as craft, theory and practice. In learning independent and mainstream approaches to production and theory, graduates will be prepared to develop their own independent productions and to assume a creative role in the motion picture, television and media industries.

Initially students declare either the Bachelor of Arts in Film and Media Arts or the Bachelor of Arts in Film and Media Arts with an optional Concentration in Screen Studies. In the spring of their sophomore year (60 credits), students may apply to enter one of three upper-level optional BFA concentrations in Directing, Media Arts or Screenwriting or one of three upper-level optional BA concentrations in Cinematography, Producing or Post Production.

The **Bachelor of Arts in Film and Media Arts with an optional Concentration in Post Production** is a liberal arts degree that prepares students to enter graduate film programs or pursue professional careers in the film and television production with a focus on Post Production. Students will complete intermediate and advanced work in Post Production in a master class capstone experience.

Students interested in the Post Production Concentration must complete the following courses by the end of their sophomore year:

Code	Title	Credit Hours
FMA 1141	Film, Video and Interactive Foundations I	4
FMA 1142	Film, Video and Interactive Foundations II	4
FMA 1171	Media & Culture	3
FMA 1172	Introduction to Film and Video Analysis	3
FMA 2551	Editing Film and Video	4
One of the following:		4
FMA 2241	Filmmaking	
FMA 2242	Videography	

Campus Location: Main

Program Code: CA-FMA-BA

To Apply for a BA in Film and Media Arts with Concentrations in Cinematography, Producing or Post Production

To be considered, students need to complete 60 credits by the end of their sophomore year, earn an average of 3.0 in six foundational and intermediate courses (see each program page for details), submit a BA with Concentration application to the department, and provide a portfolio. The BA with Concentration application must be submitted to the department no later than the deadline announced on the Film and Media Studies Undergraduate Listserv in the spring semester in which the student reaches sixty credits. If a student has less than an average of 3.0 in these courses, the student may petition the department for admission into one of the three upper-level concentrations or choose to remain in their initial program—either the BA in Film and Media Arts or the BA in Film and Media Arts with a Concentration in Screen Studies.

Transfer Students Applying to the BFA in Film and Media Arts with Concentrations in Directing, Media Arts or Screenwriting, or the BA in Film and Media Arts with Concentrations in Cinematography, Producing or Post-Production

All internal and external transfer students who have transferred no equivalent FMA courses may apply to the BFA or the BA with an upper-level concentration in their second year as a Film and Media Arts student, provided they have completed all application requirements and a creative portfolio. Transfer students who have courses equivalent to the FMA core will be evaluated on a case-by-case basis and may be able to apply for the BFA or the BA with an upper-level concentration in their first year as a Film and Media Arts student. Please see advisor for a long-term academic plan. All transfer students should be aware that completing either the BFA or the BA with an upper-level concentration may extend their time at Temple.

Exceptional cases for direct admission to the BFA or BA with upper-level concentrations will be evaluated on a case-by-case basis by the Concentration Faculty Advisor.

Los Angeles Study-Away Program

The Department of Film and Media Arts offers a department-run study-away academic and internship program in Los Angeles every semester. Students may apply to attend in fall, spring and summer of their junior and senior years. They may complete an online course, FMA 2670 with the topic *Hollywood Head Start*, before attending the Los Angeles Program, which may reduce program costs. Students interested in this option should apply to the Los Angeles Program through the Study-Away Office.

Other Internships and Special Programs

FMA has an extensive internship program throughout the year in Philadelphia. Additionally, many organizations in New York, New Jersey, Delaware and Washington, D.C. provide regular opportunities for student professional internships. Temple University offers Temple-run special programs for study and research in Rome and Tokyo.

Contact Information

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Learn more about the Bachelor of Arts in Film and Media Arts.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Arts in Film and Media Arts with Concentration in Post Production

Summary of Requirements for the Degree

The Bachelor of Arts degree may be conferred upon a student majoring in Film and Media Arts with a concentration in Post Production by recommendation of the faculty and upon satisfactory completion of a minimum of 121 credit hours. Students must complete:

1. University requirements:
 - New students are required to complete the General Education (GenEd (p. 83)) curriculum.
 - All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed below and identified with the code "WI".
2. No more than 21 FMA credits can be transferred to the major.
3. A student must earn a grade of "C-" or better in all Film and Media Arts courses that count towards the degree.
4. Students may take up to 8 internship credits in Film and Media Arts.
5. Students may count a maximum of 66 FMA credit hours toward the 121 credit hours required for the degree.

FMA Foundation Courses

Students who are interested in applying for the Post-Production concentration would ideally complete the following courses **by the end of their sophomore year**. **Note: It is recommended that Post-Production students complete Screenwriting I as their 2000-level writing intensive course.**

Code	Title	Credit Hours
FMA 1141	Film, Video and Interactive Foundations I	4
FMA 1142	Film, Video and Interactive Foundations II	4

FMA 1171	Media & Culture	3
FMA 1172	Introduction to Film and Video Analysis	3

Concentration Requirements

Courses required after completion of FMA Foundation Courses:

Code	Title	Credit Hours
Select one of the following:		4
FMA 2241	Filmmaking	
FMA 2242	Videography	
FMA 2000+ Writing Intensive Elective (WI)		4
FMA 2243	Audio: Production and Aesthetics (required)	4
FMA 2551	Editing Film and Video (required)	4
FMA 3551	Advanced Editing (required)	4
Select one of the following:		4
FMA 4451	Digital Animation, Compositing and Modeling	
FMA 3553	Color Correction	
FMA 2452	Web Art & Design	
FMA 4249	Introduction to 3D: Animation	
FMA 4248	Introduction to 3D: Modeling	
FMA 4243	Film and Video Sound	
Select one of the following:		3-4
FMA 1451	Survey of New Media	
FMA 2675	Film History I (1895-1950)	
FMA 2676	Film History II (1950-Present)	
FMA 2678	History of Experimental Film and Video Art	
FMA 3000+ Writing Intensive Elective (WI)		4
FMA 3085	Internship	4
Select one of the following:		4
FMA 3246	Documentary Workshop I	
FMA 3242	Experimental Media Workshop	
FMA 3341	Scene Analysis for Writers and Directors	
FMA 4341	Screen Directing	
Select one of the following:		4
FMA 4253	Advanced Post Production Techniques (optional for fall semester of senior year)	
Attend LA Study Away		
Any other 4-credit FMA 3000+ level course in post-production		
FMA 4254	Post Production Master Class (required)	4
Total FMA Credit Hours:		61-62

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Film and Media Arts with Concentration in Post Production

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
FMA 1141	Film, Video and Interactive Foundations I	4
FMA 1171	Media & Culture	3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	

GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		15
Spring		
FMA 1142	Film, Video and Interactive Foundations II	4
FMA 1172	Introduction to Film and Video Analysis	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Elective		3
Credit Hours		16
Year 2		
Fall		
Select one of the following:		4
FMA 2241	Filmmaking	
FMA 2242	Videography	
FMA 2000+ Writing Intensive	Studies Elective ^{WI}	4
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Elective		3
Credit Hours		17
Spring		
FMA 2243	Audio: Production and Aesthetics	4
FMA 2551	Editing Film and Video	4
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		14
Year 3		
Fall		
FMA 3551	Advanced Editing	4
Select one of the following:		4
FMA 3246	Documentary Workshop I	
FMA 3242	Experimental Media Workshop	
FMA 3341	Scene Analysis for Writers and Directors	
FMA 4341	Screen Directing	
Select one of the following:		3-4
FMA 1451	Survey of New Media	
FMA 2675	Film History I (1895-1950)	
FMA 2676	Film History II (1950-Present)	
FMA 2678	History of Experimental Film and Video Art	
GenEd Breadth Course		3
Credit Hours		14-15
Spring		
Select one of the following:		4
FMA 4451	Digital Animation, Compositing and Modeling	
FMA 3553	Color Correction	
FMA 2452	Web Art & Design	
FMA 4243	Film and Video Sound	
FMA 4248	Introduction to 3D: Modeling	
FMA 4249	Introduction to 3D: Animation	
Electives		6
GenEd Breadth Course		3

GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
Select one of the following:		4
FMA 4253	Advanced Post Production Techniques	
Attend LA Study Away		
Any other 4-credit FMA 3000+ level course in post-production		
FMA 3000+ Advanced Writing Intensive Course ^{WI}		4
Electives		7
Credit Hours		15
Spring		
FMA 4254	Post Production Master Class	4
FMA 3085	Internship	4
Electives		6
Credit Hours		14
Total Credit Hours		121-122

Film and Media Arts BA with Producing Concentration

Overview

The Department of Film and Media Arts offers both the Bachelor of Arts (BA) and Bachelor of Fine Arts (BFA) in Film and Media Arts (FMA). The FMA program focuses on the development of creative expression and technical skills in film, video, audio, digital media, and new technologies, and the theoretical understanding of media and culture. The program recognizes and explores the creative tension between individual expression and the social, political and economic forces that shape culture at large through the creation and study of film, video and new media.

Students are trained in developing meaningful content as well as craft, theory and practice. In learning independent and mainstream approaches to production and theory, graduates will be prepared to develop their own independent productions and to assume a creative role in the motion picture, television and media industries.

Initially students declare either the Bachelor of Arts in Film and Media Arts or the Bachelor of Arts in Film and Media Arts with an optional Concentration in Screen Studies. In the spring of their sophomore year (60 credits), students may apply to enter one of three upper-level optional BFA concentrations in Directing, Media Arts or Screenwriting or one of three upper-level optional BA concentrations in Cinematography, Producing or Post Production.

The **Bachelor of Arts in Film and Media Arts with an optional Concentration in Producing** is a liberal arts degree that prepares students to enter graduate film programs or pursue professional careers in the film and television production with a focus on Producing. Students will complete intermediate and advanced work in Producing culminating in a master class capstone experience.

Students who are interested in applying for the Producing concentration would ideally complete the following courses by the end of their sophomore year. Note: It is recommended that students take Screenwriting I.

Code	Title	Credit Hours
FMA 1141	Film, Video and Interactive Foundations I	4
FMA 1142	Film, Video and Interactive Foundations II	4
FMA 1171	Media & Culture	3
FMA 1172	Introduction to Film and Video Analysis	3
FMA 2771	Producing	4
One of the following:		4
FMA 2241	Filmmaking	
FMA 2242	Videography	
FMA 2396	Screenwriting I	
FMA 2551	Editing Film and Video	

Campus Location: Main

Program Code: CA-FMA-BA

To Apply for a BA in Film and Media Arts with Concentrations in Cinematography, Producing or Post Production

To be considered, students need to complete 60 credits by the end of their sophomore year, earn an average of 3.0 in six foundational and intermediate courses (see each program page for details), submit a BA with Concentration application to the department, and provide a portfolio. The BA with Concentration application must be submitted to the department no later than the deadline announced on the Film and Media Studies Undergraduate Listserv in the spring semester in which the student reaches sixty credits. If a student has less than an average of 3.0 in these courses, the student may petition the department for admission into one of the three upper-level concentrations or choose to remain in their initial program—either the BA in Film and Media Arts or the BA in Film and Media Arts with a Concentration in Screen Studies.

Transfer Students Applying to the BFA in Film and Media Arts with Concentrations in Directing, Media Arts or Screenwriting, or the BA in Film and Media Arts with Concentrations in Cinematography, Producing or Post-Production

All internal and external transfer students who have transferred no equivalent FMA courses may apply to the BFA or the BA with an upper-level concentration in their second year as a Film and Media Arts student, provided they have completed all application requirements and a creative portfolio. Transfer students who have courses equivalent to the FMA core will be evaluated on a case-by-case basis and may be able to apply for the BFA or the BA with an upper-level concentration in their first year as a Film and Media Arts student. Please see advisor for a long-term academic plan. All transfer students should be aware that completing either the BFA or the BA with an upper-level concentration may extend their time at Temple.

Exceptional cases for direct admission to the BFA or BA with upper-level concentrations will be evaluated on a case-by-case basis by the Concentration Faculty Advisor.

Los Angeles Study-Away Program

The Department of Film and Media Arts offers a department-run study-away academic and internship program in Los Angeles every semester. Students may apply to attend in fall, spring and summer of their junior and senior years. They may complete an online course, FMA 2670 with the topic *Hollywood Head Start*, before attending the Los Angeles Program, which may reduce program costs. Students interested in this option should apply to the Los Angeles Program through the Study-Away Office.

Other Internships and Special Programs

FMA has an extensive internship program throughout the year in Philadelphia. Additionally, many organizations in New York, New Jersey, Delaware and Washington, D.C. provide regular opportunities for student professional internships. Temple University offers Temple-run special programs for study and research in Rome and Tokyo.

Contact Information

LeAnn Erickson, Professor
215-204-3859
leann.erickson@temple.edu

Learn more about the Bachelor of Arts in Film and Media Arts.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Arts in Film and Media Arts with Concentration in Producing

Summary of Requirements for the Degree

The Bachelor of Arts degree may be conferred upon a student majoring in Film and Media Arts with a concentration in Producing by recommendation of the faculty and upon satisfactory completion of a minimum of 120 credit hours. Students must complete:

1. University requirements:
 - New students are required to complete the General Education (GenEd (p. 83)) curriculum.
 - All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed below and identified with the code "WI".
2. No more than 21 FMA credits can be transferred to the major.
3. A student must earn a grade of "C-" or better in all Film and Media Arts courses that count towards the degree.
4. Students may take up to 8 internship credits in Film and Media Arts.
5. Students may count a maximum of 66 FMA credit hours toward the 120 credit hours required for the degree.

FMA Foundation Courses

Students who are interested in applying for the Producing concentration would ideally complete the following courses **by the end of their sophomore year**. **Note: It is recommended that Producing students complete Screenwriting I as their 2000-level writing intensive course.**

Code	Title	Credit Hours
FMA 1141	Film, Video and Interactive Foundations I	4
FMA 1142	Film, Video and Interactive Foundations II	4
FMA 1171	Media & Culture	3
FMA 1172	Introduction to Film and Video Analysis	3

Concentration Requirements

Courses required after completion of FMA Foundation Courses:

Code	Title	Credit Hours
FMA 2771	Producing (required)	4
Select one of the following:		4
FMA 2241	Filmmaking	
FMA 2242	Videography	
Select one of the following:		4
FMA 2551	Editing Film and Video	
FMA 2396	Screenwriting I (recommended) ¹	
FMA 3771	Exhibition and Distribution of Independent Media (required)	3
FMA 3772	Fundraising for Independent Media (required)	3
Select one of the following:		3-4
FMA 1451	Survey of New Media	
FMA 2675	Film History I (1895-1950)	
FMA 2676	Film History II (1950-Present)	
FMA 2678	History of Experimental Film and Video Art	
FMA 2000+ Free Elective ¹		3-4
FMA 3000+ Writing Intensive Elective (WI)		4
FMA 3085	Internship (may be split over two or three different internships)	4-6
Select one of the following:		4
FMA 3242	Experimental Media Workshop	
FMA 3246	Documentary Workshop I	
FMA 3341	Scene Analysis for Writers and Directors	
FMA 4341	Screen Directing	
FMA 4251	Producing Master Class I (required in fall semester of senior year)	4
Select one of the following:		4
FMA 4252	Producing Master Class II (optional in spring semester of senior year)	
Attend LA Study Away		
Independent Study (to continue BFA/BA producing)		
Any other 4-credit FMA 3000+ level course		
Total FMA Credit Hours:		58-62

1

If FMA 2396 is not taken, then free elective must be Writing Intensive.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Transfer students and juniors may be eligible to add this concentration - please check with an FMA advisor.

Bachelor of Arts in Film and Media Arts with Concentration in Producing

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
FMA 1141	Film, Video and Interactive Foundations I	4
FMA 1171	Media & Culture	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		15
Spring		
FMA 1142	Film, Video and Interactive Foundations II	4
FMA 1172	Introduction to Film and Video Analysis	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Elective		3
Credit Hours		16
Year 2		
Fall		
Select one of the following:		4
FMA 2241	Filmmaking	
FMA 2242	Videography	
Select one of the following:		3-4
FMA 1451	Survey of New Media	
FMA 2675	Film History I (1895-1950)	
FMA 2676	Film History II (1950-Present)	
FMA 2678	History of Experimental Film and Video Art	
FMA 2000+ Free Elective ¹		3-4
GenEd Breadth Course		3
Credit Hours		13-15
Spring		
Select one of the following:		4
FMA 2396	Screenwriting I ²	
FMA 2551	Editing Film and Video ²	
FMA 2771	Producing ³	4
GenEd Breadth Course		3
GenEd Breadth Course		3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		17
Year 3		
Fall		
FMA 3771	Exhibition and Distribution of Independent Media ^{4,5}	3
Select one of the following:		4
FMA 3242	Experimental Media Workshop	
FMA 3246	Documentary Workshop I	
FMA 3341	Scene Analysis for Writers and Directors	
FMA 4341	Screen Directing	
GenEd Breadth Course		3

Electives		6
Credit Hours		16
Spring		
FMA 3772	Fundraising for Independent Media ^{4,5}	3
FMA 3085	Internship	4
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		13
Year 4		
Fall		
FMA 4251	Producing Master Class I	4
FMA 3000+ Advanced Writing Intensive Course ^{WI}		4
Electives		6
Credit Hours		14
Spring		
Select one of the following:		4
FMA 4252	Producing Master Class II	
Attend LA Study Away		
Independent Study (to continue BFA/BA producing)		
Any other 4-credit FMA 3000+ level course		
Electives		12
Credit Hours		16
Total Credit Hours		120-122

1

Students who have already completed their 2000-level Writing Intensive requirement by taking FMA 2396 may take any 2000+ FMA course as an elective. Students who have not completed their 2000-level Writing Intensive requirement must take a 2000-level Writing Intensive course.

2

FMA 2396 Screenwriting I counts as a Writing Intensive course. FMA 2551 Editing Film and Video does not.

3

FMA 2771 may be taken fall or spring semester.

4

FMA 3771 Exhibition and Distribution of Independent Media and FMA 3772 Fundraising for Independent Media are both required, but may be taken in either fall or spring semester.

5

For transfer students or juniors, FMA 2771 Producing may be taken in conjunction with FMA 3771 or FMA 3772.

Film and Media Arts BA with Screen Studies Concentration

Overview

The Department of Film and Media Arts offers both the Bachelor of Arts (BA) and Bachelor of Fine Arts (BFA) in Film and Media Arts (FMA). The FMA program focuses on the development of creative expression and technical skills in film, video, audio, digital media, and new technologies, and the theoretical understanding of media and culture. The program recognizes and explores the creative tension between individual expression and the social, political and economic forces that shape culture at large through the creation and study of film, video and new media.

Students are trained in developing meaningful content as well as craft, theory and practice. In learning independent and mainstream approaches to production and theory, graduates will be prepared to develop their own independent productions and to assume a creative role in the motion picture, television and media industries.

Initially students declare either the Bachelor of Arts in Film and Media Arts or the Bachelor of Arts in Film and Media Arts with an optional Concentration in Screen Studies. In the spring of their sophomore year (60 credits), students may apply to enter one of three upper-level optional BFA concentrations in Directing, Media Arts or Screenwriting or one of three upper-level optional BA concentrations in Cinematography, Producing or Post Production.

The **Bachelor of Arts in Film and Media Arts with an optional Concentration in Screen Studies** is a liberal arts degree that allows students to study in depth the aesthetics, history and cultural significance of moving-image media. It draws upon the fields of cinema studies and humanities-based

disciplines of media studies and media arts theory, while also encouraging students to approach screen cultures from neighboring disciplines, such as cultural studies, area studies, art history or visual studies.

Students who are interested in declaring a concentration in Screen Studies may do so at any time; please see an academic advisor for assistance. We encourage students from all disciplines to consider Screen Studies as a double major.

Campus Location: Main

Program Code: CA-FMA-BA

Los Angeles Study-Away Program

The Department of Film and Media Arts offers a department-run study-away academic and internship program in Los Angeles every semester. Students may apply to attend in fall, spring and summer of their junior and senior years. They may complete an online course, FMA 2670 with the topic *Hollywood Head Start*, before attending the Los Angeles Program, which may reduce program costs. Students interested in this option should apply to the Los Angeles Program through the Study-Away Office.

Other Internships and Special Programs

FMA has an extensive internship program throughout the year in Philadelphia. Additionally, many organizations in New York, New Jersey, Delaware and Washington, D.C. provide regular opportunities for student professional internships. Temple University offers Temple-run special programs for study and research in Rome and Tokyo.

Contact Information

Chris Cagle, Associate Professor
215-204-3859
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Learn more about the Bachelor of Arts in Film and Media Arts.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Arts in Film and Media Arts with Concentration in Screen Studies

Summary of Requirements for the Degree

The Bachelor of Arts degree may be conferred upon a student majoring in Film and Media Arts with a concentration in Screen Studies by recommendation of the faculty and upon satisfactory completion of a minimum of 121 credit hours. Students must complete:

1. University requirements:
 - New students are required to complete the General Education (GenEd (p. 83)) curriculum.
 - All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed below and identified with the code "WI".
2. No more than 21 FMA credits can be transferred to the major.
3. A student must earn a grade of "C-" or better in all Film and Media Arts courses that count towards the degree.
4. Students may take up to 8 internship credits in Film and Media Arts.
5. Students may count a maximum of 66 FMA credit hours toward the 121 credit hours required for the degree.
6. As noted below, students in the Screen Studies concentration must fulfill a foreign language requirement in addition to the FMA coursework and general university requirements.

FMA Foundation Courses

Film and Media Arts students will complete the following courses by the end of the sophomore year:

Code	Title	Credit Hours
Select one of the following:		
FMA 1141	Film, Video and Interactive Foundations I	4
FMA 1144	Media Arts for Non-Production Majors	
FMA 1171	Media & Culture	3
FMA 1172	Introduction to Film and Video Analysis	3
Total Credit Hours		10

Concentration Requirements

Foreign Language Requirement

Students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002. Ideally this requirement should be completed in the first or second year.

Students are strongly encouraged to take the third level of a foreign language (numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects) and/or pursue a Study Abroad opportunity.

Required Courses

Courses required after completion of Screen Studies Foundation Courses:

Code	Title	Credit Hours
Select two history surveys:		7-8
FMA 1451	Survey of New Media	
FMA 2675	Film History I (1895-1950)	
FMA 2676	Film History II (1950-Present)	
FMA 2678	History of Experimental Film and Video Art	
Select one theory course:		4
FMA 3671	Theory and Practice of Media Culture	
FMA 3871	Film Theory	
Select two courses on film and culture:		7-8
FMA 3677	American Film	
FMA 3773	Contemporary Screen Studies	
FMA 4673	International Cinema	
FMA 4674	Anthropological Film/Media	
FMA 4675	Women Film/Video Artists	
FMA 3670	Topics in Media Culture	
Select one 2000+ FMA elective		3-4
Select two 3000+ writing-intensive courses:		8
FMA 3696	Writing-Intensive Seminar: Film Directors, Periods, and Genres	
FMA 4697	Advanced Film History	
FMA 4698	Writing-Intensive Study in Documentary Film	
Two semesters of Foreign Language ¹		8
Total Credit Hours		37-40

1

Students may place out of part or all of the language requirement with tested proficiency.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Film and Media Arts with Concentration in Screen Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
FMA 1171	Media & Culture	3
Select one of the following:		4
FMA 1141	Film, Video and Interactive Foundations I	
FMA 1144	Media Arts for Non-Production Majors	
One semester of Foreign Language (may be continuation of prior language study)		4

ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		15
Spring		
FMA 1172	Introduction to Film and Video Analysis	3
One semester of Foreign Language (continuation of language taken in Year 1 Fall)		4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Quantitative Literacy Course ^{GQ}		4
GenEd Breadth Course		3
Credit Hours		17
Year 2		
Fall		
Select one of the following:		3-4
FMA 1451	Survey of New Media	
FMA 2675	Film History I (1895-1950)	
FMA 2676	Film History II (1950-Present)	
FMA 2678	History of Experimental Film and Video Art	
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Elective		3-2
Credit Hours		15
Spring		
Select one of the following:		3-4
FMA 1451	Survey of New Media	
FMA 2675	Film History I (1895-1950)	
FMA 2676	Film History II (1950-Present)	
FMA 2678	History of Experimental Film and Video Art	
2000+ FMA elective		3-4
GenEd Breadth Course		3
GenEd Breadth Course		3
Elective		3-1
Credit Hours		15
Year 3		
Fall		
Select one of the following:		4
FMA 3671	Theory and Practice of Media Culture	
FMA 3871	Film Theory	
GenEd Breadth Course		3
Electives		9
Credit Hours		16
Spring		
Select one of the following 3000+ Writing-Intensive courses:		4
FMA 3696	Writing-Intensive Seminar: Film Directors, Periods, and Genres	
FMA 4697	Advanced Film History (3000+ Writing-Intensive Course)	
FMA 4698	Writing-Intensive Study in Documentary Film	
GenEd Breadth Course		3
Electives		8
Credit Hours		15

Year 4**Fall**

Select two of following:		7-8
FMA 3677	American Film	
FMA 3773	Contemporary Screen Studies	
FMA 4673	International Cinema	
FMA 4674	Anthropological Film/Media	
FMA 4675	Women Film/Video Artists	
FMA 3670	Topics in Media Culture	
Electives		8-7

Credit Hours	15
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Spring

Select one of the following 3000+ Writing-Intensive courses:		4
FMA 3696	Writing-Intensive Seminar: Film Directors, Periods, and Genres	
FMA 4697	Advanced Film History (3000+ Writing-Intensive course)	
FMA 4698	Writing-Intensive Study in Documentary Film	
Electives		9

Credit Hours	13
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Total Credit Hours	121
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Film and Media Arts BFA with Directing Concentration

Overview

The Department of Film and Media Arts offers both the Bachelor of Arts (BA) and Bachelor of Fine Arts (BFA) in Film and Media Arts (FMA). The FMA program focuses on the development of creative expression and technical skills in film, video, audio, digital media, and new technologies, and the theoretical understanding of media and culture. The program recognizes and explores the creative tension between individual expression and the social, political and economic forces that shape culture at large through the creation and study of film, video and new media.

Students are trained in developing meaningful content as well as craft, theory and practice. In learning independent and mainstream approaches to production and theory, graduates will be prepared to develop their own independent productions and to assume a creative role in the motion picture, television and media industries.

Initially students declare either the Bachelor of Arts in Film and Media Arts or the Bachelor of Arts in Film and Media Arts with an optional Concentration in Screen Studies. In the spring of their sophomore year (60 credits), students may apply to enter one of three upper-level optional BFA concentrations in Directing, Media Arts or Screenwriting or one of three upper-level optional BA concentrations in Cinematography, Producing or Post Production.

The **Bachelor of Fine Arts in Film and Media Arts with an optional Concentration in Directing** is an intensive, professional degree that prepares students to enter graduate Film programs or pursue professional careers in screen directing. It focuses on both fictional and non-fictional directing. Studies will culminate in the direction of an advanced creative production in the BFA Directing Project Classes. Narrative and documentary students will take the same curriculum except as follows. Narrative students will choose two from a list of three courses: *Screen Directing*, *Screen Performance*, and *Scene Analysis*. Documentary students will choose two from a list of four courses: *Making Documentaries*, *Experimental Media Workshop*, *Anthropological Film/Media* or *Researching and Developing Documentaries*.

Students interested in applying for the Directing concentration must complete the following courses by the end of their sophomore year:

Code	Title	Credit Hours
FMA 1141	Film, Video and Interactive Foundations I	4
FMA 1142	Film, Video and Interactive Foundations II	4
FMA 1171	Media & Culture	3
FMA 1172	Introduction to Film and Video Analysis	3
FMA 2396	Screenwriting I	4
One of the following:		4
FMA 2241	Filmmaking	
FMA 2242	Videography	

Campus Location: Main

Program Code: CA-FMA-BFA

To Apply for a BFA in Film and Media Arts with Concentrations in Directing, Media Arts or Screenwriting

To be considered, students need to complete 60 credits by the end of their sophomore year, earn an average of 3.0 in six foundational and intermediate courses (see each program page for details), submit a BFA application to the department, and provide a portfolio. The BFA application must be submitted to the department no later than the deadline announced on the Film and Media Studies Undergraduate Listserv in the spring semester in which the student reaches sixty credits. Students with less than an average of 3.0 in the six courses or who have only completed five of the six courses may petition the department for admission to one of the BFA concentrations. (See concentration faculty advisor.) Students who were not admitted to one of the BFA concentrations can continue in the BA in Film and Media Arts or the BA in Film and Media Arts with a Concentration in Screen Studies or apply for one of the three upper-level BA concentrations.

Transfer Students Applying to the BFA in Film and Media Arts with Concentrations in Directing, Media Arts or Screenwriting, or the BA in Film and Media Arts with Concentrations in Cinematography, Producing or Post Production

All internal and external transfer students who have transferred no equivalent FMA courses may apply to the BFA or the BA with an upper-level concentration in their second year as a Film and Media Arts student, provided they have completed all application requirements and a creative portfolio. Transfer students who have courses equivalent to the FMA core will be evaluated on a case-by-case basis and may be able to apply for the BFA or the BA with an upper-level concentration in their first year as a Film and Media Arts student. Please see advisor for a long-term academic plan. All transfer students should be aware that completing either the BFA or the BA with an upper-level concentration may extend their time at Temple.

Exceptional cases for direct admission to the BFA or BA with upper-level concentrations will be evaluated on a case-by-case basis by the Concentration Faculty Advisor.

Los Angeles Study-Away Program

The Department of Film and Media Arts offers a department-run study-away academic and internship program in Los Angeles every semester. Students may apply to attend in fall, spring and summer of their junior and senior years. They may complete an online course, FMA 2670 with the topic *Hollywood Head Start*, before attending the Los Angeles Program, which may reduce program costs. Students interested in this option should apply to the Los Angeles Program through the Study-Away Office.

Special Considerations for Directing and Screenwriting BFA Students

Because it is a more structured curriculum than that of the other Film and Media Arts sequences, students in the BFA in FMA's concentrations in Directing and Screenwriting who wish to participate in the Los Angeles Program must carefully plan ahead. They should meet with the BFA Director well before the semester they plan to attend the Los Angeles Program. BFA in FMA students in the Directing and Screenwriting concentrations have the following options:

- **Option 1** is open to BFA students in the **Directing and Screenwriting concentrations**. They may attend the Los Angeles Program during the summer semester after their junior or senior years. To reduce summer cost, students may earn four of the eight hours normally required for the summer semester by completing an online course, FMA 2670 with the topic *Hollywood Head Start*, during the fall or spring semesters. Students interested in this option should apply to the Los Angeles Program through the Study-Away Office.
- **Option 2** is open to BFA students in the **Directing concentration**. These students may seek permission from the Director to attend the Los Angeles Program during the spring of their junior year. They must 1) find a Los Angeles internship that will replace the normally required , 2) demonstrate from their performance in prior BFA courses that they can complete online the required , and 3) submit a plan to complete all otherwise required courses and credits to earn the BFA. These must be approved by the BFA Director.
- **Option 3** is open to BFA students in the **Screenwriting concentration**. These students may seek permission from the BFA Director to attend the Los Angeles Program during the spring of their junior year, or the fall or spring of their senior year. They must 1) demonstrate from their performance in prior BFA courses that they can complete online the required , and 2) submit a plan to complete all otherwise required courses and credits to earn the BFA. These must be approved by the BFA Director.

Other Internships and Special Programs

FMA has an extensive internship program throughout the year in Philadelphia. Additionally, many organizations in New York, New Jersey, Delaware and Washington, D.C. provide regular opportunities for student professional internships. Temple University offers Temple-run special programs for study and research in Rome and Tokyo.

Contact Information

Elisabeth Subrin, Professor
Annenberg Hall, Room 130

subrin@temple.edu

Learn more about the Bachelor of Fine Arts in Film and Media Arts.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Fine Arts in Film and Media Studies with Concentration in Directing

Summary of Requirements for the Degree

The Bachelor of Fine Arts degree may be conferred upon a student majoring in Film and Media Arts with a concentration in Directing by recommendation of the faculty and upon satisfactory completion of a minimum of 122 credit hours. Students must complete:

1. University Requirements:
 - New students are required to complete the General Education (GenEd (p. 83)) curriculum.
 - All students must take a minimum of two writing-intensive courses specified by the major. The specific writing-intensive courses required for this major are listed below and identified with the code "WI".
2. No more than 21 FMA credits can be transferred to the major.
3. A student must earn a grade of "C-" or better in all Film and Media Arts courses that count towards the degree.
4. Students may take up to 6 internship credits in Film and Media Arts.
5. Students may count a maximum of 84 FMA credit hours toward the 122 credit hours required for the degree.

FMA Foundation Courses

Film and Media Arts students will complete the following courses by the end of the sophomore year:

Code	Title	Credit Hours
FMA 1141	Film, Video and Interactive Foundations I	4
FMA 1142	Film, Video and Interactive Foundations II	4
FMA 1171	Media & Culture	3
FMA 1172	Introduction to Film and Video Analysis	3

Concentration Requirements

Courses required after completion of FMA Foundation Courses:

Code	Title	Credit Hours
FMA 2241	Filmmaking	4
FMA 2242	Videography	4
Select one of the following:		3-4
FMA 1451	Survey of New Media	
FMA 2675	Film History I (1895-1950)	
FMA 2676	Film History II (1950-Present)	
FMA 2678	History of Experimental Film and Video Art	
FMA 2396	Screenwriting I	4
FMA 2551	Editing Film and Video	4
FMA 2771	Producing	4
FMA 3000+	Studies Elective	3-4
FMA 3773	Contemporary Screen Studies	4
Select two of the following:		7-8
(for Narrative students)		
FMA 4341	Screen Directing	
FMA 3361	Screen Performance	
FMA 3341	Scene Analysis for Writers and Directors	
(for Documentary students)		
FMA 3246	Documentary Workshop I	

FMA 3242	Experimental Media Workshop	
FMA 3247	Cross-Cultural Image Making	
FMA 4674	Anthropological Film/Media	
FMA 3343	Screenwriting II	4
FMA 3241	BFA Junior Directing Projects	4
FMA 4241	BFA Directing Projects I	4
FMA 4242	BFA Directing Projects II	4
FMA 3000+	Advanced Writing Intensive Elective (WI)	4
Total FMA Credit Hours:		71-73

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Fine Arts in Film and Media Arts with Concentration in Directing Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
FMA 1141	Film, Video and Interactive Foundations I	4
FMA 1171	Media & Culture	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		15
Spring		
FMA 1142	Film, Video and Interactive Foundations II	4
FMA 1172	Introduction to Film and Video Analysis	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Elective		3
Credit Hours		16
Year 2		
Fall		
FMA 2241	Filmmaking	4
FMA 2551	Editing Film and Video	4
Select one of the following:		3-4
FMA 1451	Survey of New Media	
FMA 2675	Film History I (1895-1950)	
FMA 2676	Film History II (1950-Present)	
FMA 2678	History of Experimental Film and Video Art	
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		14-15
Spring		
FMA 2396	Screenwriting I	4
FMA 2242	Videography	4
FMA 2771	Producing	4
GenEd Breadth Course		3
Credit Hours		15

Year 3		
Fall		
FMA 3773	Contemporary Screen Studies	4
Select two of the following:		7-8
Narrative students select from		
FMA 4341	Screen Directing	
FMA 3361	Screen Performance	
FMA 3341	Scene Analysis for Writers and Directors	
Documentary students select from		
FMA 3246	Documentary Workshop I	
FMA 3242	Experimental Media Workshop	
FMA 3247	Cross-Cultural Image Making	
FMA 4674	Anthropological Film/Media	
GenEd Breadth Course		3
Elective		3
Credit Hours		17-18
Spring		
FMA 3000+	Advanced Writing Intensive Elective ^{WI}	4
FMA 3241	BFA Junior Directing Projects	4
FMA 3343	Screenwriting II	4
GenEd Breadth Course		3
Credit Hours		15
Year 4		
Fall		
FMA 4241	BFA Directing Projects I	4
FMA 3000+	Studies Elective	4
GenEd Breadth Course		3
Elective		3
Credit Hours		14
Spring		
FMA 4242	BFA Directing Projects II	4
GenEd Breadth Course		3
GenEd Breadth Course		3
Electives		6
Credit Hours		16
Total Credit Hours		122-124

SUGGESTED ACADEMIC PLAN FOR LA-AWAY PROGRAM

Please note that the following academic plan is for students attending the LA-Away Program in the Fall of their Junior year.

Bachelor of Fine Arts in Film and Media Arts with Concentration in Directing: LA-Away Program

Year 1		
Fall		Credit Hours
FMA 1141	Film, Video and Interactive Foundations I	4
FMA 1171	Media & Culture	3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		15

Spring		
FMA 1142	Film, Video and Interactive Foundations II	4
FMA 1172	Introduction to Film and Video Analysis	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Elective		3
Credit Hours		16
Year 2		
Fall		
FMA 2241	Filmmaking	4
FMA 2551	Editing Film and Video	4
Select one of the following:		3-4
FMA 1451	Survey of New Media	
FMA 2675	Film History I (1895-1950)	
FMA 2676	Film History II (1950-Present)	
FMA 2678	History of Experimental Film and Video Art	
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		14-15
Spring		
FMA 2396	Screenwriting I	4
FMA 2242	Videography	4
FMA 2771	Producing	4
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
FMA 3085	Internship	4
FMA 3770	Topics in Film Study (Entertainment Industry Perspectives)	4
FMA 3696	Writing-Intensive Seminar: Film Directors, Periods, and Genres	4
Elective		3
Credit Hours		15
Spring		
FMA 3241	BFA Junior Directing Projects	4
FMA 3343	Screenwriting II	4
Select two of the following:		7-8
Narrative students select from		
FMA 4341	Screen Directing	
FMA 3361	Screen Performance	
FMA 3341	Scene Analysis for Writers and Directors	
Documentary students select from		
FMA 3246	Documentary Workshop I	
FMA 3242	Experimental Media Workshop	
FMA 3247	Cross-Cultural Image Making	
FMA 4674	Anthropological Film/Media	
Credit Hours		15-16
Year 4		
Fall		
FMA 4241	BFA Directing Projects I	4
FMA 3773	Contemporary Screen Studies	4
GenEd Breadth Course		3

GenEd Breadth Course		3
Elective		3
Credit Hours		17
Spring		
FMA 4242	BFA Directing Projects II	4
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Elective		3
Credit Hours		16
Total Credit Hours		123-125

Film and Media Arts BFA with Media Arts Concentration

Overview

The Department of Film and Media Arts offers both the Bachelor of Arts (BA) and Bachelor of Fine Arts (BFA) in Film and Media Arts (FMA). The FMA program focuses on the development of creative expression and technical skills in film, video, audio, digital media, and new technologies, and the theoretical understanding of media and culture. The program recognizes and explores the creative tension between individual expression and the social, political and economic forces that shape culture at large through the creation and study of film, video and new media.

Students are trained in developing meaningful content as well as craft, theory and practice. In learning independent and mainstream approaches to production and theory, graduates will be prepared to develop their own independent productions and to assume a creative role in the motion picture, television and media industries.

Initially students declare either the Bachelor of Arts in Film and Media Arts or the Bachelor of Arts in Film and Media Arts with an optional Concentration in Screen Studies. In the spring of their sophomore year (60 credits), students may apply to enter one of three upper-level optional BFA concentrations in Directing, Media Arts or Screenwriting or one of three upper-level optional BA concentrations in Cinematography, Producing or Post Production.

The **Bachelor of Fine Arts in Film and Media Arts with an optional Concentration in Media Arts** is an intensive, professional degree that prepares students to enter graduate Media Arts programs or pursue artistic careers in the media arts or in the creative industries. Areas of study include video installation, video art, media projection design for performance/sculpture/public space, interactive narrative, location-based media and mobile augmented reality, sensor-based interactive media, 2D and 3D digital animation, video game theory/design/programming, web design and net art, social practice, and other forms of experimental media. Studies will culminate in the completion and exhibition of an advanced creative project in the capstone Media Arts Project Classes.

Students interested in the Media Arts concentration must complete the following courses by the end of their sophomore year:

Code	Title	Credit Hours
FMA 1141	Film, Video and Interactive Foundations I	4
FMA 1142	Film, Video and Interactive Foundations II	4
FMA 1171	Media & Culture	3
FMA 1451	Survey of New Media	3
FMA 2242	Videography	4
FMA 2451	Experimental Video and Multi-Media	4
One of the following:		4
FMA 2396	Screenwriting I	
FMA 4441	Physical Computing	
FMA 4451	Digital Animation, Compositing and Modeling	

Campus Location: Main

Program Code: CA-FMA-BFA

To Apply for a BFA in Film and Media Arts with Concentrations in Directing, Media Arts or Screenwriting

To be considered, students need to complete 60 credits by the end of their sophomore year, earn an average of 3.0 in six foundational and intermediate courses (see each program page for details), submit a BFA application to the department, and provide a portfolio. The BFA application must be

submitted to the department no later than the deadline announced on the Film and Media Studies Undergraduate Listserv in the spring semester in which the student reaches sixty credits. Students with less than an average of 3.0 in the six courses or who have only completed five of the six courses may petition the department for admission to one of the BFA concentrations. (See concentration faculty advisor.) Students who were not admitted to one of the BFA concentrations can continue in the BA in Film and Media Arts or the BA in Film and Media Arts with a Concentration in Screen Studies or apply for one of the three upper-level BA concentrations.

Transfer Students Applying to the BFA in Film and Media Arts with Concentrations in Directing, Media Arts or Screenwriting, or the BA in Film and Media Arts with Concentrations in Cinematography, Producing or Post Production

All internal and external transfer students who have transferred no equivalent FMA courses may apply to the BFA or the BA with an upper-level concentration in their second year as a Film and Media Arts student, provided they have completed all application requirements and a creative portfolio. Transfer students who have courses equivalent to the FMA core will be evaluated on a case-by-case basis and may be able to apply for the BFA or the BA with an upper-level concentration in their first year as a Film and Media Arts student. Please see advisor for a long-term academic plan. All transfer students should be aware that completing either the BFA or the BA with an upper-level concentration may extend their time at Temple.

Exceptional cases for direct admission to the BFA or BA with upper-level concentrations will be evaluated on a case-by-case basis by the Concentration Faculty Advisor.

Los Angeles Study-Away Program

The Department of Film and Media Arts offers a department-run study-away academic and internship program in Los Angeles every semester. Students may apply to attend in fall, spring and summer of their junior and senior years. They may complete an online course, FMA 2670 with the topic *Hollywood Head Start*, before attending the Los Angeles Program, which may reduce program costs. Students interested in this option should apply to the Los Angeles Program through the Study-Away Office.

Other Internships and Special Programs

FMA has an extensive internship program throughout the year in Philadelphia. Additionally, many organizations in New York, New Jersey, Delaware and Washington, D.C. provide regular opportunities for student professional internships. Temple University offers Temple-run special programs for study and research in Rome and Tokyo.

Contact Information

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215-204-3859
sarah.drury@temple.edu

Learn more about the Bachelor of Fine Arts in Film and Media Arts.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Fine Arts in Film and Media Arts with Concentration in Media Arts

Summary of Requirements for the Degree

The Bachelor of Fine Arts degree may be conferred upon a student majoring in Film and Media Arts with a concentration in Media Arts by recommendation of the faculty and upon satisfactory completion of a minimum of 120 credit hours. Students must complete:

1. University Requirements:
 - New students are required to complete the General Education (GenEd (p. 83)) curriculum.
 - All students must take a minimum of two writing-intensive courses specified by the major. The specific writing-intensive courses required for this major are listed below and identified with the code "WI".
2. No more than 21 FMA credits can be transferred to the major.
3. A student must earn a grade of "C-" or better in all Film and Media Arts courses that count towards the degree.
4. Students may take up to 8 internship credits in Film and Media Arts.
5. Students may count a maximum of 84 FMA credit hours toward the 120 credit hours required for the degree.

FMA Foundation Courses

Students seeking to enter the BFA with a Concentration in Media Arts will complete the following courses by the end of the sophomore year:

Code	Title	Credit Hours
FMA 1141	Film, Video and Interactive Foundations I	4
FMA 1142	Film, Video and Interactive Foundations II	4
FMA 1171	Media & Culture	3
FMA 1451	Survey of New Media	3

Concentration Requirements

Courses required after completion of FMA Foundation Courses:

Code	Title	Credit Hours
FMA 2242	Videography	4
FMA 3453	Interdisciplinary Media Studio	4
Select one of the following:		4
FMA 2452	Web Art & Design	
FMA 4441	Physical Computing	
FMA 4451	Digital Animation, Compositing and Modeling	
FMA 2451	Experimental Video and Multi-Media	4
FMA 2000+	Writing Intensive Elective (WI)	3-4
Select four of the following:		16
FMA 4248	Introduction to 3D: Modeling	
FMA 4249	Introduction to 3D: Animation	
FMA 2243	Audio: Production and Aesthetics	
FMA 4441	Physical Computing	
FMA 3242	Experimental Media Workshop	
FMA 4461	Interactive Narrative	
FMA 4462	Video Game Theory and Writing	
FMA 3452	New Technologies Lab	4
FMA	Studies Elective in Digital Arts	3-4
FMA	Media History Studies Elective	3
FMA 3000+	Advanced Writing Intensive Elective (WI)	4
FMA 4442	BFA Media Arts Project I (This course can be retaken)	4
FMA 4443	BFA Media Arts Project II (This course can be retaken)	4
Total FMA Credit Hours:		71-73

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Fine Arts in Film and Media Arts with Concentration in Media Arts

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
FMA 1141	Film, Video and Interactive Foundations I	4
FMA 1171	Media & Culture	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		15
Spring		
FMA 1142	Film, Video and Interactive Foundations II	4
FMA 1451	Survey of New Media	3

IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Elective		3
Credit Hours		16
Year 2		
Fall		
FMA 2242	Videography	4
FMA 2000+ Writing Intensive Elective ^{WI}		3-4
FMA 2451	Experimental Video and Multi-Media	4
GenEd Breadth Course		3
Credit Hours		14-15
Spring		
Select one of the following:		4
FMA 2452	Web Art & Design	
FMA 4441	Physical Computing	
FMA 4451	Digital Animation, Compositing and Modeling	
FMA Studies Elective in Digital Arts		3-4
GenEd Breadth Course		3
GenEd Breadth Course		3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		16-17
Year 3		
Fall		
FMA 3453	Interdisciplinary Media Studio	4
Select two of the following:		8
FMA 4248	Introduction to 3D: Modeling	
FMA 4249	Introduction to 3D: Animation	
FMA 2243	Audio: Production and Aesthetics	
FMA 4441	Physical Computing	
FMA 3242	Experimental Media Workshop	
FMA 4461	Interactive Narrative	
FMA 4462	Video Game Theory and Writing	
GenEd Breadth Course		3
Credit Hours		15
Spring		
FMA 3000+ Advanced Writing Intensive Elective ^{WI}		4
Select two of the following:		8
FMA 4248	Introduction to 3D: Modeling	
FMA 4249	Introduction to 3D: Animation	
FMA 2243	Audio: Production and Aesthetics	
FMA 4441	Physical Computing	
FMA 3242	Experimental Media Workshop	
FMA 4461	Interactive Narrative	
FMA 4462	Video Game Theory and Writing	
GenEd Breadth Course		3
Credit Hours		15
Year 4		
Fall		
FMA 4442	BFA Media Arts Project I	4
FMA Media History Studies Elective		4

FMA 3452	New Technologies Lab	4
Elective		3
Credit Hours		15
Spring		
FMA 4443	BFA Media Arts Project II	4
FMA Elective		4
GenEd Breadth Course		3
Elective		3
Credit Hours		14
Total Credit Hours		120-122

Film and Media Arts BFA with Screenwriting Concentration

Overview

The Department of Film and Media Arts offers both the Bachelor of Arts (BA) and Bachelor of Fine Arts (BFA) in Film and Media Arts (FMA). The FMA program focuses on the development of creative expression and technical skills in film, video, audio, digital media, and new technologies, and the theoretical understanding of media and culture. The program recognizes and explores the creative tension between individual expression and the social, political and economic forces that shape culture at large through the creation and study of film, video and new media.

Students are trained in developing meaningful content as well as craft, theory and practice. In learning independent and mainstream approaches to production and theory, graduates will be prepared to develop their own independent productions and to assume a creative role in the motion picture, television and media industries.

Initially students declare either the Bachelor of Arts in Film and Media Arts or the Bachelor of Arts in Film and Media Arts with an optional Concentration in Screen Studies. In the spring of their sophomore year (60 credits), students may apply to enter one of three upper-level optional BFA concentrations in Directing, Media Arts or Screenwriting or one of three upper-level optional BA concentrations in Cinematography, Producing or Post Production.

The **Bachelor of Fine Arts in Film and Media Arts with an optional Concentration in Screenwriting** is an intensive, professional degree that prepares students to enter graduate Film programs or pursue professional careers in Film and Serial writing. It focuses on narrative feature-film and serial writing. Studies will culminate in the writing and polishing of a feature screenplay or long-form television serial bible in the BFA Screenwriting Final Project Classes.

Students interested in applying for the Screenwriting concentration should complete the following classes by the end of their sophomore year:

Code	Title	Credit Hours
FMA 1141	Film, Video and Interactive Foundations I	4
FMA 1142	Film, Video and Interactive Foundations II	4
FMA 1171	Media & Culture	3
FMA 1172	Introduction to Film and Video Analysis	3
FMA 2396	Screenwriting I	4
One of the following:		4
FMA 2551	Editing Film and Video	
FMA 2771	Producing	

Campus Location: Main

Program Code: CA-FMA-BFA

To Apply for a BFA in Film and Media Arts with Concentrations in Directing, Media Arts or Screenwriting

To be considered, students need to complete 60 credits by the end of their sophomore year, earn an average of 3.0 in six foundational and intermediate courses (see each program page for details), submit a BFA application to the department, and provide a portfolio. The BFA application must be submitted to the department no later than the deadline announced on the Film and Media Studies Undergraduate Listserv in the spring semester in which the student reaches sixty credits. Students with less than an average of 3.0 in the six courses or who have only completed five of the six courses may petition the department for admission to one of the BFA concentrations. (See concentration faculty advisor.) Students who were not admitted to one of the BFA concentrations can continue in the BA in Film and Media Arts or the BA in Film and Media Arts with a Concentration in Screen Studies or apply for one of the three upper-level BA concentrations.

Transfer Students Applying to the BFA in Film and Media Arts with Concentrations in Directing, Media Arts or Screenwriting, or the BA in Film and Media Arts with Concentrations in Cinematography, Producing or Post Production

All internal and external transfer students who have transferred no equivalent FMA courses may apply to the BFA or the BA with an upper-level concentration in their second year as a Film and Media Arts student, provided they have completed all application requirements and a creative portfolio. Transfer students who have courses equivalent to the FMA core will be evaluated on a case-by-case basis and may be able to apply for the BFA or the BA with an upper-level concentration in their first year as a Film and Media Arts student. Please see advisor for a long-term academic plan. All transfer students should be aware that completing either the BFA or the BA with an upper-level concentration may extend their time at Temple.

Exceptional cases for direct admission to the BFA or BA with upper-level concentrations will be evaluated on a case-by-case basis by the Concentration Faculty Advisor.

Los Angeles Study-Away Program

The Department of Film and Media Arts offers a department-run study-away academic and internship program in Los Angeles every semester. Students may apply to attend in fall, spring and summer of their junior and senior years. They may complete an online course, FMA 2670 with the topic *Hollywood Head Start*, before attending the Los Angeles Program, which may reduce program costs. Students interested in this option should apply to the Los Angeles Program through the Study-Away Office.

Special Considerations for Directing and Screenwriting BFA Students

Because it is a more structured curriculum than that of the other Film and Media Arts sequences, students in the BFA in FMA's concentrations in Directing and Screenwriting who wish to participate in the Los Angeles Program must carefully plan ahead. They should meet with the BFA Director well before the semester they plan to attend the Los Angeles Program. BFA in FMA students in the Directing and Screenwriting concentrations have the following options:

- **Option 1** is open to BFA students in the **Directing and Screenwriting concentrations**. They may attend the Los Angeles Program during the summer semester after their junior or senior years. To reduce summer cost, students may earn four of the eight hours normally required for the summer semester by completing an online course, with the topic *Hollywood Head Start*, during the fall or spring semesters. Students interested in this option should apply to the Los Angeles Program through the Study-Away Office.
- **Option 2** is open to BFA students in the **Directing concentration**. These students may seek permission from the Director to attend the Los Angeles Program during the spring of their junior year. They must 1) find a Los Angeles internship that will replace the normally required , 2) demonstrate from their performance in prior BFA courses that they can complete online the required , and 3) submit a plan to complete all otherwise required courses and credits to earn the BFA. These must be approved by the BFA Director.
- **Option 3** is open to BFA students in the **Screenwriting concentration**. These students may seek permission from the BFA Director to attend the Los Angeles Program during the spring of their junior year, or the fall or spring of their senior year. They must 1) demonstrate from their performance in prior BFA courses that they can complete online the required , and 2) submit a plan to complete all otherwise required courses and credits to earn the BFA. These must be approved by the BFA Director.

Other Internships and Special Programs

FMA has an extensive internship program throughout the year in Philadelphia. Additionally, many organizations in New York, New Jersey, Delaware and Washington, D.C. provide regular opportunities for student professional internships. Temple University offers Temple-run special programs for study and research in Rome and Tokyo.

Contact Information

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Learn more about the Bachelor of Fine Arts in Film and Media Arts.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Fine Arts in Film and Media Arts with Concentration in Screenwriting Summary of Requirements for the Degree

The Bachelor of Fine Arts degree may be conferred upon a student majoring in Film and Media Arts with a concentration in Screenwriting by recommendation of the faculty and upon satisfactory completion of a minimum of 122 credit hours. Students must complete:

1. University Requirements:
 - New students are required to complete the General Education (GenEd (p. 83)) curriculum.
 - All students must take a minimum of two writing-intensive courses specified by the major. The specific writing-intensive courses required for this major are listed below and identified with the code "WI".
2. No more than 21 FMA credits can be transferred to the major.
3. A student must earn a grade of "C-" or better in all Film and Media Arts courses that count towards the degree.
4. Students may take up to 6 internship credits in Film and Media Arts.
5. Students may count a maximum of 84 FMA credit hours toward the 122 credit hours required for the degree.

FMA Foundation Courses

Film and Media Arts students will complete the following courses by the end of the sophomore year:

Code	Title	Credit Hours
FMA 1141	Film, Video and Interactive Foundations I	4
FMA 1142	Film, Video and Interactive Foundations II	4
FMA 1171	Media & Culture	3
FMA 1172	Introduction to Film and Video Analysis	3

Concentration Requirements

Courses required after completion of FMA Foundation Courses:

Code	Title	Credit Hours
FMA 2241	Filmmaking	4
Select one of the following:		3
ENG 2004	Creative Writing: Fiction	
THTR 3801	Playwriting	
Select one of the following:		3-4
FMA 1451	Survey of New Media	
FMA 2675	Film History I (1895-1950)	
FMA 2676	Film History II (1950-Present)	
FMA 2678	History of Experimental Film and Video Art	
FMA 2396	Screenwriting I	4
FMA 2551	Editing Film and Video	4
FMA 2771	Producing	4
FMA 3000+	Studies Elective	3-4
FMA 3773	Contemporary Screen Studies	4
Select two of the following:		7-8
FMA 4341	Screen Directing	
FMA 3361	Screen Performance	
FMA 3341	Scene Analysis for Writers and Directors	
FMA 3343	Screenwriting II	4
FMA 3342	Serial Writing	4
FMA 3000+	Advanced Writing Intensive Elective (WI)	4
FMA 4342	BFA Screenwriting Projects I	4
FMA 4343	BFA Screenwriting Projects II	4
Total FMA Credit Hours:		70-73

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Fine Arts in Film and Media Arts with Concentration in Screenwriting

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
FMA 1141	Film, Video and Interactive Foundations I	4
FMA 1171	Media & Culture	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		15
Spring		
FMA 1142	Film, Video and Interactive Foundations II	4
FMA 1172	Introduction to Film and Video Analysis	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Elective		3
Credit Hours		16
Year 2		
Fall		
FMA 2241	Filmmaking	4
Select one of the following:		3-4
FMA 1451	Survey of New Media	
FMA 2675	Film History I (1895-1950)	
FMA 2676	Film History II (1950-Present)	
FMA 2678	History of Experimental Film and Video Art	
FMA 2551	Editing Film and Video	4
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		14-15
Spring		
FMA 2396	Screenwriting I	4
Select one of the following:		3
ENG 2004	Creative Writing: Fiction	
THTR 3801	Playwriting	
FMA 2771	Producing	4
GenEd Breadth Course		3
Elective		3
Credit Hours		17
Year 3		
Fall		
FMA 3773	Contemporary Screen Studies	4
Select one of the following:		3-4
FMA 4341	Screen Directing	
FMA 3361	Screen Performance	
FMA 3341	Scene Analysis for Writers and Directors	
FMA 3342	Serial Writing	4
GenEd Breadth Course		3
Credit Hours		14-15
Spring		
FMA 3000+ Advanced Writing Intensive Elective ^{WI}		4

Select one of the following:		3-4
FMA 4341	Screen Directing	
FMA 3361	Screen Performance	
FMA 3341	Scene Analysis for Writers and Directors	
FMA 3343	Screenwriting II	4
GenEd Breadth Course		3
Credit Hours		14-15
Year 4		
Fall		
FMA 4342	BFA Screenwriting Projects I	4
FMA 3000+ Studies Elective		3-4
GenEd Breadth Course		3
Electives		6
Credit Hours		16-17
Spring		
FMA 4343	BFA Screenwriting Projects II	4
GenEd Breadth Course		3
GenEd Breadth Course		3
Electives		6
Credit Hours		16
Total Credit Hours		122-126

Film Certificate

Overview

The **Certificate in Film**, offered by the Department of Film and Media Arts, introduces students to both the study and production of film. It is open to all Temple University undergraduates. The certificate requires four courses:

- FMA 1141 Film, Video and Interactive Foundations I, which is an introductory production course that emphasizes individual students' rigorous exploration of creative, personal visions, along with mainstream applications;
- FMA 1142 Film, Video and Interactive Foundations II, which is a second-level production course that adds an increased emphasis on aesthetics, genres, writing, and project design;
- FMA 1171 Media & Culture, which concentrates on the cultural production, distribution, and reception of film and media arts; and,
- FMA 1172 Introduction to Film and Video Analysis, which introduces students to the conceptual and theoretical tools to analyze film, television and video.

All four courses count toward the Film and Media Arts major if students decide they want to continue on.

Students who complete the certificate will achieve the following learning outcomes:

- Experience translating creative, personal vision into audio and video projects;
- Consideration of personal work in the context of larger aesthetic theories;
- Initial experience in writing for film as well as working from a script;
- An overview of the role of film, video and media arts in the larger American culture; and,
- Experience analyzing film, television and video from a number of critical perspectives.

Assessment is based on creative audio, video and media arts projects; written scripts; written papers and examinations.

Campus Location: Main

Program Code: CA-FILM-CERT

Contact Information

TFMA Academic Advising
Mitten Hall, Suite 200 West
cpcaadvising@temple.edu

Learn more about the undergraduate certificate in Film.

Requirements

Code	Title	Credit Hours
FMA 1141	Film, Video and Interactive Foundations I	4
FMA 1142	Film, Video and Interactive Foundations II ¹	4
FMA 1171	Media & Culture	3
FMA 1172	Introduction to Film and Video Analysis	3
Total Credit Hours		14

1

Students must first receive at least a C in FMA 1141 before enrolling in FMA 1142.

Media Arts Certificate

Overview

The **Certificate in Media Arts**, offered by the Department of Film and Media Arts, introduces students to both the study and production of media arts. It is open to all Temple University undergraduates. The certificate requires four courses:

- FMA 1141 Film, Video and Interactive Foundations I, which is an introductory production course that emphasizes individual students' rigorous exploration of creative, personal visions, along with mainstream applications;
- FMA 1142 Film, Video and Interactive Foundations II, which is a second-level production course that adds an increased emphasis on aesthetics, genres, writing and project design;
- FMA 1171 Media & Culture, which concentrates on the cultural production, distribution, and reception of film and media arts; and,
- FMA 1451 Survey of New Media, which introduces students to the history, theory and aesthetics of digital and networked media arts.

All four courses count toward the Film and Media Arts major if students decide they want to continue on.

Students who complete the certificate will achieve the following learning outcomes:

- Experience translating creative, personal vision into audio, video and media arts projects;
- Consideration of personal work in the context of larger aesthetic theories;
- Initial experience in writing for film as well as working from a script;
- An overview of the role of film, video and media arts in the larger American culture; and,
- Critical perspectives on how new technologies have shaped our world, as well as aesthetic and interactional strategies for alternative ways of seeing, understanding and reconfiguring our world via digital media.

Assessment is based on creative audio, video and media arts projects; written scripts; written papers, blogs, and examinations.

Campus Location: Main

Program Code: CA-MDAR-CERT

Contact Information

TFMA Academic Advising
Mitten Hall, Suite 200 West
cpcaadvising@temple.edu

Learn more about the undergraduate certificate in Media Arts.

Requirements

Code	Title	Credit Hours
FMA 1141	Film, Video and Interactive Foundations I	4
FMA 1142	Film, Video and Interactive Foundations II ¹	4
FMA 1171	Media & Culture	3

FMA 1451

Survey of New Media

3

Total Credit Hours**14**

1

Students must first received at least a C in FMA 1141 before enrolling in FMA 1142.

Musical Theater BFA

Overview

Temple Theaters has established itself as one of the finest theater training programs in the nation. The faculty are accomplished professionals and scholars who generously offer their expertise and great passion for the craft and creation of theater. As a theater department in the culturally rich city of Philadelphia, Temple University's Department of Theater is immersed in and among some of the most important regional and national theaters in the country.

The **Bachelor of Fine Arts in Musical Theater** is focused on building well-rounded, versatile "triple-threat" artists who have developed the prerequisite skills and tools necessary for a life as a theater professional. The training provided in the degree ensures technical aptitude and an immersion into the genre, history and artistry of musical theater, while foundational theater courses guarantee a broad knowledge of theater. Furthermore, Temple's excellent general education requirements safeguard that BFA students receive a well-rounded, comprehensive experience to accompany their training in musical theater.

The Theater department boasts a half century of excellence in theater training, and BFA candidates also benefit from interdisciplinary training in the Boyer College of Music and Dance, as both are housed in the Center for the Performing and Cinematic Arts. Other course requirements include Acting I–III, Senior Cabaret Workshop, Fitzmaurice Voice Technique, Musical Theater: Dress Rehearsal, Ballet, Jazz, Tap, Musical Theater Dance Techniques, Music Theory, Ear Training, Choral Ensemble and Theater as a Profession.

Students have the chance to participate in productions including musicals, student-directed productions, dramas, showcases, singing ensembles, dance performances and workshops conducted by visiting artists. Recent on-campus productions include *Sunday in the Park with George*, *Side Show*, *Guys and Dolls*, *Merrily We Roll Along*, *Brigadoon*, *Hair*, *Oklahoma!*, *Spring Awakening*, *A Chorus Line*, *Rent*, *Urinetown*, and *Sweeney Todd*. Guest artists have included: Telly Leung, Shoshana Bean, Adam Gwon, Chad Beguelin, Barbara Cook, David Garrison, Jonathan Groff, Marc Kudisch, Baayork Lee, John McDaniel, Marcia Milgrom-Dodge, Melba Moore, Hugh Panaro (a Temple alum), Pasek and Paul, and Lauren Worsham.

The successful theater student graduates from our program with excellent communication and collaboration skills, a broad-based and substantive liberal arts background, developed abilities within the discipline of theater, a peerless commitment to achieving and appreciating artistic excellence, and a passion for life-long learning that will enable success in a wide variety of future endeavors. Our alumni are not only successful artists in theater and all of the entertainment industries, but they are also leaders in many other fields. We strive to graduate well-educated and enlightened "Citizen Artists" who possess the creative capacity and commitment to make a difference in the quality of community life regardless of their chosen field of endeavor.

Campus Location: Main

Program Code: CA-MUST-BFA

Accreditation

The Department of Theater is accredited by the National Association of Schools of Theatre (NAST) and is a member of the University Resident Theater Association (U/RTA). These affiliations characterize it as amongst an elite group of highly-recognized Theater Programs. The Theater department was recently ranked by *U.S. News & World Report* among the top 25 theater programs in the nation.

Contact Information

Department Office
Tomlinson Theater, Room 209
215-204-8414

Fred Duer, MFA, Chair
Tomlinson Theater, Room 210A
215-204-2804
fmduer@temple.edu

Peter Reynolds, MFA, Assistant Chair
Tomlinson Theater, Room 210B
215-204-8628
peterr@temple.edu

Learn more about the Bachelor of Fine Arts in Musical Theater.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements for the Degree

The Bachelor of Fine Arts degree in Musical Theater may be conferred upon a student by recommendation of the faculty and by satisfactory completion of a minimum of 124 credit hours.

- University Requirements: All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.
- There will be no requirement to take the GenEd Arts course if all of the following courses are completed with a C- or better: THTR 1096 , THTR 1202 and THTR 1231. If the student changes majors before completing all three courses, s/he must complete a GenEd Arts course to satisfy the requirement for General Education.
- All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed below and identified with the code "WI".
- Students must complete Theater Department foundation courses with a grade of C or better in each course.
- No more than 20 credits of work in the major field may be transferred from another institution. Students must complete at least 16 semester hours in Theater courses at Temple University.
- All Theater majors must take placement tests in English and mathematics. If a student places into ENG 0701 or MATH 0701 or MATH 0702, these courses must be completed prior to taking the General Education requirement for English and Quantitative Literacy.

Major Requirements

Code	Title	Credit Hours
Theater Requirements		
THTR 1087	Production Practicum (eight times)	8
THTR 1096	Introduction to Theater Process (WI)	3
THTR 1202	Fundamentals of Voice and Movement	3
THTR 1141	Voice I for Musical Theater	1
THTR 1142	Voice II for Musical Theater	1
THTR 1231	Acting I	3
THTR 1411	Welcome Backstage	3
THTR 2101	Ballet I for Musical Theater	1
THTR 2121	Ballet II for Musical Theater	1
THTR 2141	Voice III for Musical Theater	1
THTR 2231	Speech for the Actor	3
THTR 2261	Acting II	3
THTR 3001	History of the Theater I	3
THTR 3012	American Musical Theater	3
THTR 3101	Jazz I for Musical Theater	1
THTR 3121	Jazz II for Musical Theater	1
THTR 3131	Advanced Jazz for Musical Theater (twice)	2
THTR 3132	Musical Theater Voice & Acting	3
THTR 3151	Ballet III for Musical Theater	1
THTR 3279	Acting III	3
THTR 4097	World of the Play (WI)	3
THTR 4101	Tap for Musical Theater	1
THTR 4121	Musical Theater Dance Techniques	1
THTR 4132	Senior Cabaret Workshop	3
THTR 4221	Theater as a Profession	3 to 4
Music Requirements		
MUSC 1201	Voice Concentration	2
MUSC 1202	Voice Concentration	2
MUSC 1407	Piano for Non-Music Majors I	1
MUSC 2201	Voice Concentration	2
MUSC 2202	Voice Concentration	2

MUSC 3201	Voice Concentration	2
MUSC 3202	Voice Concentration	2
MUSC 3231	Musical Theater Scene Study	2
MUSC 3232	Musical Theater Voice & Acting	2
MUSC 3300	Choral Ensemble (three times)	3
MUSC 4201	Voice Concentration	2
MUSC 4202	Voice Concentration	2
MUSC 4233	Musical Theater: Dress Rehearsal	2
MUST 1701	Music Theory for Non-Music Majors	2
MUST 1705	Music Theory for Non-Music Majors II	3
MUST 1741	Aural Theory I	2

Suggested Academic Plan

Bachelor of Fine Arts in Musical Theater

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
THTR 1087	Production Practicum	1
THTR 2101	Ballet I for Musical Theater	1
MUST 1701	Music Theory for Non-Music Majors	2
THTR 1202	Fundamentals of Voice and Movement	3
THTR 1231	Acting I	3
MUSC 1201	Voice Concentration	2
MUSC 3300	Choral Ensemble	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		17
Spring		
THTR 1087	Production Practicum	1
THTR 1141	Voice I for Musical Theater	1
THTR 2121	Ballet II for Musical Theater	1
THTR 1096	Introduction to Theater Process	3
MUSC 1202	Voice Concentration	2
THTR 2231	Speech for the Actor	3
THTR 1411	Welcome Backstage	3
MUSC 3300	Choral Ensemble	1
GenEd Breadth Course		3
Credit Hours		18
Year 2		
Fall		
THTR 1087	Production Practicum	1
MUST 1741	Aural Theory I	2
THTR 2261	Acting II	3
THTR 3101	Jazz I for Musical Theater	1
MUSC 2201	Voice Concentration	2
MUSC 3300	Choral Ensemble	1
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		17

Spring		
THTR 1087	Production Practicum	1
MUSC 3231	Musical Theater Scene Study	2
MUST 1705	Music Theory for Non-Music Majors II	3
THTR 3121	Jazz II for Musical Theater	1
MUSC 2202	Voice Concentration	2
THTR 3151	Ballet III for Musical Theater	1
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Credit Hours		16
Year 3		
Fall		
THTR 1087	Production Practicum	1
THTR 1142	Voice II for Musical Theater	1
MUSC 1407	Piano for Non-Music Majors I	1
THTR 3001	History of the Theater I	3
THTR 3279	Acting III	3
MUSC 3232	Musical Theater Voice & Acting	2
MUSC 3201	Voice Concentration	2
THTR 3131	Advanced Jazz for Musical Theater	1
GenEd Breadth Course		3
Credit Hours		17
Spring		
THTR 1087	Production Practicum	1
THTR 2141	Voice III for Musical Theater	1
THTR 3012	American Musical Theater	3
MUSC 3202	Voice Concentration	2
THTR 4101	Tap for Musical Theater	1
THTR 3132	Musical Theater Voice & Acting	3
GenEd Breadth Course		3
Credit Hours		14
Year 4		
Fall		
THTR 1087	Production Practicum	1
MUSC 4233	Musical Theater: Dress Rehearsal	2
MUSC 4201	Voice Concentration	2
THTR 3131	Advanced Jazz for Musical Theater	1
THTR 4097	World of the Play	3
THTR 4221	Theater as a Profession	3
GenEd Breadth Course		3
Credit Hours		15
Spring		
THTR 1087	Production Practicum	1
THTR 4121	Musical Theater Dance Techniques	1
MUSC 4202	Voice Concentration	2
THTR 4132	Senior Cabaret Workshop	3
GenEd Breadth Course		3
Credit Hours		10
Total Credit Hours		124

Screen Studies Certificate

Overview

The **Certificate in Screen Studies**, offered by the Department of Film and Media Arts, introduces students to the study and the history of film, experimental film, video art and/or media arts. The certificate requires four courses:

- FMA 1141 Film, Video and Interactive Foundations I, which is an introductory production course that emphasizes individual students' rigorous exploration of creative, personal visions, along with mainstream applications;
- FMA 1171 Media & Culture, which concentrates on the cultural production, distribution, and reception of film and media arts;
- FMA 1172 Introduction to Film and Video Analysis, which introduces students to the conceptual and theoretical tools to analyze film, television, and video; and,
- A Film or Media Arts History course selected from a specific list.

Students who complete the certificate will achieve the following learning outcomes:

- Experience translating creative, personal vision into audio and video projects;
- Consideration of personal work in the context of larger aesthetic theories;
- An overview of the role of film, video and media arts in the larger American culture;
- Experience analyzing film, television and video from a number of critical perspectives; and,
- An historical awareness of the development of Film and Video, of New Media, or of Experimental Film and Video Art.

Assessment is based on creative audio, video and media arts projects; blogs; critical papers and/or examinations.

Campus Location: Main

Program Code: CA-SCRS-CERT

Contact Information

Chris Cagle, Associate Professor
215-204-3859
ccagle@temple.edu

Learn more about the undergraduate certificate in Screen Studies.

Requirements

Code	Title	Credit Hours
FMA 1141	Film, Video and Interactive Foundations I	4
FMA 1171	Media & Culture	3
FMA 1172	Introduction to Film and Video Analysis	3
Select one of the following Film or Media Arts History courses: ¹		3-4
FMA 1451	Survey of New Media	
FMA 2675	Film History I (1895-1950)	
FMA 2676	Film History II (1950-Present)	
FMA 2678	History of Experimental Film and Video Art	
Total Credit Hours		13-14

1

Students must first receive at least a C in FMA 1171 and FMA 1172 before enrolling in this course.

Screen Studies Minor

Overview

The **Minor in Screen Studies**, offered by the Department of Film and Media Arts, provides students the opportunity to sample the aesthetics, history and cultural significance of moving-image media. It draws upon the fields of cinema studies and humanities-based disciplines of media studies and media arts theory, while also encouraging students to approach screen cultures from neighboring disciplines, such as cultural studies, area studies, art history or visual studies.

The Minor in Screen Studies requires a minimum of 19 credits and is open to all undergraduate students across the university.

Campus Location: Main

Contact Information

Chris Cagle, Associate Professor
215-204-3859
ccagle@temple.edu

Requirements

Code	Title	Credit Hours
FMA 1172	Introduction to Film and Video Analysis	3
Select one of the following:		3-4
FMA 1144	Media Arts for Non-Production Majors	
FMA 1171	Media & Culture	
Select one history survey:		3-4
FMA 1451	Survey of New Media	
FMA 2675	Film History I (1895-1950)	
FMA 2676	Film History II (1950-Present)	
FMA 2678	History of Experimental Film and Video Art	
FMA 4698	Writing-Intensive Study in Documentary Film	
Select one theory course:		4
FMA 3671	Theory and Practice of Media Culture	
FMA 3871	Film Theory	
Select one course on film/media and culture:		3-4
FMA 3670	Topics in Media Culture	
FMA 3677	American Film	
FMA 3770	Topics in Film Study	
FMA 3773	Contemporary Screen Studies	
FMA 4673	International Cinema	
FMA 4674	Anthropological Film/Media	
FMA 4675	Women Film/Video Artists	
One 2000+ FMA studies elective		3-4
Total Credit Hours		19-23

Stage Management Certificate

Overview

The **Certificate in Stage Management**, offered by the Department of Theater, allows undergraduates from other disciplines to pursue their interest in the backstage organization of live theater; adds to student's self-confidence, leadership, and presentation skills; and allows the student to participate in Department of Theater productions for academic credit.

While students may not be outright Theater majors, they may have a desire to be involved with productions. Skills acquired from the Certificate in Stage Management include confidence in public speaking and presentation, creativity, collaboration, professionalism and many more, enhanced through the study within the Department of Theater coursework.

Theater offers the undergraduate Certificate in Stage Management on the Main Campus only. The certificate consists of a four-course, 12-credit sequence.

Students must be concurrently enrolled in a baccalaureate degree and the certificate to earn the certificate.

Campus Location: Main

Program Code: CA-STMA-CERT

Contact Information

Students interested in declaring this certificate in the Department of Theater can do so by contacting a TFMA advisor for next steps.

To seek assistance in monitoring their progress with the certificate declared, students are asked to meet with Matthew Miller (mbmiller@temple.edu, 215-204-4263). Meetings should take place regularly from the time of declaration to applying for graduation within their home school/college.

Learn more about the undergraduate certificate in Stage Management.

Requirements

A grade of C or higher is must be earned in THTR 1411 in order to register for THTR 2441. A grade of C- or higher must be earned in all other required courses.

Code	Title	Credit Hours
THTR 1411	Welcome Backstage	3
THTR 2441	Stage Management I	3
THTR 3442	Theater Management I	3
THTR 3080	Special Topics (in stage management)	3
Total Credit Hours		12

Technical Production and Management BFA

Overview

Temple Theaters has established itself as one of the finest theater training programs in the nation. The faculty are accomplished professionals and scholars who generously offer their expertise and great passion for the craft and creation of theater. As a theater department in the culturally rich city of Philadelphia, Temple University's Department of Theater is immersed in and among some of the most important regional and national theaters in the country.

The **Bachelor of Fine Arts in Technical Production and Management** is designed to prepare students for professional work in the theater industry or top tier graduate program as Technical Directors, Production Managers or Stage Managers. Stage Managers will be work-ready at the end of the four-year program, while Technical Directors and Production Managers may or may not opt to explore graduate programs to further develop their skills. Students take a variety of courses to prepare them for the professional world, including courses in Design, Stagecraft, Technical Direction, Structural Design for the Stage, Sound, Lighting and Projection Technology, The Job Market, Theater Management, Theater Safety and Management, and Music Theory; all which lead to a capstone project, where students take on a leadership position on one of the musicals, plays or operas that Temple Theaters produces each year. The program has a strong emphasis on experiential learning, and between Temple Theaters productions and internships with theaters in the Philadelphia region, students learn critical skills from a wide variety of professionals and mentors.

The successful theater student graduates from our program with excellent communication and collaboration skills, a broad-based and substantive liberal arts background, developed abilities within the discipline of theater, a peerless commitment to achieving and appreciating artistic excellence, and a passion for life-long learning that will enable success in a wide variety of future endeavors. Our alumni are not only successful artists in theater and all of the entertainment industries, but they are also leaders in many other fields. We strive to graduate well-educated and enlightened "Citizen Artists" who possess the creative capacity and commitment to make a difference in the quality of community life regardless of their chosen field of endeavor.

Campus Location: Main

Program Code: CA-TPAM-BFA

Accreditation

The Department of Theater is accredited by the National Association of Schools of Theatre (NAST) and is a member of the University Resident Theater Association (U/RTA). These affiliations characterize it as amongst an elite group of highly-recognized Theater Programs. The Theater department was recently ranked by *U.S. News & World Report* among the top 25 theater programs in the nation.

Contact Information

Department Office
Tomlinson Theater, Room 209
215-204-8414

Fred Duer, MFA, Chair
Tomlinson Theater, Room 210A
215-204-2804

fmduer@temple.edu

Peter Reynolds, MFA, Assistant Chair
 Tomlinson Theater, Room 210B
 215-204-8628
 peterr@temple.edu

Learn more about the Bachelor of Fine Arts in Technical Production and Management.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements for the Degree

The Bachelor of Fine Arts degree in Technical Production and Management may be conferred upon a student by recommendation of the faculty and by satisfactory completion of a minimum of 123 credit hours.

- University Requirements: All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.
- There will be no requirement to take the GenEd Arts course if all of the following courses are completed with a C- or better: THTR 1003, THTR 1096, and THTR 1231. If the student changes majors before completing all three courses, s/he must complete a GenEd Arts course to satisfy the requirement for General Education.
- All students must take a minimum of two writing-intensive courses.
- Students must complete Theater Department foundation courses with a grade of C or better in each course.
- No more than 20 credits of work in the major field may be transferred from another institution. Students must complete at least 16 semester hours in Theater courses at Temple University.
- All Theater majors must take placement tests in English and mathematics. If a student places into ENG 0701 or MATH 0701 or MATH 0702, these courses must be completed prior to taking the General Education requirement for English and Quantitative Literacy.

Code	Title	Credit Hours
Theater Requirements		
THTR 1003	Creativity: Basic	3
THTR 1087	Production Practicum (8 times)	8
THTR 1096	Introduction to Theater Process (WI)	3
THTR 1231	Acting I	3
THTR 1511	Stagecraft	3
THTR 2085	Theater Internship	3
THTR 2411	Introduction to Design	3
THTR 2441	Stage Management I	3
THTR 2442	Propcraft	3
THTR 2501	Theater Safety and Management	3
THTR 2711	Drawing and Rendering for the Theater I	3
THTR 2712	Drawing and Rendering for the Theater II	3
THTR 2713	Design Drafting	3
THTR 3001	History of the Theater I	3
THTR 3002	History of the Theater II	3
THTR 3031	Lighting, Sound and Video Technology	3
THTR 3082	General Study	2
THTR 3261	The Job Market	3
THTR 3421	Technical Direction for the Theater	3
THTR 3422	Structural Design for the Stage	3
THTR 3442	Theater Management I	3
THTR 4097	World of the Play (WI)	3
THTR 4401	Theater Management Capstone	3
Select one of the following:		3
THTR 3431	Scene Painting I	
THTR 3301	Introduction to the Director's Art	
Select two of the following:		6

THTR 2512	Lighting Design I	
THTR 2612	Costume Design I	
THTR 2721	Scene Design I	
THTR 2421	Creative Sound Technique	
THTR 4511	Lighting Design II	
THTR 4611	Costume Design II	
THTR 4721	Scene Design II	
Approved Elective outside Department of Theater ¹		3
Total Credit Hours		85

1

Approved elective outside of theater, but related. For example, photography, textiles, business, etc. See Advisor.

Suggested Academic Plan

Bachelor of Fine Arts in Technical Production and Management

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
THTR 1511	Stagecraft	3
THTR 1096	Introduction to Theater Process	3
THTR 1003	Creativity: Basic	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
THTR 1087	Production Practicum	1
Credit Hours		14
Spring		
THTR 2411	Introduction to Design	3
THTR 2441	Stage Management I	3
THTR 2713	Design Drafting	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Quantitative Literacy (GQ)		4
THTR 1087	Production Practicum	1
Credit Hours		17
Year 2		
Fall		
THTR 3421	Technical Direction for the Theater	3
THTR 3442	Theater Management I	3
THTR 2711	Drawing and Rendering for the Theater I	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Select one of the following:		3
THTR 2512	Lighting Design I	
THTR 2612	Costume Design I	
THTR 2721	Scene Design I	
THTR 2421	Creative Sound Technique	
THTR 1087	Production Practicum	1
Credit Hours		16
Spring		
THTR 2501	Theater Safety and Management	3
THTR 2712	Drawing and Rendering for the Theater II	3

THTR 3422	Structural Design for the Stage	3
GenEd Breadth Course		3
GenEd Breadth Course		3
THTR 1087	Production Practicum	1
Credit Hours		16
Year 3		
Fall		
THTR 3031	Lighting, Sound and Video Technology	3
Select one of the following:		3
THTR 3431	Scene Painting I	
THTR 3301	Introduction to the Director's Art	
GenEd Breadth Course		3
GenEd Breadth Course		3
THTR 3002	History of the Theater II	3
THTR 1087	Production Practicum	1
Credit Hours		16
Spring		
THTR 1231	Acting I	3
THTR 2085	Theater Internship	3
THTR 3001	History of the Theater I	3
Free Elective		3
GenEd Breadth Course		3
THTR 1087	Production Practicum	1
Credit Hours		16
Year 4		
Fall		
THTR 2442	Propcraft	3
THTR 4401	Theater Management Capstone	3
THTR 3082	General Study	2
THTR 3261	The Job Market	3
Free Elective		3
THTR 1087	Production Practicum	1
Credit Hours		15
Spring		
THTR 4097	World of the Play	3
GenEd Breadth Course		3
Select one of the following (not previously taken):		3
THTR 2512	Lighting Design I	
THTR 2612	Costume Design I	
THTR 2721	Scene Design I	
THTR 2421	Creative Sound Technique	
THTR 4511	Lighting Design II	
THTR 4611	Costume Design II	
THTR 4721	Scene Design II	
Approved Elective outside Department of Theater ¹		3
THTR 1087	Production Practicum	1
Credit Hours		13
Total Credit Hours		123

1

Approved elective outside of theater, but related. For example, photography, textiles, business, etc. See Advisor.

Theater and Community Engagement Certificate

Overview

The **Certificate in Theater and Community Engagement**, offered by the Department of Theater, allows undergraduates from other disciplines to pursue their interest in theater and how it relates to the world at large. The required course for the certificate, *Community Engaged Theater*, gives students the opportunity to explore how theater companies and individual artists from the United States and abroad have used performance to address local to global social issues. Students can then choose among a menu of courses that address more specific issues of identity, representation and oppression including gender, race and sexuality. This certificate allows students to utilize art and creativity to address issues that impact their lives and the lives of those in their communities. This certificate develops skills in creativity and community organization; enhances students' experience at Temple University; prepares them for graduate-level work and increases their awareness of social issues that are relevant in the workplace, in the classroom and in our daily lives.

Theater offers this undergraduate Certificate in Theater and Community Engagement on the Main Campus only. The certificate consists of a four-course, 12-credit sequence.

Students must be concurrently enrolled in a baccalaureate degree and the certificate to earn the certificate.

Campus Location: Main

Program Code: CA-TCEN-CERT

Contact Information

Students interested in declaring this certificate in the Department of Theater can do so by contacting a TFMA advisor for next steps.

To seek assistance in monitoring their progress with the certificate declared, students are asked to meet with Kimmika Williams-Witherspoon (kwilli01@temple.edu, 215-204-8417). Meetings should take place regularly from the time of declaration to applying for graduation within their home school/college.

Learn more about the undergraduate certificate in Theater and Community Engagement.

Requirements

A grade of C- or higher must be earned in all required courses.

Code	Title	Credit Hours
THTR 3058	Community Engaged Theater	3
Select 3 from the following:		9
THTR 1008	Poetry as Performance	
THTR 2008	Poetic Ethnography	
THTR 3052	Theater of Protest	
THTR 3053	Women in Theater	
THTR 3054	African-American Theater	
THTR 3055	Performance Art	
THTR 3057	Queer Theater	
Total Credit Hours		12

Theater BA

Overview

Temple Theaters has established itself as one of the finest theater training programs in the nation. The faculty are accomplished professionals and scholars who generously offer their expertise and great passion for the craft and creation of theater. As a theater department in the culturally rich city of Philadelphia, Temple University's Department of Theater is immersed in and among some of the most important regional and national theaters in the country.

The production program is at the center of the pedagogy, serving as a creative laboratory for experiential learning across disciplines. Temple Theaters offers a full season of productions each year, bringing exciting, contemporary theater to a diverse audience. Temple Theaters has been noted for premiering many new works for Philadelphians as well as producing vital stagings of classic works. Past productions have included big musicals -

Sunday in the Park with George, Ragtime, Spring Awakening; classic dramas - *Romeo and Juliet, Our Town, Enemy of the People*; new American plays - *The Brother/Sister Plays, Reggie Hoops, Blood at the Root*; and original devised works - *In Conflict* and *Odd Girl Out*.

Students in the **Bachelor of Arts in Theater** are advised to select courses that will best prepare them to succeed in the future. Toward this end, **students may select** courses according to their particular interests through the **Theater Studies Sequence** or **choose from one of the following three optional concentrations**:

- Acting;
- Design and Production; or,
- Directing.

The successful theater student graduates from our program with excellent communication and collaboration skills, a broad-based and substantive liberal arts background, developed abilities within the discipline of theater, a peerless commitment to achieving and appreciating artistic excellence, and a passion for life-long learning that will enable success in a wide variety of future endeavors. Our alumni are not only successful artists in theater and all of the entertainment industries, but they are also leaders in many other fields. We strive to graduate well-educated and enlightened "Citizen Artists" who possess the creative capacity and commitment to make a difference in the quality of community life regardless of their chosen field of endeavor.

Special Admissions Information

An audition is required for acceptance into the Acting Concentration (see audition information). Acceptance into the Design and Production Concentration and the Directing Concentration requires an interview with the Head of the Area.

Theater Studies Sequence

The Theater Studies Sequence prepares students to enter graduate programs or pursue careers in theater, other entertainment industries, or other fields. It is within this sequence that entrepreneurial students, the student who wishes to explore future interdisciplinary linkages, or those most interested in playwriting, might best fit. The student who follows the Theater Studies Sequence may select any courses offered by the department as long as required prerequisites are completed with applicable proficiencies as indicated in some courses by a grade of C or better.

Theater Studies Sequence students must complete the Theater Foundation Courses. However, they are encouraged to meet with a Theater Department faculty member to discuss their goals and what selection of courses might best prepare them to achieve their professional aspirations after graduation.

Acting Concentration

The Acting Concentration prepares students to enter graduate acting programs or pursue professional careers in theater, television and film. The coursework provides the highest caliber of training possible within the context of a liberal arts education, so students can thrive either in a graduate conservatory program or in the profession. Through intensive and varied classes in acting, combined with experiential work in minimalist to full-scale productions, students develop the skills needed for creative communication and artistic leadership—tools they will need to pursue their professional goals.

Notes:

1. In order for the student to progress to the next level of study, prerequisites for admission to some classes are required.
2. A student is not officially a part of the Acting Concentration until successfully auditioning before the Acting Faculty. These auditions are held every semester and are announced in advance by the Head of Undergraduate Acting.
3. Some Voice, Movement, Speech, and Acting classes may be repeated for credit.
4. Performance courses are available to those students electing the Acting Concentration and to other students in the department who meet the prerequisite requirements.
5. Certification officials from the Society of Fight Directors are invited to the final projects of *Swordplay for the Actor* classes, and some students receive certification in various combat specialties.

Design and Production Concentration

The Design and Production Concentration prepares students to enter graduate Design or Production programs or to pursue professional careers in theater, television and film. The coursework provides the highest caliber of training possibilities within the context of a liberal arts education, so students can thrive either in a graduate conservatory program or in the profession. Through intensive and varied classes in design and production, combined with experiential hands-on work with creative teams for full-scale and minimalist productions, students develop the skills needed for creative communication and artistic leadership—tools they will need to pursue their professional goals.

Note: In order for the student to progress to the next level of study, prerequisites for admission to some classes are required.

Directing Concentration

The Directing Concentration prepares students to enter graduate directing programs or pursue professional careers in theater, television and film. The coursework provides the highest caliber of training possible within the context of a liberal arts education, so students can thrive either in a graduate

conservatory program or in the profession. Through intensive and varied classes combined with experiential work in minimalist to full-scale productions, students develop the skills needed for creative communication and artistic leadership—tools they will need to pursue their professional goals.

Note: Admission to the Directing concentration is highly selective. To be admitted to the concentration, a student must:

- Have completed the following coursework: THTR 1003 Creativity: Basic, THTR 1096 Introduction to Theater Process, THTR 1231 Acting I, THTR 1411 Welcome Backstage, and THTR 2411 Introduction to Design.
- Have a cumulative GPA of 3.5 or higher. To continue in the concentration, student must maintain this GPA to graduation.
- Meet with the Head of Directing to review the application process.
- Prepare a personal portfolio and a list of plays. Notify the Head of Directing that portfolio is ready, and send the list.
- Complete the portfolio review and interview.

Campus Location: Main

Program Code: CA-THTR-BA

Accreditation

The Theater Department is accredited by the National Association of Schools of Theatre (NAST) and is a member of the University Resident Theater Association (U/RTA). These affiliations characterize it as amongst an elite group of highly-recognized Theater Programs. The Theater Department was recently ranked by *U.S. News & World Report* among the top 25 theater programs in the nation.

Accelerated Program

The +1 accelerated program allows students to earn a BA in Theater and an MEd in Secondary Education with a Concentration in English Education by taking graduate-level courses in their junior and senior year, thus leaving only 19 credits of graduate work in the final year after earning the BA degree. Learn more about the accelerated program.

Contact Information

Department Office
Tomlinson Theater, Room 209
215-204-8414

Fred Duer, MFA, Chair
Tomlinson Theater, Room 210A
215-204-2804
fmduer@temple.edu

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Tomlinson Theater, Room 210B
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peterr@temple.edu

Learn more about the Bachelor of Arts in Theater.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Requirements

Summary of Requirements for the Degree

The Bachelor of Arts degree in Theater may be conferred upon a student by recommendation of the faculty and by satisfactory completion of a minimum of 124 credit hours. Students must complete:

- University requirements: All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.
- There will be no requirement to take the GenEd Arts course if all of the following courses are completed with a C- or better: THTR 1003, THTR 1096 and THTR 1231. If the student changes majors before completing all three courses, s/he must complete a GenEd Arts course to satisfy the requirement for General Education.
- All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed below and identified with the code "WI".
- Students must complete Theater Department foundation courses with a grade of C or better in each course.
- No more than 20 credits of work in the major field may be transferred from another institution. Students must complete at least 16 semester hours in Theater courses at Temple University.

- All Theater majors must take placement tests in English and mathematics. If a student places into ENG 0701 or MATH 0701 or MATH 0702, these courses must be completed prior to taking the General Education requirement for English and Quantitative Literacy.

Theater Foundation Courses

Code	Title	Credit Hours
THTR 1003	Creativity: Basic	3
THTR 1096	Introduction to Theater Process (WI)	3
THTR 1231	Acting I	3
THTR 1411	Welcome Backstage	3
THTR 2411	Introduction to Design	3
THTR 3001	History of the Theater I	3
THTR 3002	History of the Theater II	3
THTR 4097	World of the Play (WI)	3
THTR 1087	Production Practicum (1 s.h. each semester the student is enrolled as a major)	1-8
Art History Elective		3
Required Elective (in non-dramatic literature)		3
Required Elective Concentration ^{1,2}		9
Total Credit Hours		40-47

1

The 9 semester hours of the required elective concentration may be in any one department, preferably in the Arts or an interdisciplinary study approved by the Theater Department advisor or chair.

2

The concentration may include the required course in art history or the required course in non-dramatic literature. It may not include ENG 0802, ENG 0812, or ENG 0902.

Acting Concentration

Required Courses in addition to the Foundation Courses

Code	Title	Credit Hours
Required Courses		
THTR 2221	Voice for the Actor	3
THTR 2231	Speech for the Actor	3
THTR 2241	Basic Movement	3
THTR 2261	Acting II	3
THTR 3279	Acting III	3
THTR 4212	Acting IV	3
THTR 4222	Acting V	3
Acting Concentration Electives		
Select four of the following:		12
THTR 1008	Poetry as Performance	
THTR 1202	Fundamentals of Voice and Movement	
THTR 1232	Jacques Lecoq Technique Part 1	
THTR 2001	Introduction to Hip Hop Theater	
THTR 2008	Poetic Ethnography	
THTR 2201	Acting Styles	
THTR 2232	Jacques Lecoq Technique Part 2	
THTR 2233	Advanced Speech for the Actor	
THTR 2251	Dance for the Actor	
THTR 2252	Alexander Technique	
THTR 2262	Improvisation	
THTR 2271	Dialects for the Actor	

THTR 2611	Make-Up
THTR 3055	Performance Art
THTR 3132	Musical Theater Voice & Acting
THTR 3210	Theater Workshop
THTR 3220	Theater Workshop
THTR 3221	Advanced Voice for the Actor
THTR 3230	Theater Workshop
THTR 3231	Acting for Commercials, Industrials and Voice-Overs
THTR 3241	Combat & Stunts for the Actor
THTR 3262	Improvisation 2
THTR 3278	Acting for the Camera
THTR 3301	Introduction to the Director's Art
THTR 3321	Rehearsal & Performance
THTR 4131	Musical Theater Scene Study
THTR 4241	Swordplay for the Actor
THTR 4299	Thesis for Acting Emphasis
THTR 4841	Advanced Swordplay

Total Credit Hours**33**

For students who transfer from other departments, schools and universities, there are several alternative routes to fulfill the Acting Concentration that can be discussed with your Theater advisor and/or the head of the Acting Program.

Design and Production Concentration

Required Courses in addition to the Foundation Courses

Code	Title	Credit Hours
THTR 2431	Lighting and Sound Technology	3
THTR 2711	Drawing and Rendering for the Theater I	3
THTR 2712	Drawing and Rendering for the Theater II	3
THTR 2512	Lighting Design I	3
THTR 2721	Scene Design I	3
THTR 2612	Costume Design I	3
THTR 2713	Design Drafting	3
or THTR 3621	Costume Production	
THTR 2441	Stage Management I	3
Select four of the following:		12
THTR 2085	Theater Internship	
THTR 2421	Creative Sound Technique	
THTR 2442	Propcraft	
THTR 2611	Make-Up	
THTR 2713	Design Drafting	
THTR 3082	General Study	
THTR 3261	The Job Market	
THTR 3421	Technical Direction for the Theater	
THTR 3431	Scene Painting I	
THTR 3442	Theater Management I	
THTR 3613	History of Decor	
THTR 3621	Costume Production	
THTR 3622	Draping and Flat Pattern Drafting	
THTR 3623	Costume Crafts	
THTR 3624	Draping and Flat Pattern Drafting 2	
THTR 3625	History of Fashion	

THTR 3641	Theatrical Model Making
THTR 3741	Design for TV and Film
THTR 4511	Lighting Design II
THTR 4611	Costume Design II
THTR 4721	Scene Design II

Total Credit Hours **36**

Note: The concentration must total a minimum of 35 semester hours beyond the Foundation Courses.

Directing Concentration

Additional Courses Required for the Directing Concentration

Code	Title	Credit Hours
THTR 2512	Lighting Design I	3
THTR 1202	Fundamentals of Voice and Movement	3
or THTR 2241	Basic Movement	
THTR 2261	Acting II	3
or THTR 3132	Musical Theater Voice & Acting	
THTR 3241	Combat & Stunts for the Actor	3
THTR 2441	Stage Management I	3
THTR 3051	Modern Directions	3
THTR 3301	Introduction to the Director's Art	3
THTR 4301	Advanced Directing	4
THTR 3191	Research	2
THTR 2721	Scene Design I	3
or THTR 2612	Costume Design I	
THTR 4003	Production Dramaturgy	3
Total Credit Hours		33

Suggested Academic Plans

Please note that these are **suggested** academic plans. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Theater (General)

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
THTR 1003	Creativity: Basic ¹	3
THTR 1411	Welcome Backstage	3
THTR 1087	Production Practicum	1
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		15
Spring		
THTR 1096	Introduction to Theater Process ¹	3
THTR 1231	Acting I ¹	3
THTR 1087	Production Practicum	1
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
GenEd Breadth Course		3

GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
THTR 2411	Introduction to Design	3
THTR 1087	Production Practicum	1
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Spring		
THTR 1087	Production Practicum	1
Elective		4
GenEd Breadth Course		3
Non-Dramatic Literature Class		3
Exploratory Concentration Class		3
Theater Elective/Elective		3
Credit Hours		17
Year 3		
Fall		
THTR 3001	History of the Theater I	3
THTR 1087	Production Practicum	1
Art History Elective ²		3
Exploratory Concentration Class		3
Theater Electives/Electives		6
Credit Hours		16
Spring		
THTR 3002	History of the Theater II	3
THTR 1087	Production Practicum	1
Exploratory Concentration Class		3
Theater Electives/Electives		9
Credit Hours		16
Year 4		
Fall		
THTR 4097	World of the Play	3
THTR 1087	Production Practicum	1
Theater Electives/Electives		9
Credit Hours		13
Spring		
THTR 1087	Production Practicum	1
Theater Electives/Electives		14
Credit Hours		15
Total Credit Hours		124

1

GenEd Arts (GA) Waiver: Completion of THTR 1003, THTR 1096 and THTR 1231.

2

Students must select an Art History course. For questions or recommendations, students should see their advisor.

Bachelor of Arts in Theater with Concentration in Acting

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
THTR 1231	Acting I ¹	3
THTR 2221	Voice for the Actor	3
THTR 1003	Creativity: Basic ¹	3
THTR 1087	Production Practicum	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
Credit Hours		17
Spring		
THTR 2261	Acting II	3
THTR 2231	Speech for the Actor	3
THTR 1096	Introduction to Theater Process ¹	3
THTR 1087	Production Practicum	1
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		17
Year 2		
Fall		
THTR 2241	Basic Movement	3
Theater Concentration Elective		3
THTR 1411	Welcome Backstage	3
THTR 1087	Production Practicum	1
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Credit Hours		16
Spring		
THTR 3279	Acting III	3
THTR 2411	Introduction to Design	3
THTR 1087	Production Practicum	1
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 3		
Fall		
THTR 4212	Acting IV	3
Theater Concentration Elective		3
THTR 3001	History of the Theater I	3
THTR 1087	Production Practicum	1
GenEd Breadth Course		3
Elective		3
Credit Hours		16
Spring		
Theater Concentration Elective		3
Theater Concentration Elective		3

THTR 3002	History of the Theater II	3
THTR 1087	Production Practicum	1
Non-Dramatic Literature Class		3
Exploratory Concentration Class		3
Credit Hours		16
Year 4		
Fall		
THTR 4222	Acting V	3
THTR 4097	World of the Play	3
THTR 1087	Production Practicum	1
Art History Elective ²		3
Exploratory Concentration Class		3
Credit Hours		13
Spring		
THTR 1087	Production Practicum	1
Exploratory Concentration Class		3
Electives		9
Credit Hours		13
Total Credit Hours		124

1

GenEd Arts (GA) Waiver: Completion of THTR 1003, THTR 1096 and THTR 1231.

2

Students must select an Art History course. For questions or recommendations, students should see their advisor.

Bachelor of Arts in Theater with Concentration in Design and Production

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
THTR 1087	Production Practicum	1
THTR 1003	Creativity: Basic ¹	3
THTR 1411	Welcome Backstage	3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
Non-Dramatic Literature Course		3
Credit Hours		17
Spring		
THTR 1087	Production Practicum	1
THTR 1096	Introduction to Theater Process ¹	3
THTR 2411	Introduction to Design	3
THTR 2431	Lighting and Sound Technology	3
GenEd Quantitative Literacy Course ^{GQ}		4
GenEd Breadth Course		3
Credit Hours		17
Year 2		
Fall		
THTR 1087	Production Practicum	1
THTR 2441	Stage Management I	3
THTR 2711	Drawing and Rendering for the Theater I	3
THTR 3001	History of the Theater I	3

IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Art History Elective ²		3
Credit Hours		16
Spring		
THTR 1087	Production Practicum	1
THTR 2712	Drawing and Rendering for the Theater II	3
THTR 3002	History of the Theater II	3
Select one of the following:		3
THTR 2512	Lighting Design I	
THTR 2612	Costume Design I	
THTR 2721	Scene Design I	
Theater Concentration Elective		3
GenEd Breadth Course		3
Credit Hours		16
Year 3		
Fall		
THTR 1087	Production Practicum	1
THTR 1231	Acting I ¹	3
Exploratory Concentration Class		3
Select one of the following:		3
THTR 2713	Design Drafting	
THTR 3621	Costume Production	
GenEd Breadth Course		3
Select one of the following:		3
THTR 2512	Lighting Design I	
THTR 2612	Costume Design I	
THTR 2721	Scene Design I	
Credit Hours		16
Spring		
THTR 1087	Production Practicum	1
Theater Concentration Elective		3
Exploratory Concentration Class		3
GenEd Breadth Course		3
Select one of the following:		3
THTR 2512	Lighting Design I	
THTR 2612	Costume Design I	
THTR 2721	Scene Design I	
Elective		3
Credit Hours		16
Year 4		
Fall		
THTR 1087	Production Practicum	1
Theater Concentration Elective		3
THTR 4097	World of the Play	3
Elective		3
GenEd Breadth Course		3
Credit Hours		13
Spring		
THTR 1087	Production Practicum	1
Exploratory Concentration Class		3
Theater Concentration Elective		3

GenEd Breadth Course	3
Elective	3
Credit Hours	13
Total Credit Hours	124

1

GenEd Arts (GA) Waiver: Completion of THTR 1003, THTR 1096 and THTR 1231.

2

Students must select an Art History course. For questions or recommendations, students should see their advisor.

Bachelor of Arts in Theater with Concentration in Directing

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
THTR 1087	Production Practicum	1
THTR 1003	Creativity: Basic ¹	3
THTR 1231	Acting I ¹	3
THTR 1411	Welcome Backstage	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Select one of the following:		3
THTR 1202	Fundamentals of Voice and Movement	
THTR 2241	Basic Movement	
Credit Hours		17
Spring		
THTR 1087	Production Practicum	1
THTR 1096	Introduction to Theater Process ¹	3
THTR 2411	Introduction to Design	3
GenEd Quantitative Literacy Course ^{GQ}		4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Credit Hours		17
Year 2		
Fall		
THTR 1087	Production Practicum	1
THTR 2441	Stage Management I	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Select one of the following:		3
THTR 2261	Acting II	
THTR 3132	Musical Theater Voice & Acting	
Credit Hours		16
Spring		
THTR 1087	Production Practicum	1
THTR 3241	Combat & Stunts for the Actor	3
Non-Dramatic Literature Class		3
GenEd Breadth Course		3
GenEd Breadth Course		3

GenEd Breadth Course		3
Credit Hours		16
Year 3		
Fall		
THTR 1087	Production Practicum	1
THTR 2512	Lighting Design I	3
THTR 3001	History of the Theater I	3
THTR 3301	Introduction to the Director's Art	3
THTR 3051	Modern Directions	3
Art History Elective ²		3
Credit Hours		16
Spring		
THTR 1087	Production Practicum	1
THTR 3002	History of the Theater II	3
Elective		3
Exploratory Concentration Class		3
Elective		3
Select one of the following:		3
THTR 2612	Costume Design I	
THTR 2721	Scene Design I	
Credit Hours		16
Year 4		
Fall		
THTR 1087	Production Practicum	1
THTR 4301	Advanced Directing	4
THTR 3191	Research	2
Exploratory Concentration Class		3
Elective		3
Credit Hours		13
Spring		
THTR 1087	Production Practicum	1
THTR 4097	World of the Play	3
THTR 4003	Production Dramaturgy	3
Exploratory Concentration Class		3
Elective		3
Credit Hours		13
Total Credit Hours		124

1

GenEd Arts (GA) Waiver: Completion of THTR 1003, THTR 1096 and THTR 1231.

2

Students must select an Art History course. For questions or recommendations, students should see their advisor.

Theater Education Certificate

Overview

The **Certificate in Theater Education**, offered by the Department of Theater, allows undergraduates from other disciplines to pursue their interest in education combined with Theater courses, adds to student's self-confidence and presentation skills, and makes the student doubly marketable and employable because they have an extra skill set applicable to classes, after-school activities, and a better classroom presence. While students may not be outright Theater majors, they may have a desire to teach drama or lead drama after-school programs in a K-12 setting. Their desire to one day enter the classroom—even teaching some other area such as math, science, social studies or special education—is what drives them to also go for the Certificate in Theater Education. The Certificate in Theater Education allows a student to gain theater training which would enable them to take on additional responsibilities once attaining a job teaching another area. Skills acquired from the Certificate in Theater Education include confidence

in public speaking and presentation, creativity, collaboration, professionalism and empathy, which are qualities enhanced through the study within the Department of Theater coursework.

Theater offers the undergraduate Certificate in Theater Education on the Main Campus only. The certificate consists of a five-course, 15-credit sequence, which includes courses that satisfy the PA State Department of Education Endorsement in Drama/Theater.

Students must be concurrently enrolled in a baccalaureate degree and the certificate to earn the certificate.

Campus Location: Main

Program Code: CA-THED-CERT

Contact Information

Students interested in declaring this certificate in the Department of Theater can do so by contacting a TFMA advisor for next steps.

To seek assistance in monitoring their progress with the certificate declared, students are asked to meet with Matthew Miller (mbmiller@temple.edu, 215-204-4263). Meetings should take place regularly from the time of declaration to applying for graduation within their home school/college.

Learn more about the undergraduate certificate in Theater Education.

Requirements

A grade of C- or higher must be earned in all required courses, except where noted.

Code	Title	Credit Hours
THTR 1231	Acting I	3
THTR 1411	Welcome Backstage (must earn a grade of C or higher)	3
THTR 2441	Stage Management I ¹	3
THTR 3011	Methods of Teaching Artistry	3
THTR 4097	World of the Play	3
Total Credit Hours		15

1

The prerequisite for this course is THTR 1411 with a grade of C or higher.

Theater Minor

Overview

The **Minor in Theater**, offered by the Department of Theater, is available to undergraduate students in other departments and colleges. The minor is intended to give some broad introduction in theater followed by a small amount of specialization. A notation on the transcript will indicate successful completion of the minor.

Students electing the Theater minor may apply up to six transfer credits toward the twenty credits required for the minor. THTR 1087 is not available as an equivalency for any articulated credit in transfer. Students must receive the permission of their advisor before starting in this program. Once the minor has been approved, students must follow the academic rules of the Department of Theater for all Theater courses. Minor credit is not given for Theater grades below C. Students must maintain at least a 2.0 GPA in the minor. Students with theater averages under 2.0 GPA for more than two semesters will be dropped from the program. Students with averages under 2.0 GPA may not begin the program. Students minoring in Theater should collaborate with a Theater department advisor in the selection of coursework.

Campus Location: Main

Contact Information

Fred Duer, MFA, Chair
Tomlinson Theater, Room 210A
215-204-2804
fmduer@temple.edu

Peter Reynolds, MFA, Assistant Chair
Tomlinson Theater, Room 210B
215-204-8628

peterr@temple.edu

Department Office
Tomlinson Theater, Room 209
215-204-8414

Requirements

Code	Title	Credit Hours
Required Courses		
THTR 1002	Theater: The Collaborative Art	3
THTR 3051	Modern Directions	3
THTR 1087	Production Practicum (2 semesters required)	1/1
Theater Electives - Select 4 courses from either or a combination of the Additional Courses below:		12
Additional Courses in Theater History and Literature		
THTR 3012	American Musical Theater	
THTR 3052	Theater of Protest	
THTR 3054	African-American Theater	
THTR 3057	Queer Theater	
THTR 3070	Seminar in Drama	
THTR 3613	History of Decor	
THTR 3801	Playwriting	
THTR 4097	World of the Play	
Additional Courses in Theater Performance		
THTR 1003	Creativity: Basic	
THTR 1008	Poetry as Performance	
THTR 1231	Acting I	
THTR 1232	Jacques Lecoq Technique Part 1	
THTR 2008	Poetic Ethnography	
THTR 2221	Voice for the Actor	
THTR 2231	Speech for the Actor	
THTR 2241	Basic Movement	
THTR 2251	Dance for the Actor	
THTR 2261	Acting II	
THTR 2262	Improvisation	
THTR 3058	Community Engaged Theater	
THTR 3132	Musical Theater Voice & Acting	
THTR 4131	Musical Theater Scene Study	
Additional Courses in Theater Design and Production		
THTR 1411	Welcome Backstage	
THTR 2411	Introduction to Design	
THTR 2512	Lighting Design I	
THTR 2612	Costume Design I	
THTR 2721	Scene Design I	
Additional Courses in Theater Producing/Directing		
THTR 2441	Stage Management I	
THTR 3301	Introduction to the Director's Art	
THTR 3442	Theater Management I	
Total Credit Hours		20

Voice and Speech for the Actor Certificate

Overview

The **Certificate in Voice and Speech for the Actor**, offered by the Department of Theater, allows undergraduates from other disciplines to pursue their interest in voice and speech. The Department of Theater at Temple University boasts two master teachers and one associate teacher of the renowned Fitzmaurice voice method. Participants in the Certificate in Voice and Speech for the Actor study with these teachers and with instructors trained by them. For myriad reasons, interested undergraduates pursue a major outside of Theater and the performing arts, but their passion for performance and hunger for training remains. The Certificate in Voice and Speech for the Actor allows a student to continue training with professional actors and faculty from the Department of Theater at Temple University and the rich theatrical community of Philadelphia. Skills acquired from the Certificate in Voice and Speech for the Actor complement requisite expertise in most professions. Confidence in public speaking and presentation, creativity, collaboration, professionalism and communication are just some of the qualities enhanced through the study of voice and speech.

Theater offers the undergraduate Certificate in Voice and Speech for the Actor on the Main Campus only. The certificate consists of a four-course, 12-credit sequence.

Students must be concurrently enrolled in a baccalaureate degree and the certificate to earn the certificate.

Campus Location: Main

Program Code: CA-VSA-CERT

Contact Information

Students interested in declaring this certificate in the Department of Theater can do so by contacting a TFMA advisor for next steps.

To seek assistance in monitoring their progress with the certificate declared, students are asked to meet with Melanie Julian (melanie.julian@temple.edu, 215-204-1324). Meetings should take place regularly from the time of declaration to applying for graduation within their home school/college.

Learn more about the undergraduate certificate in Voice and Speech for the Actor.

Requirements

A grade of C- or higher must be earned in all required courses.

Code	Title	Credit Hours
THTR 2221	Voice for the Actor	3
THTR 2231	Speech for the Actor	3
THTR 2233	Advanced Speech for the Actor	3
Select one of the following:		3
THTR 1008	Poetry as Performance	
THTR 1211	Fundamentals of Acting	
THTR 2201	Acting Styles	
THTR 2271	Dialects for the Actor	
THTR 3231	Acting for Commercials, Industrials and Voice-Overs	
Total Credit Hours		12

College of Education and Human Development

Overview

Mission Statement

The College of Education and Human Development at Temple University promotes education as a primary mechanism for social mobility and social justice for all learners. Our mission is to prepare all of our students as educational leaders and agents of change who employ leading-edge understandings and evidence-based practices in whatever setting they work. In our research, we conduct well-designed investigations that have the potential to improve learning and teaching, especially for historically underserved populations, and provide effective mentorship of doctoral students so that they can engage in similar kinds of investigations on their own. In our teaching, we strive to infuse our findings and those of other investigators into our coursework in ways that provide practitioners and prospective practitioners with deep understandings both of research and theory, and of how to bring research and theory into effective practice. In our service, we endeavor to create and implement an infrastructure, policies, and procedures that facilitate and enhance the implementation of the teaching and research missions of the college. Our students come from backgrounds that are economically and culturally diverse, but have in common the desire to acquire the skills they need to become the kind of teacher and/or researcher who can improve the lives of others through education.

History

While the official date for the founding of the College of Education and Human Development is usually given as 1919, the college has included teacher preparation as part of its curricula almost from its inception. It is clear from Temple's history that the unofficial founder of the college was Laura Carnell, who began a program for the preparation of kindergarten teachers as early as 1895. The college was founded in 1919 as Teachers College. Its initial programs in elementary and then secondary education were offered largely in response to the Philadelphia School District's decision that higher positions in the city's school system would be open only to those with a college degree. As a consequence, the college began offering two, three, and four-year programs to teachers, as well as extension work, day and evening courses, five days a week and on Saturday mornings. This intimate relationship between the college and the School District of Philadelphia characterizes almost all of the college's history. Programs of graduate study at the master's level were introduced in 1923, with the Doctor of Education degree being first awarded in 1931.

Historically, Temple's College of Education and Human Development has had a significant impact on local and regional practice. The college continues to be a large provider of teachers for the Philadelphia School District and for many suburban districts. Many principals and superintendents of the neighboring regions have received their degrees from Temple. Many of the school psychologists, counselors, educational researchers, and other education professionals have been prepared at Temple. In a very real sense, the College of Education and Human Development has helped to shape the educational direction of the region. In addition, recognizing that education occurs both in and out of school, the college has in recent years diversified its programs to provide preparation to those who plan to work with learners across the lifespan not only in schools but also in businesses and community-based organizations.

Academic Departments

The College of Education and Human Development consists of the following departments:

- Policy, Organizational and Leadership Studies (POLS)
- Psychological Studies in Education (PSE)
- Teaching and Learning (T&L)

Accreditation

The College of Education and Human Development is an accredited member of the Middle States Accreditation.

The college offers programs approved by the Pennsylvania Department of Education that are designed for students seeking certificates to teach in early childhood/elementary, middle-grades, secondary, special education and business education settings.

Academic Opportunities

+1 Programs

The College of Education and Human Development offers many +1 programs for CEHD students as well as students in all majors at Temple University. Eligible undergraduate students begin graduate courses while completing their bachelor's degree. The graduate coursework, if successfully completed, will appear on a graduate transcript and will usually count toward the master's degree requirements if the student matriculates into the graduate year immediately upon completion of the bachelor's degree.*

Academic advisors in the Office of Undergraduate and Graduate Affairs work closely with +1 students as they progress through their +1 program, guiding and supporting them from the application period through completion of their bachelor's and then master's degrees. Each student is provided with an academic plan that reflects the graduate coursework. Students can read more about available +1 programs (p. 1792) in this *Bulletin* and should contact plus1@temple.edu with inquiries.

*

In some cases, degree requirements for the intended master's degree may change during a student's undergraduate semesters, and this could result in the need for additional courses/an adjusted academic plan. In cases when students delay matriculation, degree requirements may change and therefore may affect whether graduate courses fulfill degree requirements.

Diamond Research Scholars Program

The Diamond Research Scholars Program provides Temple undergraduates the opportunity to engage in a focused, mentored research or creative arts project during the summer and fall. The program requires that students participate in the two-day Undergraduate Research Institute, devote ten weeks during the summer to develop a research project in their area of interest under the direction of their faculty mentor, and complete the project during the fall semester while registered for an independent study/research course. For eligibility and other information, please visit <https://undergradstudies.temple.edu/research/diamond>. Students can also view research opportunities within the college.

English Language Teaching Certificate

The undergraduate English Language Teaching Certificate (p. 589) (ELT) prepares students who are interested in teaching English to adult immigrant learners, international college students, and/or students overseas. Some may already be involved in teaching English as a second language (ESL) in the Writing Center, serve as conversation partners in ESL programs, or volunteer as teachers in community-based ESL programs. Others may anticipate going abroad and teaching English as a foreign language (EFL). For more information and to add this certificate, students should meet with their advisor to discuss adding the certificate and how the requirements fit into their degree program; students not in the College of Education and Human Development must then meet with a College of Education and Human Development undergraduate advisor to add this certificate. (Note: Students in teacher education programs should not declare the ELT certificate; such students should meet with a College of Education and Human Development undergraduate advisor to discuss completing coursework that leads to ESL certification.)

Minors and Certificates

The college offers a variety of minors and certificates (p. 554) available to all Temple students.

Student Organizations and Engagement

The college offers a variety of opportunities for students to become engaged in their field of study. Participating in student groups provides peer support and future professional contacts. It also presents opportunities to give back to the community, either locally or globally. Among the opportunities are:

- The Human Development and Community Engagement Club, which provides networking opportunities, professional development workshops, career exploration, and social events;
- Jumpstart, which is a national early education organization that trains students to work with preschool children in low-income neighborhoods; and
- Kappa Delta Pi Honor Society, which promotes academic excellence and a network for those who are committed to teaching.

Study Away Opportunities

All CEHD students are encouraged to explore study away/education abroad opportunities. Numerous courses required for degree completion are available at Temple campuses in Rome and Tokyo, and at programs in places such as Oviedo, Spain. Education majors can also gain experience teaching English overseas in Chile, China, South Korea and other countries.

Secondary Education World Language majors are encouraged to study overseas, when possible, in relevant foreign language-speaking areas through Temple or external study abroad programs. Temple offers semester and year-long programs at Temple campuses in Rome and Oviedo, Spain, as well as exchange options at the University of Puerto Rico and Universities of Hamburg and Tübingen in Germany. Temple offers various summer language programs in Rome, Germany, Spain, and France. The Latin American Studies Semester program is an immersion experience available at Temple's Main Campus to all Spanish majors during spring semesters.

CEHD first-year students majoring in Secondary Education English, Social Studies (History), or World Languages; Human Development and Community Engagement; or Adult and Organizational Development can opt to begin their Temple academic career in Rome through the Temple Rome Entry Year Program.

Learn more about studying abroad and explore a list of government-sponsored teaching abroad scholarships.

Career Development

The College of Education and Human Development is committed to preparing students with the professional knowledge, skills and experiences necessary for today's competitive job market. Career planning is an ongoing process that begins from the moment students join our college, with workshops, counseling, guest speakers, internships/clinical practice, and connections to clubs/organizations affiliated with the university and college. As students approach graduation, the college, in partnership with the University Career Center, offers a range of individualized support and organized events to help them conduct a successful career search, including career fairs, networking with professional associations and employment agencies, professional development days, mock interviews, resume workshops, and more. For additional information or to schedule an appointment, please visit Handshake.

The college's Career Development Office services include:

- Career counseling to select and refine goals and interests;
- Résumés, cover letters and thank you letters coaching;
- Guidance in locating and applying for internships, full-time, and/or part-time employment opportunities;
- Job alerts;
- Interview practice;
- Networking strategies and opportunities; and
- Professional skills workshops.

Scholarships and Awards

Through the generous support of our loyal alumni, faculty, staff and friends of the College of Education and Human Development, we are able to offer a limited number of scholarships to our incoming and current students based on merit and/or financial need. Current students are notified via their Temple e-mail address early in the spring semester about available scholarships. Learn more about the College of Education and Human Development's scholarship terms and conditions.

Administration

Monika Williams Shealey, Dean
 1301 Cecil B. Moore Avenue, Ritter Annex 1st Floor
 Philadelphia, PA 19122-6091
 215-204-8017
 cehddean@temple.edu

<https://education.temple.edu/>

Contact Information

College of Education and Human Development
 Shimada Resource Center
 150 Ritter Annex
 1301 Cecil B. Moore Ave.
 Philadelphia, PA 19122
 215-204-8011

Office Hours: 8:30 a.m.–5:00 p.m. Monday through Friday

- **Teacher Education Certification Office** - edcert@temple.edu
- **Office of Field Placement and Professional Experiences** - edfield@temple.edu
- **Undergraduate Academic Advising** - edadvising@temple.edu
- **Office of Enrollment Management and Marketing** - educate@temple.edu

Additional Contacts and Directories

- Office of the Dean
- Faculty and Staff Directory
- Offices and Centers
- Ombudsperson

Undergraduate Programs

- Adult and Organizational Development BA (p. 565)
- Adult and Organizational Development Minor (p. 569)
- Applied Behavior Analysis Certificate (p. 569)
- Career and Technical Education BSEd (p. 570)
- Career and Technical Education BSEd with Business, Computer and Information Technology Education (p. 574)
- Career and Technical Education BSEd with Marketing Education Concentration (p. 578)
- Diversity and Inclusion Certificate (p. 581)
- Early Childhood-Elementary Education (PreK-4) BSEd (p. 582)
- Early Childhood-Elementary Education (PreK-4) BSEd with Special Education Concentration (p. 585)
- Education Minor (p. 589)

- English Language Teaching Certificate (p. 589)
- Human Development and Community Engagement BS (p. 590)
- Human Development and Community Engagement Minor (p. 594)
- Leadership and Military Science Certificate (p. 595)
- Middle Grades Education BSEd with Language Arts Concentration (p. 596)
- Middle Grades Education BSEd with Mathematics and Language Arts Concentration (p. 601)
- Middle Grades Education BSEd with Mathematics and Science Concentration (p. 605)
- Middle Grades Education BSEd with Mathematics Concentration (p. 610)
- Middle Grades Education BSEd with Science and Language Arts Concentration (p. 614)
- Middle Grades Education BSEd with Science Concentration (p. 619)
- Middle Grades Education BSEd with Social Studies Concentration (p. 624)
- Secondary Education / English Education BSEd (p. 629)
- Secondary Education / Mathematics Education BSEd (p. 632)
- Secondary Education / Social Studies Education BSEd (p. 636)
- Secondary Education / World Languages Education BSEd (p. 640)
- Special Education (Pre-K-12) BSEd (p. 643)

Academic Policies and Regulations

Students are responsible for complying with all university (p. 1835) and college policies and procedures. Teacher education students are responsible for understanding additional policies related to Pennsylvania Department of Education (PDE) requirements for teacher certification.

Academic Responsibility

The College of Education and Human Development expects students to take responsibility for understanding the requirements for their degrees. Students should review all degree requirements for their catalog term and should follow the academic plan as set forth in the *Bulletin* that corresponds to their catalog term. Academic advisors work with students to develop individual academic plans based on students' goals and needs. All students are expected to consult with an academic advisor each semester to discuss questions and concerns regarding timely degree completion.

Academic Overload Requests

Students in the College of Education and Human Development must petition through an academic advisor when requesting permission to take more than 18 credits in either the fall or spring semesters or more than 8 credits in either summer session. Each petition is evaluated individually, and a decision rendered. Criteria considered when reviewing an overload petition include but are not limited to: current cumulative GPA; total number of credits attempted and earned; previous semesters, if any, in which a student took an academic overload and the GPA earned in such semesters; amount of overload credits requested; and specific courses the student will be taking in that semester. Decisions are made at the discretion of the college; submission of a petition does not guarantee approval. Students will be notified via their TEmail address of the decision.

Attendance

Attendance policies for College of Education and Human Development courses are established at the discretion of the instructor. Supplementing the university's Attendance policy (p. 1844), the college requires all students to adhere to instructors' attendance policies as set forth in each course's syllabus.

Awarding of Bachelor Degrees

The College of Education and Human Development does not award Bachelor of Arts or Bachelor of Science degrees to students who have already completed an accredited first Bachelor's, Master's, or PhD degree, regardless of when the degree was completed.

Candidacy

The Pennsylvania Department of Education requires that undergraduate teacher education students meet specific requirements in order to take upper-level education courses, such as teaching methods and student teaching. When a student has met all of these requirements, based on review of their application, they achieve "candidacy" in the teacher preparation program. Students can find information about Candidacy in the College Requirements (p. 559) section of this *Bulletin* and on the college's Teacher Education Canvas site.

Change of Program (COP)

Changing into a College of Education and Human Development Major From Another College at Temple

Students in other colleges/schools at Temple who wish to change their major (program) to a College of Education and Human Development (CEHD) must complete the Change of Program (COP) course in Canvas. After completing this course, students are eligible to schedule an appointment with a

CEHD academic advisor to complete the change of major (program). To be enrolled in the Change of Program course, students should self-enroll in the Canvas site or can e-mail edadvising@temple.edu.

IMPORTANT NOTE: Changing programs *may*:

1. mean that courses taken in the previous major (program) do not fulfill degree requirements of the new major (program), and
2. result in additional time to degree completion.

Both of these factors should be taken into consideration by the student when making the decision to change the major (program). Students should be aware that all requirements of the university-approved curricula (as per the eight-semester plans that appear in this *Bulletin*) must be fulfilled. Students should consult with a College of Education and Human Development academic advisor to create an academic plan that identifies courses/requirements that need to be fulfilled and to determine the anticipated graduation date.

GPA Requirements for COP

Students seeking to transfer into a teacher education/certification program *must* have a minimum cumulative GPA of 3.0; no exceptions are made to this GPA requirement.¹ Students interested in a teacher education program who do not yet have a 3.0 or who are still deciding if the program is right for them are eligible to take certain courses prior to officially changing their program; students interested in taking classes prior to declaring the new program must complete the CEHD Change of Program Canvas course and must meet with an academic advisor to discuss which courses they are eligible to take that would apply to their prospective program.

Students wishing to change their program to a non-certification program [Adult and Organizational Development (AOD) or Human Development and Community Engagement (HDCE)] must have a minimum cumulative GPA of 2.0.¹

1

Students in their first semester at Temple University who have not yet established a GPA are eligible to change their majors.

Changing Programs Within the College of Education and Human Development

Students must be in good academic standing to change their current CEHD major (program) to another CEHD major (program). Students must schedule a Change of Program appointment with an academic advisor to complete the process, develop a new academic plan, and determine if there is a change to the anticipated graduation date.

Clearances

The College of Education and Human Development's clearances policy requires that all students enrolled in CEHD courses that require fieldwork submit updated copies of the following clearances to the college annually (each summer), via its online platform, EdPortal:

1. Pennsylvania State Police Criminal History Record (Act 34),
2. Pennsylvania Department of Public Welfare Child Abuse History Clearance (Act 151),
3. Federal Criminal History Background Check (FBI/fingerprint check) (Act 114), and
4. P.P.D. (TB) Test (School Health regulations, 28 PA Code, Section 23.44).

In limited circumstances, a student's place of current employment may be approved by their program as their site to complete their fieldwork. Students who have been approved by their program to complete their fieldwork in their place of employment may submit an Employer Clearances Verification for On-the-Job Fieldwork form (pdf) in lieu of annually renewed clearances (see On-the-Job Fieldwork for details). Typically, students who receive this approval are enrolled in Career and Technical Education, select postbaccalaureate certification programs, emergency certification programs, and add-on certification programs.

For questions about these requirements, contact the Office of Field Placement and Professional Experiences in the Shimada Resource Center at edfield@temple.edu.

Completion of Degree

All students must complete the entirety of the degree program in which they are enrolled to graduate from that major. Students who cannot or do not want to complete all degree requirements must change their major (program); students should consult with an academic advisor to discuss this decision and options.

Co-requisites and Prerequisites

Students should be aware of all prerequisites and co-requisites; they may be administratively dropped from classes for which they do not meet prerequisites and co-requisites. (Candidacy approval is considered a prerequisite to all upper-level teaching methods courses.)

Courses Over Five and Ten Years Old

Courses over five years old are subject to review to fulfill requirements. Courses over ten years old will not count toward degree requirements nor certification requirements.

Dean's List

Each fall and spring semester those undergraduates who have met the credit hour and academic criteria established for their school or college are placed on the Dean's List. For specific GPA and credit-hour requirements for each college, see the university's Dean's List policy (p. 1849). Dean's List letters are sent from the University Registrar.

Educators' Code of Professional Conduct

The College of Education and Human Development at Temple University promotes education as a primary mechanism for social mobility and social justice for all learners. Our mission is to prepare all of our students to be ethical and effective professionals who will employ leading-edge understandings and evidence-based practices in whatever setting they work. In order for us to achieve that mission, we have to have high expectations for our students from the onset of their studies. Our Code of Professional Conduct articulates those expectations and delineates the process the college employs when they are not met. This is a supplement, not a substitution, for the university's Code of Conduct.

I. Expectations for ethical behaviors in Temple courses include the following:

1. Students must demonstrate professional responsibility through full participation in all course activities and compliance with academic and attendance policies as described in each course syllabus.
2. Students must not attend class under the influence of any non-prescribed drugs or medications or alcohol.
3. Students must manifest respect for others regardless of race, culture, gender, social class, sexual orientation, religion, disability or ability level.
4. Students must avoid classroom behaviors that interfere with the learning of others, including, but not limited to, irresponsible use of cell phones, laptops or Ipads, or regularly making negative or disruptive comments.
5. Students must exhibit a professional level of respect for both professors and classmates and shall not engage in physical intimidation or any other inappropriately aggressive behavior.
6. Students must submit only their original work.
7. Students must obtain permission to use and shall give appropriate citations for any work of another person used in her/his assignments, including classmates.
8. Students shall not submit work done for another class without the express approval of an instructor.
9. Students must comply with all fair use and copyright requirements when installing and using software on any computer.
10. Students must use electronic communication in a responsible and professional manner at all times and shall not display, send, or forward any sexually explicit or other inappropriate materials or any harassing or discriminatory communications.
11. Students must not falsify or misrepresent any information to faculty, supervising teachers, and university supervisors.

II. Expectations for ethical behavior in field placements include the following:

1. Students must adhere to Pennsylvania's Code of Professional Practice and Conduct for Educators (<https://www.pacodeandbulletin.gov/Display/pacode?file=/secure/pacode/data/022/chapter235/chap235toc.html&d=>).
2. Students must comply with all policies, statutes, rules and procedures established by Temple University, state and local agencies, and any school or other institution in which the student is doing any field experience.
3. Students must treat supervising teachers; other school faculty, administrators, and staff; university supervisors; and their own students with respect at all times.
4. Student shall recognize, respect, and plan for the diversity that exists in the classroom and greater community.
5. The student shall develop and adhere to appropriate professional boundaries in all relationships. Developing a romantic and/or sexual relationship with a student, instructor, staff member, or supervisor is unacceptable.
6. Students must exhibit a professional commitment to their work in schools and must not demonstrate unprofessional behavior through poorly prepared lessons, unprofessional appearance, or low expectations for self and others.
7. Students must not attend field assignments under the influence of any non-prescribed drugs or medications or alcohol.
8. Students shall become knowledgeable about and abide by rules set forth by all schools in which they are doing field experience.

Field Experience

Students in teacher education programs should be aware there are numerous processes and policies governing field placements, all of which can be found in the current year's Teacher Education Field Handbook in the Teacher Education resources of the College of Education and Human Development section on TUPortal and on the Office of Field Placement and Professional Experiences web site. Contact edfield@temple.edu with inquiries.

Grievances

Students with grievances must first address concerns with the professor to seek a resolution. When a resolution cannot be achieved, the student should contact the Ombudsperson to begin the formal Appeal process: education.ombudsperson@temple.edu.

College of Education and Human Development students with grade grievances in courses outside of the college must follow the process in the college/school who manages the course.

Letters of Completion

Any student who has 1) successfully completed all requirements of the degree program and 2) whose degree has been officially *conferred* by the University Registrar may request a "Letter of Completion". As per university and college policy, no final Letter of Completion can be provided to a student until after the university's graduation clearance and degree conferral process is completed (as per established university deadlines). Students must request a Letter of Completion.

Non-Traditional Credits

The CEHD accepts credit for prior learning in the form of Advanced Placement (AP), International Baccalaureate (IB), College Level Exam Program (CLEP), Dantes Subject Standardized Test (DSST), Military Science Courses, and certain Professional Certifications/Licensures. Non-traditional credits maximums are as follows:

- AP and IB are unlimited.
- Generally, a maximum of 12 credits combined from CLEP, DSST, and/or Upper-Level Military Science credits, with generally no more than 8 credits in any single type. Certain programs may be eligible for more than these maximums, at the discretion of the college. Certain programs may also allow Professional Certification or Licensure credits, at the discretion of the college.

Participation in the College of Education and Human Development Graduation Ceremony

The College of Education and Human Development recognizes that in certain circumstances students who have not yet completed all degree requirements may wish to participate in the University Commencement and/or the college graduation ceremony. The following guidelines outline the circumstances under which undergraduate students may be allowed to participate in the CEHD graduation ceremony. For policy related to participation in the University Commencement, students should refer to the university's Petition for Permission for Non-Graduates to Participate in Commencement. Students may participate in the CEHD graduation ceremony only once. Students with an approved petition to participate as a non-graduate forfeit their right to participate when they actually complete their degrees.

CEHD students with no more than fifteen credits remaining in their degree *and* who will complete their degree requirements in the immediate summer or fall semester(s) may *petition* to participate in the May CEHD graduation ceremony. Students intending to petition must work with an academic advisor to develop a valid academic plan and must submit that academic plan along with a petition to the academic advisor. Decisions are at the discretion of the college.

Submission of a petition does not guarantee approval. Petitions will be reviewed by college administration and students will be notified of the decision via TUmail.

Prerequisites

See Co-requisites and Prerequisites, above.

Re-enrollment

A student who has not been registered for one (or more) semesters and who is not on an approved Leave of Absence is no longer an active student as per university policy. Former students must initiate the re-enrollment process. The College of Education and Human Development reviews Re-enrollment Requests on a rolling basis and students are alerted of the decision via the e-mail address provided on their Re-enrollment Request form. University policy dictates a student **must** re-enroll into the current version of the selected curriculum. This can impact degree requirements, how prior coursework may/may not apply to the degree requirements, and might impact expected time to degree. Students approved for re-enrollment must meet with an academic advisor to discuss remaining requirements and anticipated graduation date.

University-established deadlines for Re-enrollment Requests are:

- For the fall semester: August 1*
- For the spring semester: December 1*
- For summer sessions: April 1*

*

Any Re-enrollment Requests received after these dates are reviewed at the discretion of the College of Education and Human Development.

Important Note about Transcripts and Holds for Students wishing to Re-enroll:

- Students who have attended another institution since last enrolled at Temple are required to submit all transcripts with the Re-enrollment Request form; failure to submit all transcripts will result in a denial of the re-enrollment request. When transcripts are provided, a new Re-enrollment Request must be submitted. If transcripts are provided after the university-established deadlines noted above, review of the Re-enrollment Request will be at the discretion of the CEHD.

- Students with any type of hold on their record must clear the hold prior to submitting a Re-enrollment Request; failure to clear all holds will result in a denial of the re-enrollment request. When all holds are cleared, a new Re-enrollment Request must be submitted. If a hold is not cleared until after the university-established deadlines noted above, review of the Re-enrollment Request will be at the discretion of the CEHD.

Repeating a Course

It is recommended that any student who must repeat a course for any reason meet with an academic advisor prior to reattempting a course. Academic advisors will work with the student to identify strategies/resources that may support success and will help the student review his/her academic plan. As per university policy, students making a third attempt at a course cannot self-register; they must meet with an academic advisor and must submit a petition. Petitions for a third attempt of a course are reviewed and the student is notified of the decision via their TUMail account. Submission of a petition does not guarantee approval. Approvals of third attempt petitions may come with stipulations. Students should refer to the university policy on Repeating a Course (p. 1860) for further information.

Student Teaching Policies

- Students are not permitted to take any academic class along with student teaching unless that course is indicated on their curriculum sheet in the 8th (student teaching) semester.
- Repeating student teaching: Students must meet with the Office of Field Placement to discuss eligibility to repeat student teaching after failing it. Students are only allowed to take student teaching and the affiliated seminar a total of two times. The college determines a student's eligibility for repeating student teaching.
- Students in teacher education programs should be aware there are numerous processes and policies governing student teaching, all of which can be found in the current year's *Student Teaching Handbook* in the Student Teaching Channel found on the College of Education and Human Development tab in TUPortal.

Temple University Requirements

- All students must successfully complete Temple University's General Education (GenEd (p. 83)) curriculum, making sure they are informed of any GenEd waivers (p. 86) that may be included in their program. Students should consult with an academic advisor if they have any questions about GenEd requirements for their degree.
- All students must successfully complete a minimum of two writing-intensive courses at Temple University (including transfer students).

Teacher Education Programs: Bachelor of Science in Education Degree

Early Childhood-Elementary Education (with optional Special Education Concentration), Middle Grades Education, Secondary Education, Special Education, and Career and Technical Education

Areas of Certification within the College of Education and Human Development ¹

All curricula leading to Pennsylvania certification have been approved by Temple University's Board of Trustees and the Pennsylvania Department of Education.

- Career and Technical Education, concentration options:
 - Business, Computer, and Information Technology Education K-12
 - Marketing Education K-12
- Early Childhood-Elementary Education (Pre K to 4)
- Early Childhood-Elementary Education (Pre K to 4) with Special Education (Pre K to 12)
- Middle Grades Education (grades 4-8)
 - Mathematics
 - Science
 - Language Arts
 - Social Studies
 - Mathematics and Science
 - Mathematics and Language Arts
 - Science and Language Arts
- Special Education (Pre K to 12)
- Secondary Education (grades 7-12)
 - English
 - Mathematics
 - Social Studies
- World Languages (grades K-12)

- Chinese
- French
- German
- Italian
- Latin
- Spanish

Students can find further details and updates about all certifications on the College of Education and Human Development web site.

College of Education and Human Development Graduation Requirements

Students receive a Bachelor of Science in Education degree by meeting the following minimum requirements:

- Completion of program requirements as detailed on the 8-semester academic plan;²
- Earn a "C-" or above in all required Education Courses
- Earn a "C-" or above in all required University General Education Courses.

Meeting the minimum credits required for a degree does not mean the degree is complete as the student may have taken additional courses/credits not applicable to the student's program/degree requirements. Students must successfully complete all requirements as indicated in their program's requirements. Some credits from ROTC and preparatory/remedial courses do not count towards the total number of semester hours needed to graduate.

College of Education and Human Development Teacher Certification Requirements Candidacy

The Pennsylvania Department of Education requires that undergraduate teacher education students meet specific requirements in order to take upper-level education courses, such as teaching methods and student teaching. When a student has met all of these requirements, based on review of their application, they achieve "candidacy" in the teacher preparation program. Students can find information about Candidacy on the college's Teacher Education Canvas site. Students cannot register for teaching methods courses without achieving Candidacy.

To achieve Candidacy, students must:

- Submit an application to the College of Education and Human Development Academic Advising Office.
- Generally, successfully complete:
 - six credits of *college-level* math to be approved for Candidacy;*
 - three credits of *college-level* English;**
 - three credits of English/college composition.**
- Complete a minimum of 48 credits (transfer included).
- Earn a C- or higher in all courses identified as pre-candidacy courses on the 8-semester program plan.
- Earn a minimum cumulative GPA of 3.00. Students whose GPA is below a 3.00, but above a 2.80 are eligible to petition for a GPA appeal and should schedule an appointment with an academic advisor to discuss this.
 - Secondary Education students must earn a minimum cumulative 2.0 GPA in the content courses (i.e. second major courses). Students must earn a minimum of "C-" (or higher, where stipulated by the program) in all content area courses.
 - Middle Grades students must earn a minimum cumulative 2.0 GPA in the concentration area. Students must earn a minimum of "C-" (or higher, where stipulated by the program) in all concentration area courses.
- Demonstrate Proficiency in Basic Skills: Pennsylvania legislation requires undergraduate certification candidates to pass the basic skills assessments in math, reading and writing prior to formal admission into a program. This requirement is waived, covering the period of this academic year (2023-2024). Specifically, Act 55 of 2022 signed into law by Governor Wolf requires the Secretary of Education to waive the requirement to satisfactorily complete the assessment of basic skills for 3 years from July 8, 2022 through July 8, 2025. This applies to all students who enter preparation programs during this period as well as otherwise qualified candidates who submit their certification application during this period.
- Students can consult the PDE web site for updates and current requirements.

*Developmental courses, pre-college courses, MATH 0701, and MATH 0702 are not applicable to this requirement.

**Developmental courses, pre-college courses, ENG 0701, and ENG 0711 are not applicable to this requirement.

Certification Requirements

Successful completion of a teacher preparation program is one step towards teaching certification in Pennsylvania. Upon successful completion of a program, all teacher education students seeking PA certification must apply directly to the Pennsylvania Department of Education through TIMS.

CEHD Recommendation for Certification

As part of the TIMS application, the college verifies program completion and recommends the student for certification. Students must meet all of the following requirements to secure the college's recommendation on TIMS.

- Complete all the requirements for their specific Teacher Education Certification Program, including:
 - If applicable, meeting Basic Skills requirements in Reading, Writing and Mathematics (see Candidacy).
 - Completing all field and course requirements as specified for their program.
 - Successfully completing student teaching, when applicable, (with a minimal score of 4 on the PDE 430).
 - Earn a minimum cumulative GPA of 3.0, generally.
- Submit an online application through the PATeacher Information Management System (TIMS).
- Complete the online Temple University Request for Recommendation. This applies to all applicants for certification, including those who completed a program in the past but did not file for certification at that time.

Additional PA Requirements for Certification:

- Be a United States citizen or a legal permanent resident holding a valid Green Card. (Special note: Foreign Educated Certification Applicants.)
- Demonstration of General Knowledge, Professional Knowledge and/or Subject Area Knowledge as required by their specific area of certification.
NOTE: Students may complete these requirements before or after the college submits their recommendation.

For more information see Pennsylvania Department of Education's Testing Requirements.

Field Experience, Practicum and Student Teaching

The Pennsylvania Department of Education (PDE) has detailed four stages of field experience(s) for teacher preparation programs. To meet Stages 1-3, CEHD partners with schools and districts to arrange relevant, diverse, and supported field experiences, to advance students' analytic and teaching skills, reflexive practice, and professional network-building. These experiences are built into methods courses and practicum courses. Students are not permitted to engage in any fieldwork with or near minors without annually updated clearances.

For student teaching (Stage 4), candidates enroll in Supervised Teaching. Through this experience, they receive coaching and guidance from school-based teacher mentors and university-assigned supervisors, as they take the lead of classroom instruction.

To be eligible for student teaching, candidates are required to have:

- 3.0 GPA (Students with a 2.80 or higher and who have taken certification exams might be eligible for an appeal process; see an academic advisor);
- A minimum of C- in all required courses;
- No academic or financial holds;
- No Incompletes;
- Updated clearances on Edportal, valid through the end of their student teaching; and,
- Completed application submitted to Associate Directors of Clinical Practice one year prior to student teaching.

Students in teacher education programs are expected to abide by the processes and policies governing field placements and student teaching. Details can be found on the Teacher Education Channel of the College of Education and Human Development tab on TUPortal and on the Office of Field Placement and Professional Experiences web site.

Programs that do not lead to Teacher Certification: Bachelor of Arts/Bachelor of Science

Adult and Organizational Development (BA) and Human Development and Community Engagement (BS)

Students receive a BA in Adult and Organizational Development or a BS in Human Development and Community Engagement by meeting the following minimum college requirements:

- Completion of program requirements as detailed on the 8-semester matrix.
- Earn a "C-" or above in all required Education Courses.
- Earn a "C-" or above in all required University General Education Courses.
- Earn a minimum cumulative GPA of 2.0.
- Earn the minimum credits required for the degree.

Minors and Certificates

Refer to the College of Education and Human Development's Programs section (p. 554) of this *Bulletin* for a list of minors and certificates.

1

Students seeking Teacher Education Certification in other areas should contact the school/college listed below. Information about these teacher education certification programs can also be found within that school or college's section of this *Undergraduate Bulletin*:

- Art - Tyler School of Art and Architecture
- Music - Boyer College of Music and Dance
- In addition to the Secondary Math and Science Education programs offered in the College of Education and Human Development, students can earn teacher certification through TUteach, a joint program between the College of Science and Technology and the College of Education and Human Development. This program is housed in the College of Science and Technology.

2

The required total credit hours vary depending on the course of study. These credit hours are satisfied by taking courses in four categories:

1. University General Education requirements
2. Foundational Education courses
3. Teacher Education Certification Courses (i.e. methods and student teaching)
4. Elective courses, as noted in each program of study.

Academic Advising Information

Shimada Resource Center

150 Ritter Annex
1301 Cecil B. Moore Ave.
Philadelphia, PA 19122
215-204-8011
edadvising@temple.edu

Undergraduate Academic Advising Services

All students in the College of Education and Human Development have the flexibility to meet with any of the academic advisors. CEHD advisors utilize best practices in guiding students from pre-admission to degree completion to provide students with an understanding of their degree requirements, policies, and college/university resources. Advisors work with students to create academic plans, encouraging students to take ownership of their academic choices as they work to achieve their academic and related goals.

The undergraduate academic advising staff in the College of Education and Human Development supports students in a variety of areas, including, but not limited to:

- Collaborate with students to develop an individual academic plan to support student goals, and on-time graduation;
- Orientations and advising for new students (freshmen) and transfer students;
- Advising for students facing academic challenges;
- Change of program (major);
- Petitions;
- Workshops/Group Advising;
- Candidacy applications;
- Pennsylvania Department of Education (PDE) guidelines and requirements for teacher education students;
- Auditing and tracking of students (i.e.; pre-student teaching, Fly in 4, pre-graduation);
- Graduation processing; and
- Registration assistance.

Undergraduate Advising Appointment Scheduling

Schedule online via the Student Tools tab in TUPortal or e-mail edadvising@temple.edu.

Academic Responsibility Policy

The College of Education and Human Development expects students to assume primary responsibility for knowing the requirements for their degrees and for acquiring current information about their academic status. All students are expected to collaborate with an academic advisor each semester to

discuss questions and concerns, review their academic plans, and ensure timely degree completion. College of Education and Human Development academic advisors are trained to provide sound advice aligned with university and college policies and practice.

Faculty

For additional information on the College of Education and Human Development's faculty please visit the college's faculty directory.

Gregory Anderson, Professor, Department of Policy, Organizational and Leadership Studies, College of Education and Human Development; PhD, City University of New York.

Crystal L. Austin, Assistant Professor of Instruction, Department of Psychological Studies in Education, College of Education and Human Development; PhD, University at Albany, State University of New York.

Janelle M. Bailey, Associate Professor, Department of Teaching and Learning, College of Education and Human Development; PhD, University of Arizona.

Julie L. Booth, Professor, Department of Teaching and Learning, College of Education and Human Development; PhD, Carnegie Mellon University.

Jean A. Boyer, Assistant Professor of Instruction, Department of Teaching and Learning, College of Education and Human Development; PhD, University of Cincinnati.

Joseph Boyle, Associate Professor, Department of Teaching and Learning, College of Education and Human Development; PhD, University of Kansas.

Carol B. Brandt, Associate Professor, Department of Teaching and Learning, College of Education and Human Development; PhD, University of New Mexico.

Wanda M. Brooks, Professor, Department of Teaching and Learning, College of Education and Human Development; EdD, University of Pennsylvania.

Kathryn Burke, Research Assistant Professor, Department of Teaching and Learning, College of Education and Human Development; PhD, University of Kansas.

James P. Byrnes, Professor, Department of Psychological Studies in Education, College of Education and Human Development; PhD, Temple University.

Sarah A. Cordes, Associate Professor, Department of Policy, Organizational and Leadership Studies, College of Education and Human Development; PhD, New York University.

Maia Bloomfield Cucchiara, Associate Professor, Department of Teaching and Learning, College of Education and Human Development; PhD, University of Pennsylvania.

James Earl Davis, Professor, Department of Policy, Organizational and Leadership Studies, College of Education and Human Development; PhD, Cornell University.

Sarah Elizabeth Diamond, Associate Professor of Practice, Department of Teaching and Learning, College of Education and Human Development; PhD, Auburn University.

Meixia Ding, Associate Professor, Department of Teaching and Learning, College of Education and Human Development; PhD, Texas A and M University.

Arthur G. Dowdy, Assistant Professor, Department of Teaching and Learning, College of Education and Human Development; PhD, Temple University.

Joseph P. DuCette, Professor, Department of Psychological Studies in Education, College of Education and Human Development; PhD, Cornell University.

Richard M. Englert, Professor and Chancellor, Department of Policy, Organizational and Leadership Studies, College of Education and Human Development; EdD, University of California Los Angeles.

Armando X. Estrada, Associate Professor, Department of Policy, Organizational and Leadership Studies, College of Education and Human Development; PhD, University of Texas at El Paso.

Frank H. Farley, Professor Emeritus, Department of Psychological Studies in Education, College of Education and Human Development; PhD, University of London.

Catherine A. Fiorello, Professor, Department of Psychological Studies in Education, College of Education and Human Development; PhD, University of Kentucky.

Judith Flanigan, Associate Professor of Instruction, Department of Teaching and Learning, College of Education and Human Development; PhD, Temple University.

Timothy P. Fukawa-Connelly, Professor, Department of Teaching and Learning, College of Education and Human Development; PhD, University of Maryland.

Allison Gilmour, Assistant Professor, Department of Teaching and Learning, College of Education and Human Development; PhD, Vanderbilt University.

Sally A. Gould-Taylor, Research Associate Professor, Department of Teaching and Learning, College of Education and Human Development; PhD, Temple University.

John Hall, Assistant Professor, Department of Policy, Organizational and Leadership Studies, College of Education and Human Development; PhD, University of California Berkeley.

Insook Han, Associate Professor, Department of Teaching and Learning, College of Education and Human Development; EdD, Columbia University, Teachers College.

Shanta Hattikudur, Associate Professor of Instruction, Department of Policy, Organizational and Leadership Studies, College of Education and Human Development; PhD, University of Wisconsin-Madison.

Annemarie H. Hindman, Professor, Department of Teaching and Learning, College of Education and Human Development; PhD, University of Michigan.

Heidi Hutman, Assistant Professor of Instruction, Department of Psychological Studies in Education, College of Education and Human Development; PhD, University of Albany.

Xu (Lilya) Jiang, Assistant Professor, Department of Psychological Studies in Education, College of Education and Human Development; PhD, University of South Carolina.

Jennifer Johnson, Assistant Professor, Department of Policy, Organizational and Leadership Studies, College of Education and Human Development; PhD, University of Maryland College Park.

Paul Jones, Assistant Professor, Department of Psychological Studies in Education, College of Education and Human Development; PhD, Temple University.

Avshalom Kaplan, Professor, Department of Psychological Studies in Education, College of Education and Human Development; PhD, University of Michigan.

Suzanne Kelley, Clinical Assistant Professor, Department of Teaching and Learning, College of Education and Human Development; PhD, Temple University.

Julie Beth Kessler, Associate Professor of Instruction, Department of Teaching and Learning, College of Education and Human Development; PhD, Temple University.

Janice H. Laurence, Professor, Department of Psychological Studies in Education, College of Education and Human Development; PhD, George Mason University.

Di Liu, Assistant Professor of Instruction, Department of Teaching and Learning, College of Education and Human Development; EdD, Boston University.

Christopher W. McGinley, Professor of Practice, Department of Policy, Organizational and Leadership Studies, College of Education and Human Development; EdD, University of Pennsylvania.

Kelly M. McGinn, Assistant Professor, Department of Psychological Studies in Education, College of Education and Human Development; PhD, Temple University.

Sabina Neugebauer, Associate Professor, Department of Teaching and Learning, College of Education and Human Development; EdD, Harvard University.

Kristie Jones Newton, Professor, Department of Teaching and Learning, College of Education and Human Development; PhD, University of Maryland College Park.

Beth Olanoff, Associate Professor of Instruction, Department of Policy, Organizational and Leadership Studies, College of Education and Human Development; JD, University of Pennsylvania.

Timothy J. Patterson, Assistant Professor, Department of Teaching and Learning, College of Education and Human Development; PhD, Columbia University, Teachers College.

Laura Pendergast, Associate Professor, Department of Psychological Studies in Education, College of Education and Human Development; PhD, The Pennsylvania State University.

Charles Price, Associate Professor, Department of Policy, Organizational and Leadership Studies, College of Education and Human Development; PhD, Graduate Center, City University of New York.

M. Meghan Raisch, Assistant Professor of Instruction, Department of Policy, Organizational and Leadership Studies, College of Education and Human Development; PhD, Temple University.

Jessica Reinhardt, Associate Professor of Practice, Department of Psychological Studies in Education, College of Education and Human Development; PhD, University of Denver.

Jayminn S. Sanford-DeShields, Associate Professor, Department of Teaching and Learning, College of Education and Human Development; EdD, Harvard University.

W. Joel Schneider, Professor, Department of Policy, Organizational and Leadership Studies, College of Education and Human Development; PhD, Texas A and M University.

Lori A. Shorr, Associate Professor of Instruction, Department of Psychological Studies in Education, College of Education and Human Development; PhD, University of Pittsburgh.

Michael W. Smith, Professor, Department of Teaching and Learning, College of Education and Human Development; PhD, University of Chicago.

Judith C. Stull, Research Professor, Department of Policy, Organizational and Leadership Studies, College of Education and Human Development; PhD, Boston College.

Jill May Swavelly, Professor of Instruction, Department of Teaching and Learning, College of Education and Human Development; EdD, Temple University.

Matthew J. Tincani, Professor, Department of Teaching and Learning, College of Education and Human Development; PhD, The Ohio State University.

Renee M. Tobin, Professor, Department of Psychological Studies in Education, College of Education and Human Development; PhD, Texas A and M University.

Benjamin Torsney, Assistant Professor of Instruction, Department of Policy, Organizational and Leadership Studies, College of Education and Human Development; PhD, Temple University.

Jason C. Travers, Associate Professor, Department of Teaching and Learning, College of Education and Human Development; PhD, University of Nevada, Las Vegas.

Matthew J. Elvis Wagner, Associate Professor, Department of Teaching and Learning, College of Education and Human Development; EdD, Columbia University, Teachers College.

Daniel Walinsky, Associate Professor of Instruction, Department of Psychological Studies in Education, College of Education and Human Development; PhD, University of North Dakota.

Barbara A. Wasik, Professor and the PNC Chair in Early Childhood Education, Department of Teaching and Learning, College of Education and Human Development; PhD, Temple University.

Diana L. Wildermuth, Associate Professor of Practice, Department of Psychological Studies in Education, College of Education and Human Development; PhD, Temple University.

Jason Wingard, Professor, Department of Policy, Organizational and Leadership Studies, College of Education and Human Development; PhD, University of Pennsylvania.

Christine A. Woyshner, Professor, Department of Teaching and Learning, College of Education and Human Development; EdD, Harvard University.

Adult and Organizational Development BA

Overview

The **Bachelor of Arts in Adult and Organizational Development**, offered by the Department of Policy, Organizational and Leadership Studies, is comprehensive and systems-focused, and will help students develop the skills and knowledge needed to be an effective change agent in any organization.

The Adult and Organizational Development program pushes students to:

- conquer the complexity of communication styles to identify different styles and what they can reveal about the roots of conflicts;
- develop effective instructional strategies to facilitate adult and team learning, and then design and implement effective training programs; and
- master the peacemaking process, in order to recognize and mediate different conflict types and negotiate appropriate resolutions for communities, families, organizations and schools.

Students will finish the degree program by completing a field assignment at one of the hundreds of community groups, corporations, government agencies, schools and social service agencies in the Philadelphia area. In addition, students will observe how management and staff lead teams, manage change, mediate conflicts, and train adults in the social context of a bustling, culturally diverse region.

Campus Location: Main

Program Code: ED-AOD-BA

Accelerated +1 Programs

The College of Education and Human Development offers accelerated programs, including the opportunity for Adult and Organizational Development majors to pursue the following +1 Accelerated Programs:

- +1 Accelerated Program in Any Temple Major + Advocacy and Organizational Development MEd
- +1 Accelerated Program in Any Temple Major + Higher Education MEd
- +1 Accelerated Program in Any Temple Major + Teaching English to Speakers of Other Languages MEd

Qualified students earn a bachelor's and a master's degree in a five-year course of study. Learn more about the College of Education and Human Development's +1 Accelerated Programs.

Contact Information

Undergraduate Advising, College of Education and Human Development
 edadvising@temple.edu

Armando Estrada, Program Coordinator
 armando.x.estrada@temple.edu

Christopher McGinley, Policy, Organizational and Leadership Studies Department Chair
 christopher.mcginley@temple.edu

Learn more about the Bachelor of Arts in Adult and Organizational Development.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

- All students must complete Temple University's General Education (GenEd (p. 83)) curriculum.
- All students must take a minimum of two writing-intensive courses at Temple University (including transfer students). The specific writing-intensive courses required for this major are AOD 3396 and AOD 4396.

College Requirements

Refer to the College Requirements (p. 559) for specific information.

Program Requirements

- Students must complete 34 credit hours in the major.
- All courses in the major must be passed with a grade of "C-" or better; students must earn a 2.0 cumulative GPA.
- Complete the following course requirements in Adult and Organizational Development:

Code	Title	Credit Hours
Required Courses		
AOD 1001	Practical Application in Adult and Organizational Development	1
AOD 1016	Introduction to Adult Learning and Training	3
AOD 1166	Interpersonal Processes through the Life Span	3

AOD 2176	Team Process in Education	3
AOD 2201	Research Methods	3
AOD 2214	Conflict Processes	3
or AOD 2215	Mediation: Principles and Practice	
AOD 2218	Leadership in Organizations	3
AOD 3317	Adult and Workforce Development	3
AOD 3318	Systems Approach to Organizational Change	3
AOD 3396	Organizational Processes (WI)	3
AOD 4016	Advanced Adult Learning and Training	3
AOD 4396	Field Research: Practice in Professional Settings (WI)	3
Total Credit Hours		34

AOD strives to be a flexible and dynamic program that accommodates students transitioning in from other majors. AOD courses are offered both at Main campus and at Ambler. Although flexible, a minimum of three semesters is necessary to complete the AOD BA degree requirements. We strongly advise that no more than two other AOD courses be taken along with AOD 4396 Field Research: Practice in Professional Settings, the "capstone" course that is completed during the final semester prior to graduation. This capstone course requires the reflection on and application of AOD principles gained in prior courses.

Suggested Academic Plan

Bachelor of Arts in Adult and Organizational Development

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
GenEd Quantitative Literacy Course ^{GQ}		4
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Breadth Course		3
GenEd Breadth Course		3
AOD 1016	Introduction to Adult Learning and Training	3
Credit Hours		17
Spring		
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
AOD 1166	Interpersonal Processes through the Life Span	3
AOD 1001	Practical Application in Adult and Organizational Development	1
Elective		3
Credit Hours		16
Year 2		
Fall		
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
AOD 2201	Research Methods	3
Select one of the following:		3
AOD 2214	Conflict Processes	
AOD 2215	Mediation: Principles and Practice	
Elective		3
Elective		3
Credit Hours		15
Spring		
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	

AOD 2176	Team Process in Education	3
AOD 2218	Leadership in Organizations	3
Elective		3
Elective		3
Credit Hours		15
Year 3		
Fall		
GenEd Breadth Course		3-4
AOD 3317	Adult and Workforce Development	3
AOD 3396	Organizational Processes	3
Elective		4-3
Elective		3
Credit Hours		16
Spring		
GenEd Breadth Course		3
AOD 3318	Systems Approach to Organizational Change	3
Elective		3
Elective		3
Elective		3
Credit Hours		15
Year 4		
Fall		
AOD 4016	Advanced Adult Learning and Training	3
Elective		3
Elective		3
Elective		3
Elective		3
Credit Hours		15
Spring		
AOD 4396	Field Research: Practice in Professional Settings	3
Elective		3
Elective		3
Elective		3
Elective		3
Credit Hours		15
Total Credit Hours		124
Code	Title	Credit Hours
AOD Electives		
AOD 2115	Conflict Resolution in Education	3
AOD 2117		3
AOD 2307	Interaction Analysis	3
AOD 3319	Skill Building for Social Entrepreneurship and Community Engagement	3
AOD 4376	Innovation and Mission-Driven Organizations	3
AOD 4382	Independent Study	1 to 3
AOD 4385	Internship in Adult and Organizational Development	3

Adult and Organizational Development Minor

Overview

A **Minor in Adult and Organizational Development (AOD)**, offered by the Department of Policy, Organizational and Leadership Studies, can complement a range of existing majors across Temple, including, among others: Human Resource Management, Psychology, Education, Business Management, Communication Management, and Social Work. The AOD minor can open up expanded career opportunities for students through our applied focus on organizational skill development, training and adult learning.

Campus Location: Main

Contact Information

Undergraduate Advising, College of Education and Human Development
edadvising@temple.edu

Armando Estrada, Program Coordinator
armando.x.estrada@temple.edu

Requirements

The minor in Adult and Organizational Development consists of 15 credit hours in Adult & Organizational Development coursework.

Students must complete the following courses:

Code	Title	Credit Hours
AOD 1016	Introduction to Adult Learning and Training	3
AOD 1166	Interpersonal Processes through the Life Span	3
AOD 2176	Team Process in Education	3
AOD 2214	Conflict Processes	3
Select one of the following:		3
AOD 2215	Mediation: Principles and Practice	
AOD 3316	Negotiation Processes	
AOD 3319	Skill Building for Social Entrepreneurship and Community Engagement	
Total Credit Hours		15

All courses must be completed with a minimum grade of C-.

Applied Behavior Analysis Certificate

Overview

The undergraduate **Certificate in Applied Behavior Analysis (ABA)**, offered by the Department of Teaching and Learning, is designed for students who would like to work in human service industries implementing interventions based in the science of behavior analysis. The undergraduate program is designed to meet the coursework requirements for the Board Certified assistant Behavior Analyst (BCaBA) credential awarded by the BACB. BCaBAs work under the supervision of BCBAAs. This program would also prepare students to apply to the MSEd in ABA program should they desire to further their studies in ABA and/or obtain the coursework required for the BCBA credential.

The program's mission is to enable its students to work proficiently with the coherent system of concepts and principles of behavior analysis, preparing them for professional careers in a variety of environments. The core principles and techniques of ABA are broadly applicable; hence, the interdisciplinary character of this program. Demand for individuals with applied behavior-analytic competencies is intense and growing, especially in social service agencies and educational institutions that serve individuals with autism or with developmental disabilities and functional deficits resulting from head injury. The program also provides competencies for diverse types of work, such as implementing effective instruction and classroom management, teaching strategies for effective behavior management in home settings, and designing and improving performance, productivity, and safety in organizations. The program is anchored upon fundamentals of the behavior analytic approach.

Campus Location: Main

Program Code: ED-ABA-CERT

Contact Information

Undergraduate Advising, College of Education and Human Development

edadvising@temple.edu

Jason Travers, Program Coordinator
jason.travers@temple.edu

Learn more about the undergraduate certificate in Applied Behavior Analysis.

Requirements

Number of Credits Required to Complete the Certificate: 15

The following courses must be completed with a minimum grade of C-:

Code	Title	Credit Hours
ABA 3301	Understanding Autism	3
ABA 3302	Analyzing and Changing Behavior	3
ABA 3303	Evaluating Behavior Change Intervention	3
ABA 3304	Ethics and Applied Behavior Analysis	3
Select one of the following:		3
PSY 2103	Foundations of Learning and Behavior Analysis	
ABA 2103	Concepts and Principles of Behavior Analysis	
Total Credit Hours		15

Career and Technical Education BSEd

Overview

Offered by the Department of Teaching and Learning, the **Bachelor of Science in Education in Career and Technical Education** (BSEd in CTE) is designed to prepare students who expect to teach career and technical education subjects in grades 7-12 and at the 2-year college level in public and private schools. Subject area content (occupational competency assessment credit for industry experience) and professional education content are combined with general education content (university curriculum) in order to provide the student with a general education, a field of specialization, and professional training. Moreover, the curriculum aims to combine these elements in such proportions as to give students the balanced perspective of the relation that industrial education bears to education as a whole.

BSEd in CTE students may complete one of the following **optional concentrations**:

- Business, Computer and Information Technology Education
- Marketing Education

Note: All students enrolling in the Business, Computer and Information Technology Education or Marketing Education concentrations are advised by the Office of Undergraduate Advising (edadvising@temple.edu) in the College of Education and Human Development and should meet with an advisor each semester. All other students are advised through the Center for Professional Development in Career and Technical Education (cteadv@temple.edu) in the College of Education and Human Development and should meet with an advisor each semester.

Campus Locations: Main and Online

Program Code: ED-CTE-BSED

Accreditation

The program is approved as a teacher preparation program by the Pennsylvania Department of Education.

Occupational Competency Assessment

For both the BSEd in Career and Technical Education program as well as career and technical teacher certification, there is an occupational experience and an occupational competency testing requirement which must be met. The student must pass an occupational competency assessment (or the equivalent) and have completed four years of occupational wage-earning experience (or 8,000 hours) beyond the time needed to learn the occupation. Learn more about eligibility requirements and how to apply for the OCA exam or credential review.

Licensure/Certification

The BSEd in Career and Technical Education program consists of a total of 123 credits, of which sixty (60) of those credits may be used to secure a Career and Technical Instructional I and Career and Technical Instructional II certification. In addition, the student can also be awarded 24 credits for passing an Occupational Competency Assessment.

1. The total number of credit hours at graduation may be greater for some students based on initial placement exams, transfer evaluations, individual curricular choices, and academic progress.
2. Certain courses fulfill multiple requirements. In consultation with the advisor, students will be able to plan their curriculum more effectively.
3. Students must fulfill the necessary prerequisites for any given course or course sequence. See the Prerequisites and Co-requisites Policy (p. 1860) in the university-wide Academic Policies section in this Bulletin.

Career and Technical Certification Options for Practicing Teachers

Cooperative Education Certification

School personnel interested in teaching and supervising students in work-based settings in Pennsylvania must be certified in Cooperative Education. This certification covers a variety of work-based settings for secondary students, including capstone programs, diversified occupations programs, shadowing experiences, work experience programs, internships, and job shadowing. The skill and knowledge included in this certification program also has application to post-secondary and adult settings.

Persons wishing to become teachers of cooperative education must apply to the program and provide information about their education and experiential backgrounds. Based on the information provided, a program of studies, which includes an internship, is prepared. Persons who enter this program holding a valid teaching certificate will work toward earning an "add-on" certificate in Cooperative Education, while others will work toward a "stand-alone" certificate. Persons wishing to enroll in this program should contact an advisor.

Learn more about cooperative education certification.

Career & Technical Certification Program

This curriculum, which is offered in cooperation with the Pennsylvania Department of Education, is designed to prepare in-service teachers of career and technical education (industrial) subjects at the secondary, post-secondary, and 2-year college levels in public and private schools. Career and Technical Teacher Education courses may be taken on three levels: certification, undergraduate, and graduate. Persons who meet Pennsylvania Statutory requirements and who have at least four years (or 8,000 hours) of work experience beyond the learning period in a trade, technical, or other selected occupation may prepare for certification to teach occupational subjects or related classes in secondary level schools in Pennsylvania.

This program prepares students for Career and Technical Instructional I certification in Pennsylvania and, in general, is acceptable in other states. Work taken toward the certification objective may be applied to the undergraduate degree program. The courses are offered on a part-time basis for those who are employed as secondary level teachers in Pennsylvania.

Learn more about the undergraduate non-degree Career and Technical Education program requirements.

Contact Information

Elizabeth Diamond, Program Coordinator
ediamond@temple.edu

Patience Lehrman, Executive Director, Career and Technical Education (CTE) and Intergenerational Center (IGC)
patience@temple.edu

Kristie Newton, Teaching and Learning Department Chair
KJNewton@temple.edu

Learn more about the Bachelor of Science in Education in Career and Technical Education.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Curriculum

1. All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.
2. All students must take 6 s.h. of college level math and 6 s.h. of English composition and literature and pass the required state tests to be certified.
3. All students must take a minimum of two writing-intensive courses at Temple. The specific writing-intensive courses required for this major are EDUC 2296 and MGSE 3796.

Major Requirements

Code	Title	Credit Hours
AOD 1166	Interpersonal Processes through the Life Span	3
CTE 3372	Project-based Learning for Today's CTE	3
CTE 4324	Industry-Based Coordination Methods for Work-Based Learning	3
CTE 4331	Industry-Based Instructional Methods for Work-Based Learning	3
EDUC 1017 or MATH 1021	Algebra and Algebraic Thinking for Educators College Algebra	4
EDUC 2103	Socio-cultural Foundations of Education in the United States	3
EDUC 2109	Adolescent Development for Educators	3
EDUC 2296	Effective Teaching: Theory and Practice (WI)	3
EDUC 2306	Assessment and Evaluation	3
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3
TESL 3631	Principles and Practice for Teaching English Learners	3
SGM 3501	Entrepreneurial and Innovative Thinking	3
SPED 2231	Introduction to Special Education	3
SPED 4103	Classroom Management and Positive Behavior Support	3
SPED 4109	Educating Students with Disabilities in Inclusive Settings	3
Total Credit Hours		46

Program Requirements

Code	Title	Credit Hours
CTE 3101	Principles of Career and Technical Education	3
CTE 3102	Teaching Strategies in Career and Technical Education	3
CTE 3103	Curriculum in Career and Technical Education	3
CTE 4315	Credit by Examination	24
CTE 4416	Professionalism, Evaluation, and Assessment in Secondary Education	3
EDUC 4788	Student Teaching in Secondary Education/Career Technical Education	3
HDCE 2304	Families and the Community	3
SPED 4105	Assessment in Special Education	3
Total Credit Hours		45

Code	Title	Credit Hours
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Minimum Hours Required for Graduation

123

Note: Matriculated students with work experience who have completed 90 s.h. of acceptable coursework may arrange through a credit by exam process for up to 24 s.h. to be recorded toward their degree.

Suggested Academic Plan

Bachelor of Science in Education in Career and Technical Education

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

(Certain courses require that a student secure clearances as per the College of Education and Human Development policy; students should check the current list of courses that require clearances on the College of Education and Human Development web site.)

Year 1

Fall	Credit Hours
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing ¹ or Analytical Reading and Writing: ESL or Honors Writing About Literature
GenEd Quantitative Literacy Course (GQ) ¹	4

GenEd Breadth Course ¹		3
EDUC 2109	Adolescent Development for Educators ²	3
Credit Hours		14
Spring		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life ¹ or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course ¹		3
GenEd Breadth Course ¹		3
EDUC 2103	Socio-cultural Foundations of Education in the United States	3
Select one of the following:		4
EDUC 1017	Algebra and Algebraic Thinking for Educators	
MATH 1021	College Algebra	
Credit Hours		16
Year 2		
Fall		
GenEd Breadth Course ¹		3
GenEd Breadth Course ¹		3
GenEd Breadth Course ¹		3
SPED 2231	Introduction to Special Education ²	3
EDUC 2306	Assessment and Evaluation	3
Credit Hours		15
Spring		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good ¹ or Honors Intellectual Heritage II: The Common Good	3
EDUC 2296	Effective Teaching: Theory and Practice	3
AOD 1166	Interpersonal Processes through the Life Span	3
SGM 3501	Entrepreneurial and Innovative Thinking	3
CTE 4315	Credit by Examination	4
Credit Hours		16
Year 3		
Fall		
TESL 3631	Principles and Practice for Teaching English Learners ²	3
SPED 4105	Assessment in Special Education	3
CTE 3103	Curriculum in Career and Technical Education	3
CTE 4324	Industry-Based Coordination Methods for Work-Based Learning ³	3
CTE 4315	Credit by Examination	4
Credit Hours		16
Spring		
CTE 3101	Principles of Career and Technical Education	3
CTE 3372	Project-based Learning for Today's CTE	3
CTE 4331	Industry-Based Instructional Methods for Work-Based Learning ³	3
CTE 4315	Credit by Examination	4
CTE 4416	Professionalism, Evaluation, and Assessment in Secondary Education	3
Credit Hours		16
Year 4		
Fall		
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3
HDCE 2304	Families and the Community	3
CTE 3102	Teaching Strategies in Career and Technical Education	3
SPED 4109	Educating Students with Disabilities in Inclusive Settings	3
CTE 4315	Credit by Examination	4
Credit Hours		16

Spring		
CTE 4315	Credit by Examination	8
EDUC 4788	Student Teaching in Secondary Education/Career Technical Education	3
SPED 4103	Classroom Management and Positive Behavior Support	3
Credit Hours		14
Total Credit Hours		123

1

General Education course requirements can be found in the University Bulletin.

2

Completion of 1) SPED 2231, 2) EDUC 2109 and 3) TESL 3631 constitute a wavier for the GenEd Human Behavior (GB) category if the courses are completed with a C- or better.

3

Cooperative Education Certification:

1. This program completes 2 of the 3 course requirements for the Cooperative Education Certification.
2. The Cooperative Education NOCTI exam must also be passed.
3. See the Cooperative Education Program Coordinator for more details.

Career and Technical Education BSEd with Business, Computer and Information Technology Education

Overview

The **Bachelor of Science in Education in Career and Technical Education** (BSEd in CTE) is offered by the Department of Teaching and Learning.

Students may complete one of the following **optional concentrations**:

- Business, Computer and Information Technology Education
- Marketing Education

The **BSEd in CTE with the optional concentration in Business, Computer and Information Technology Education** (BCITE) is designed to prepare students who expect to teach business subjects in K-12 and at the 2-year college level in public and private schools. Subject area content (academic specialization) and professional education content are combined with general education content (university curriculum) in order to provide the student with a general education, a field of specialization, and professional training. Moreover, the curriculum aims to combine these elements in such proportions as to give students the balanced perspective of the relation that business education bears to education as a whole.

Note: All students enrolling in the Business, Computer and Information Technology Education or Marketing Education concentrations are advised by the Office of Undergraduate Advising (edadvising@temple.edu) in the College of Education and Human Development and should meet with an advisor each semester. All other students are advised through the Center for Professional Development in Career and Technical Education (cteadv@temple.edu) in the College of Education and Human Development and should meet with an advisor each semester.

Campus Location: Main

Program Code: ED-CTE-BSED

Accreditation

The program is approved as a teacher preparation program by the Pennsylvania Department of Education.

Licensure/Certification

Upon successful completion of the program requirements, candidates may apply for a Pennsylvania Instructional I Teaching Certificate. Please note, Pennsylvania requires assessment of candidates in General Knowledge, Professional Knowledge and/or Subject Area Knowledge prior to issuance of a certificate. Please refer to the PDE web site for testing requirements.

Contact Information

Undergraduate Advising, College of Education and Human Development
 edadvising@temple.edu

Elizabeth Diamond, Program Coordinator

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Kristie Newton, Teaching and Learning Department Chair
KJNewton@temple.edu

Learn more about the Bachelor of Science in Education in Career and Technical Education.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Curriculum

1. All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.
2. All students must take 6 credits of college level math and 6 credits of English (3 in composition and 3 in literature) and pass the required state tests to be certified.
3. All students must take a minimum of two writing-intensive courses at Temple. The writing-intensive courses required for this major are EDUC 2296 and MGSE 3796.

Major Requirements

Code	Title	Credit Hours
AOD 1166	Interpersonal Processes through the Life Span	3
CTE 3372	Project-based Learning for Today's CTE	3
CTE 4324	Industry-Based Coordination Methods for Work-Based Learning	3
CTE 4331	Industry-Based Instructional Methods for Work-Based Learning	3
EDUC 1017 or MATH 1021	Algebra and Algebraic Thinking for Educators College Algebra	4
EDUC 2103	Socio-cultural Foundations of Education in the United States	3
EDUC 2109	Adolescent Development for Educators	3
EDUC 2296	Effective Teaching: Theory and Practice	3
EDUC 2306	Assessment and Evaluation	3
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3
TESL 3631	Principles and Practice for Teaching English Learners	3
SGM 3501	Entrepreneurial and Innovative Thinking	3
SPED 2231	Introduction to Special Education	3
SPED 4103	Classroom Management and Positive Behavior Support	3
SPED 4109	Educating Students with Disabilities in Inclusive Settings	3
Total Credit Hours		46

Program Requirements

Code	Title	Credit Hours
ACCT 2101 or ACCT 2501	Financial Accounting Survey of Accounting	3
CTE 3241	Methods of Teaching Business Education, Marketing Education, and Computer Applications	3
CTE 4285	Industry Education Capstone and Field Experience for Work-Based Learning	3
ECON 1101	Macroeconomic Principles	3
General Business Studies Minor Course		3
General Business Studies Minor Course		3
General Business Studies Minor Course		3
HRM 1101	Leadership and Organizational Management	3
MGSE 4801	Senior Seminar and Performance Assessment in Grades 4-12 Education	3
MGSE 4888	Student Teaching in Grades 4-12	9
MKTG 2101	Marketing Management	3

RMI 2501	Fundamentals of Personal Financial Planning	3
SPED 4201	Effective Transition for Students with Disabilities	3
Total Credit Hours		45

Code	Title	Credit Hours
Minimum Hours Required for Graduation		123

Suggested Academic Plan

Bachelor of Science in Education in Career and Technical Education with Optional Concentration in Business, Computer and Information Technology Education

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

(Certain courses require that a student secure clearances as per the College of Education and Human Development policy; students should check the current list of courses that require clearances on the College of Education and Human Development web site.)

Year 1		Credit Hours
Fall		
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing ¹ or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course (GQ) ¹		4
GenEd Breadth Course ¹		3
GenEd Breadth Course ¹		3
ECON 1101	Macroeconomic Principles ^{3, 4}	3
Credit Hours		17
Spring		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life ¹ or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course ¹		3
EDUC 2103	Socio-cultural Foundations of Education in the United States	3
Select one of the following:		3
ACCT 2101	Financial Accounting ^{3, 4}	
ACCT 2501	Survey of Accounting ^{3, 4}	
Select one of the following:		4
EDUC 1017	Algebra and Algebraic Thinking for Educators	
MATH 1021	College Algebra	
Credit Hours		16
Year 2		
Fall		
GenEd Breadth Course ¹		3
GenEd Breadth Course ¹		3
SPED 2231	Introduction to Special Education ²	3
HRM 1101	Leadership and Organizational Management ⁴	3
MKTG 2101	Marketing Management ⁴	3
Credit Hours		15
Spring		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good ¹ or Honors Intellectual Heritage II: The Common Good	3
AOD 1166	Interpersonal Processes through the Life Span	3
EDUC 2109	Adolescent Development for Educators ²	3
RMI 2501	Fundamentals of Personal Financial Planning ⁴	3
General Business Studies Minor Course ⁵		3
Credit Hours		15

Year 3**Fall**

GenEd Breath Course ¹		3
CTE 3241	Methods of Teaching Business Education, Marketing Education, and Computer Applications	3
EDUC 2306	Assessment and Evaluation	3
CTE 4324	Industry-Based Coordination Methods for Work-Based Learning ⁶	3
General Business Studies Minor Course ⁵		3

Credit Hours	15
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Spring

TESL 3631	Principles and Practice for Teaching English Learners ²	3
EDUC 2296	Effective Teaching: Theory and Practice	3
CTE 3372	Project-based Learning for Today's CTE	3
CTE 4331	Industry-Based Instructional Methods for Work-Based Learning ⁶	3
General Business Studies Minor Course ⁵		3

Credit Hours	15
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Year 4**Fall**

MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3
CTE 4285	Industry Education Capstone and Field Experience for Work-Based Learning ⁶	3
SGM 3501	Entrepreneurial and Innovative Thinking	3
SPED 4201	Effective Transition for Students with Disabilities	3
SPED 4109	Educating Students with Disabilities in Inclusive Settings	3

Credit Hours	15
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Spring

MGSE 4888	Student Teaching in Grades 4-12	9
MGSE 4801	Senior Seminar and Performance Assessment in Grades 4-12 Education	3
SPED 4103	Classroom Management and Positive Behavior Support	3

Credit Hours	15
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Total Credit Hours	123
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1

General Education course requirements can be found in the University Bulletin.

2

Completion of 1) SPED 2231, 2) EDUC 2109 and 3) TESL 3631 constitute a waiver for the GenEd Human Behavior (GB) category if the courses are completed with a C- or better.

3

Part of the General Business Studies Minor through the Fox School of Business and Management. Students are encouraged to complete ECON 1101 and ACCT 2101 early because they are prerequisites for other courses.

4

Students need to apply for the General Business Studies Minor through the Fox School of Business and Management. More information can be obtained in the Bulletin under Fox School of Business and Management - General Business Studies Minor (p. 853).

5

Choose from the following courses: ACCT 2102, ACCT 3511, ECON 1102, ECON 3506, ECON 3511, ECON 3541, HRM 2501, LGLS 1101, LGLS 3504, MIS 2101.

6

Cooperative Education Certification:

1. This program fulfills the course requirements for the Cooperative Education Certification.
2. The Cooperative Education NOCTI exam must also be passed.
3. See the Cooperative Education Program Coordinator for more details.

Career and Technical Education BSEd with Marketing Education Concentration

Overview

The **Bachelor of Science in Education in Career and Technical Education** (BSEd in CTE) is offered by the Department of Teaching and Learning.

Students may complete one of the following **optional concentrations**:

- Business, Computer and Information Technology Education
- Marketing Education

The **BSEd in CTE with the optional concentration in Marketing Education** is designed to prepare students who expect to teach marketing subjects in K-12 and at the 2-year college level in public and private schools. Subject area content (academic specialization) and professional education content are combined with general education content (university curriculum) in order to provide the student with a general education, a field of specialization, and professional training. Moreover, the curriculum aims to combine these elements in such proportions as to give students the balanced perspective of the relation that marketing education bears to education as a whole.

Note: All students enrolling in the Business, Computer and Information Technology Education or Marketing Education concentrations are advised by the Office of Undergraduate Advising (edadvising@temple.edu) in the College of Education and Human Development and should meet with an advisor each semester. All other students are advised through the Center for Professional Development in Career and Technical Education (cteadv@temple.edu) in the College of Education and Human Development and should meet with an advisor each semester.

Campus Location: Main

Program Code: ED-CTE-BSED

Accreditation

The program is approved as a teacher preparation program by the Pennsylvania Department of Education.

Licensure/Certification

Upon successful completion of the program requirements, candidates may apply for a Pennsylvania Instructional I Teaching Certificate. Please note, Pennsylvania requires assessment of candidates in General Knowledge, Professional Knowledge and/or Subject Area Knowledge prior to issuance of a certificate. Please refer to the PDE web site for testing requirements.

Contact Information

Undergraduate Advising, College of Education and Human Development
edadvising@temple.edu

Elizabeth Diamond, Program Coordinator
ediamond@temple.edu

Kristie Newton, Teaching and Learning Department Chair
KJNewton@temple.edu

Learn more about the Bachelor of Science in Education in Career and Technical Education.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Curriculum

1. All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.
2. All students must take 6 credits of college level math and 6 credits of English (3 in composition and 3 in literature) and pass the required state tests to be certified.
3. All students must take a minimum of two writing-intensive courses at Temple. The specific courses that may satisfy the writing-intensive requirement for this major are EDUC 2296 and MGSE 3796.

Major Requirements

Code	Title	Credit Hours
AOD 1166	Interpersonal Processes through the Life Span	3
CTE 3372	Project-based Learning for Today's CTE	3
CTE 4324	Industry-Based Coordination Methods for Work-Based Learning	3
CTE 4331	Industry-Based Instructional Methods for Work-Based Learning	3
EDUC 1017 or MATH 1021	Algebra and Algebraic Thinking for Educators College Algebra	4
EDUC 2103	Socio-cultural Foundations of Education in the United States	3
EDUC 2109	Adolescent Development for Educators	3
EDUC 2296	Effective Teaching: Theory and Practice	3
EDUC 2306	Assessment and Evaluation	3
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3
TESL 3631	Principles and Practice for Teaching English Learners	3
SGM 3501	Entrepreneurial and Innovative Thinking	3
SPED 2231	Introduction to Special Education	3
SPED 4103	Classroom Management and Positive Behavior Support	3
SPED 4109	Educating Students with Disabilities in Inclusive Settings	3
Total Credit Hours		46

Program Requirements

Code	Title	Credit Hours
ACCT 2101 or ACCT 2501	Financial Accounting Survey of Accounting	3
CTE 3241	Methods of Teaching Business Education, Marketing Education, and Computer Applications	3
CTE 4285	Industry Education Capstone and Field Experience for Work-Based Learning	3
ECON 1101	Macroeconomic Principles	3
General Business Studies Minor Course		3
General Business Studies Minor Course		3
General Business Studies Minor Course		3
HRM 1101	Leadership and Organizational Management	3
MGSE 4801	Senior Seminar and Performance Assessment in Grades 4-12 Education	3
MGSE 4888	Student Teaching in Grades 4-12	9
MKTG 2101	Marketing Management	3
RMI 2501	Fundamentals of Personal Financial Planning	3
SPED 4201	Effective Transition for Students with Disabilities	3
Total Credit Hours		45

Code	Title	Credit Hours
Minimum Hours Required for Graduation		123

Suggested Academic Plan

Bachelor of Science in Education in Career and Technical Education with Optional Concentration in Marketing Education

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

(Certain courses require that a student secure clearances as per the College of Education and Human Development policy; students should check the current list of courses that require clearances on the College of Education and Human Development web site.)

Year 1		Credit Hours
Fall		
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing ¹ or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course (GQ) ¹		4
GenEd Breadth Course ¹		3
GenEd Breadth Course ¹		3
ECON 1101	Macroeconomic Principles ^{3, 4}	3
Credit Hours		17
Spring		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life ¹ or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course ¹		3
EDUC 2103	Socio-cultural Foundations of Education in the United States	3
Select one of the following:		3
ACCT 2101	Financial Accounting ^{3, 4}	
ACCT 2501	Survey of Accounting ^{3, 4}	
Select one of the following:		4
EDUC 1017	Algebra and Algebraic Thinking for Educators	
MATH 1021	College Algebra	
Credit Hours		16
Year 2		
Fall		
GenEd Breadth Course ¹		3
GenEd Breadth Course ¹		3
SPED 2231	Introduction to Special Education ²	3
HRM 1101	Leadership and Organizational Management ⁴	3
MKTG 2101	Marketing Management ⁴	3
Credit Hours		15
Spring		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good ¹ or Honors Intellectual Heritage II: The Common Good	3
AOD 1166	Interpersonal Processes through the Life Span	3
EDUC 2109	Adolescent Development for Educators ²	3
RMI 2501	Fundamentals of Personal Financial Planning ⁴	3
General Business Studies Minor Course ⁵		3
Credit Hours		15
Year 3		
Fall		
GenEd Breadth Course ¹		3
CTE 3241	Methods of Teaching Business Education, Marketing Education, and Computer Applications	3
EDUC 2306	Assessment and Evaluation	3
CTE 4324	Industry-Based Coordination Methods for Work-Based Learning ⁶	3
General Business Studies Minor Course ⁵		3
Credit Hours		15
Spring		
TESL 3631	Principles and Practice for Teaching English Learners ²	3
EDUC 2296	Effective Teaching: Theory and Practice	3
CTE 3372	Project-based Learning for Today's CTE	3
CTE 4331	Industry-Based Instructional Methods for Work-Based Learning ⁶	3
General Business Studies Minor Course ⁵		3
Credit Hours		15

Year 4		
Fall		
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3
CTE 4285	Industry Education Capstone and Field Experience for Work-Based Learning ⁶	3
SGM 3501	Entrepreneurial and Innovative Thinking	3
SPED 4201	Effective Transition for Students with Disabilities	3
SPED 4109	Educating Students with Disabilities in Inclusive Settings	3
Credit Hours		15
Spring		
MGSE 4888	Student Teaching in Grades 4-12	9
MGSE 4801	Senior Seminar and Performance Assessment in Grades 4-12 Education	3
SPED 4103	Classroom Management and Positive Behavior Support	3
Credit Hours		15
Total Credit Hours		123

1

General Education course requirements can be found in the University Bulletin.

2

Completion of 1) SPED 2231, 2) EDUC 2109 and 3) TESL 3631 constitute a waiver for the GenEd Human Behavior (GB) category if the courses are completed with a C- or better.

3

Part of the General Business Studies Minor through the Fox School of Business and Management. Students are encouraged to complete ECON 1101 and ACCT 2101 early because they are prerequisites for other courses.

4

Students need to apply for the General Business Studies Minor through the Fox School of Business and Management. More information can be obtained in the Bulletin under Fox School of Business and Management - General Business Studies Minor (p. 853).

5

Choose from the following courses: LGLS 1101, MIS 3538, MKTG 2511, MKTG 3501, MKTG 3504, MKTG 3507, MKTG 3508, MKTG 3512.

6

Cooperative Education Certification:

1. This program fulfills the course requirements for the Cooperative Education Certification.
2. The Cooperative Education NOCTI exam must also be passed.
3. See the Cooperative Education Program Coordinator for more details.

Diversity and Inclusion Certificate

Overview

The **Certificate in Diversity and Inclusion** is offered by the Department of Psychological Studies in Education. Students who earn this certificate will be able to negotiate issues of power in a variety of settings, and will be positioned to act as advocates and organizers for people who have been systemically marginalized based on a variety of socially constructed characteristics including race, socioeconomic status, disability, immigration status and ethnicity. A certificate in Diversity and Inclusion enables and empowers our students to be leaders in both public and private sectors. Requirements of the certificate include four three-credit courses, and a comprehensive reflective paper.

Campus Location: Main

Program Code: ED-DI-CERT

Contact Information

Undergraduate Advising, College of Education and Human Development
 edadvising@temple.edu

Shanta Hattikudur, Program Coordinator
 shanta@temple.edu

Learn more about the undergraduate certificate in Diversity and Inclusion.

Requirements

Number of Credits Required to Complete the Certificate: 12

Code	Title	Credit Hours
EDUC 1001	Diversity and Inclusion: Reflective Paper ¹	0
AOD 1166	Interpersonal Processes through the Life Span	3
AOD 2218	Leadership in Organizations	3
SPED 2231	Introduction to Special Education	3
URBE 4496	Understanding Urban Communities	3
Total Credit Hours		12

1

Course should be completed with final certificate class (URBE 4496).

HDCE majors are not eligible to complete this certificate.

Early Childhood-Elementary Education (PreK-4) BSEd

Overview

Offered by the Department of Teaching and Learning, the **Bachelor of Science in Education in Early Childhood-Elementary Education (PreK-4)** is designed to prepare teachers to work in programs serving children in pre-kindergarten, kindergarten, primary and early intermediate grades. The program aims to help students gain an appreciation and understanding of child development and learning, build conceptual and practical expertise about effective instruction, acquire a sound philosophy of education, and develop personally and professionally.

One hallmark of the program is the variety of exciting and diverse field experiences. By working directly with children many times over the course of several semesters prior to student teaching, students in the program gain hands-on experience with children of various ages and backgrounds, gaining insight into the creation of effective learning situations which meet the needs of all learners.

Students may complete the **optional concentration** in Special Education.

Campus Location: Main

Program Code: ED-ECED-BSED

Accreditation

The program is approved as a teacher preparation program by the Pennsylvania Department of Education.

Licensure/Certification

Upon successful completion of the program requirements, candidates may apply for a Pennsylvania Instructional I Teaching Certificate. Please note, Pennsylvania requires assessment of candidates in General Knowledge, Professional Knowledge and/or Subject Area Knowledge prior to issuance of a certificate. Please refer to the PDE web site for testing requirements.

Accelerated +1 Programs

The College of Education and Human Development offers accelerated programs, including the opportunity for Early Childhood-Elementary Education (PreK-4) majors to pursue the Early Childhood-Elementary Education (PreK-4) BSEd and Special Education MEd accelerated program. Qualified students earn a bachelor's and a master's degree in a five-year course of study. Learn more about the College of Education and Human Development's +1 Accelerated Programs.

Contact Information

Undergraduate Advising, College of Education and Human Development
edadvising@temple.edu

Judith Flanigan, Program Coordinator
judith.flanigan@temple.edu

Kristie Newton, Teaching and Learning Department Chair

KJNewton@temple.edu

Learn more about the Bachelor of Science in Education in Early Childhood-Elementary Education (PreK-4).

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

- All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum (except where a waiver is noted).
- All students must take a minimum of two writing-intensive (WI) courses at Temple University. The specific writing-intensive courses required for this major are ECED 3296 and SPED 4198.

College Requirements

- Students must be accepted into the certification program prior to taking methods courses; for further details, see "Candidacy" under College Requirements (p. 559).
- Additional University and College requirements are located on the College of Education and Human Development's Academic Policies and Regulations (p. 555) page in this *Bulletin*.

Program Requirements

Code	Title	Credit Hours
Required Courses		
MATH 1015	Introduction to Numbers & Figures	4
EDUC 1016 or MATH 1021	Mathematics for Educators College Algebra	4
ECED 2101	Child Development, Birth to Nine	3
ECED 2104	Integrating the Arts into Early Childhood Education	3
ECED 2105	Cognition and Learning in the Classroom	3
ECED 2106	Language and Literacy Development in Early Childhood: Birth through Kindergarten	3
ECED 2187	Practicum for Pre-K and Kindergarten	3
ECED 3106	Literacy Foundations for the Primary Grades: First Grade through Fourth Grade	3
ECED 3107	Learning Mathematics for the Primary Grades: First through Fourth Grade	3
ECED 3109	Science for the Early Years	3
ECED 3187	Practicum for the Primary Grades	3
ECED 3207	Mathematics and Science Pedagogical Content Knowledge	3
ECED 3208	Social Studies for the Early Years, Pre K-4	3
ECED 3296	Differentiated Literacy and Assessment	3
ECED 4106	The Learning Community: Family and Community Relationships	3
ECED 4187	Senior Practicum in Early Childhood Education	6
ECED 4802	Senior Seminar I in Early Childhood Education	3
ECED 4803	Senior Seminar II in Early Childhood Education	3
ECED 4588	Student Teaching in Early Childhood Education	9
EDUC 2103	Socio-cultural Foundations of Education in the United States	3
SPED 2231	Introduction to Special Education	3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
SPED 4103	Classroom Management and Positive Behavior Support	3
SPED 4198	Literacy Instruction and Assessment in Special Education	3
TESL 3631	Principles and Practice for Teaching English Learners	3
Total Credit Hours		86

Major Requirements

Code	Title	Credit Hours
ECED 3287	Practicum II for the Primary Grades	3
Total Credit Hours		3

Suggested Academic Plan

Bachelor of Science in Education in Early Childhood-Elementary Education (PreK-4)

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

(Certain courses require that a student secure clearances as per the College of Education and Human Development policy; students should check the current list of courses that require clearances on the College of Education and Human Development web site.)

Year 1		Credit Hours
Fall		
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing ³ or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
MATH 1015	Introduction to Numbers & Figures ^{1,3}	4
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		17
Spring		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life ³ or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
GenEd Breadth Course		3
EDUC 2103	Socio-cultural Foundations of Education in the United States ³	3
Select one of the following Algebra courses: ^{1,3,4}		4
EDUC 1016	Mathematics for Educators	
MATH 1021	College Algebra	
Credit Hours		16
Year 2		
Fall		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good ³ or Honors Intellectual Heritage II: The Common Good	3
Elective		3
SPED 2231	Introduction to Special Education ^{2,3}	3
ECED 2101	Child Development, Birth to Nine ^{2,3}	3
GenEd Breadth Course		3
Credit Hours		15
Spring		
ECED 2104	Integrating the Arts into Early Childhood Education	3
ECED 2105	Cognition and Learning in the Classroom ³	3
ECED 2106	Language and Literacy Development in Early Childhood: Birth through Kindergarten ³	3
ECED 2187	Practicum for Pre-K and Kindergarten ³	3
ECED 4106	The Learning Community: Family and Community Relationships	3
Credit Hours		15
Year 3		
Fall		
ECED 3106	Literacy Foundations for the Primary Grades: First Grade through Fourth Grade	3
ECED 3107	Learning Mathematics for the Primary Grades: First through Fourth Grade ¹	3

TESL 3631	Principles and Practice for Teaching English Learners ²	3
ECED 3109	Science for the Early Years	3
ECED 3187	Practicum for the Primary Grades	3
Credit Hours		15
Spring		
ECED 3296	Differentiated Literacy and Assessment	3
ECED 3207	Mathematics and Science Pedagogical Content Knowledge	3
ECED 3208	Social Studies for the Early Years, Pre K-4	3
ECED 3287	Practicum II for the Primary Grades	3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
Credit Hours		15
Year 4		
Fall		
ECED 4802	Senior Seminar I in Early Childhood Education	3
ECED 4187	Senior Practicum in Early Childhood Education	6
SPED 4103	Classroom Management and Positive Behavior Support	3
SPED 4198	Literacy Instruction and Assessment in Special Education	3
Credit Hours		15
Spring		
ECED 4588	Student Teaching in Early Childhood Education	9
ECED 4803	Senior Seminar II in Early Childhood Education	3
Credit Hours		12
Total Credit Hours		120

1

Completion of 1) MATH 1015, 2) MATH 1021 or EDUC 1016 and 3) ECED 3107 constitute the waiver for the GenEd Quantitative Literacy (GQ) category if the courses are completed with a C- or better.

2

Completion of 1) SPED 2231, 2) ECED 2101 and 3) TESL 3631 constitute the waiver for the GenEd Human Behavior (GB) category if the courses are completed with a C- or better.

3

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits (Intellectual Heritage I: The Good Life or Intellectual Heritage II: The Common Good); no 0700 or pre-college level courses can count toward these requirements.

4

Students selecting MATH 1021 should do so in consultation with a CEHD academic advisor.

Early Childhood-Elementary Education (PreK-4) BSEd with Special Education Concentration

Overview

Offered by the Department of Teaching and Learning, the **Bachelor of Science in Education in Early Childhood-Elementary Education (PreK-4) with optional Concentration in Special Education (K-8)** is designed to prepare teachers to work in programs serving diverse learners in a variety of settings in grades pre-kindergarten through four. In addition to certification in early childhood-elementary education, students in this concentration will learn to implement evidence-based instructional practices in classrooms with students of diverse abilities. Furthermore, students will apply their skills in a variety of field experiences including a practicum for diverse learners focused on addressing the needs of special education students and English language learners.

Note: Students must declare the special education concentration (a.k.a. dual certification) prior to the sixth semester as it appears in the eight-semester matrix.

Campus Location: Main

Program Code: ED-ECED-BSED

Accreditation

The program is approved as a teacher preparation program by the Pennsylvania Department of Education.

Licensure/Certification

Upon successful completion of the program requirements, candidates may apply for a Pennsylvania Instructional I Teaching Certificate. Please note, Pennsylvania requires assessment of candidates in General Knowledge, Professional Knowledge and/or Subject Area Knowledge prior to issuance of a certificate. Please refer to the PDE web site for testing requirements.

Accelerated +1 Programs

The College of Education and Human Development offers accelerated programs, including the opportunity for Early Childhood-Elementary Education (PreK-4) majors to pursue the Early Childhood-Elementary Education (PreK-4) BSEd and Special Education MEd accelerated program. Qualified students earn a bachelor's and a master's degree in a five-year course of study. Note: Students majoring in Early Childhood-Elementary Education (PreK-4) with the optional concentration in Special Education are **not eligible** for the Early Childhood-Elementary Education (PreK-4) BSEd and Special Education MEd accelerated program. If students are interested in the accelerated program, they should meet with an academic advisor.

Contact Information

Undergraduate Advising, College of Education and Human Development
edadvising@temple.edu

Judith Flanigan, Program Coordinator
judith.flanigan@temple.edu

Kristie Newton, Teaching and Learning Department Chair
KJNewton@temple.edu

Learn more about the Bachelor of Science in Education in Early Childhood-Elementary Education (PreK-4).

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

- All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum (except where a waiver is noted).
- All students must take a minimum of two writing-intensive (WI) courses at Temple University. The specific writing-intensive courses required for this major are ECED 3296 and SPED 4198.

College Requirements

- Students must be accepted into the certification program prior to taking methods courses; for further details, see "Candidacy" under College Requirements (p. 559).
- Additional University and College requirements are located on the College of Education and Human Development's Academic Policies and Regulations (p. 555) page in this *Bulletin*.

Program Requirements

Code	Title	Credit Hours
Required Courses		
MATH 1015	Introduction to Numbers & Figures	4
EDUC 1016 or MATH 1021	Mathematics for Educators College Algebra	4
ECED 2101	Child Development, Birth to Nine	3
ECED 2104	Integrating the Arts into Early Childhood Education	3
ECED 2105	Cognition and Learning in the Classroom	3
ECED 2106	Language and Literacy Development in Early Childhood: Birth through Kindergarten	3
ECED 2187	Practicum for Pre-K and Kindergarten	3
ECED 3106	Literacy Foundations for the Primary Grades: First Grade through Fourth Grade	3

ECED 3107	Learning Mathematics for the Primary Grades: First through Fourth Grade	3
ECED 3109	Science for the Early Years	3
ECED 3187	Practicum for the Primary Grades	3
ECED 3207	Mathematics and Science Pedagogical Content Knowledge	3
ECED 3208	Social Studies for the Early Years, Pre K-4	3
ECED 3296	Differentiated Literacy and Assessment	3
ECED 4106	The Learning Community: Family and Community Relationships	3
ECED 4187	Senior Practicum in Early Childhood Education	6
ECED 4802	Senior Seminar I in Early Childhood Education	3
ECED 4803	Senior Seminar II in Early Childhood Education	3
ECED 4588	Student Teaching in Early Childhood Education	9
EDUC 2103	Socio-cultural Foundations of Education in the United States	3
SPED 2231	Introduction to Special Education	3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
SPED 4103	Classroom Management and Positive Behavior Support	3
SPED 4198	Literacy Instruction and Assessment in Special Education	3
TESL 3631	Principles and Practice for Teaching English Learners	3
Total Credit Hours		86

Major Requirements

Code	Title	Credit Hours
SPED 2128	Assistive Technology and Universal Design for Learning	3
SPED 3201	Effective Instructional Strategies for Students with Moderate to Significant Disabilities	3
SPED 3287	Practicum for Diverse Learners	3
SPED 4201	Effective Transition for Students with Disabilities	3
Total Credit Hours		12

Suggested Academic Plan

Bachelor of Science in Education in Early Childhood-Elementary Education (PreK-4) with Optional Concentration in Special Education

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

(Certain courses require that a student secure clearances as per the College of Education and Human Development policy; students should check the current list of courses that require clearances on the College of Education and Human Development web site.)

Year 1		
Fall		Credit Hours
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing ³ or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
MATH 1015	Introduction to Numbers & Figures ^{1,3}	4
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		17
Spring		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life ³ or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
GenEd Breadth Course		3
EDUC 2103	Socio-cultural Foundations of Education in the United States ³	3
Select one of the following Algebra courses: ^{1,3,4}		4

EDUC 1016	Mathematics for Educators	
MATH 1021	College Algebra	
Credit Hours		16
Year 2		
Fall		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good ³ or Honors Intellectual Heritage II: The Common Good	3
SPED 2128	Assistive Technology and Universal Design for Learning	3
SPED 2231	Introduction to Special Education ^{2,3}	3
ECED 2101	Child Development, Birth to Nine ^{2,3}	3
GenEd Breadth Course		3
Credit Hours		15
Spring		
ECED 2104	Integrating the Arts into Early Childhood Education	3
ECED 2105	Cognition and Learning in the Classroom ³	3
ECED 2106	Language and Literacy Development in Early Childhood: Birth through Kindergarten ³	3
ECED 2187	Practicum for Pre-K and Kindergarten ³	3
ECED 4106	The Learning Community: Family and Community Relationships	3
Credit Hours		15
Year 3		
Fall		
ECED 3106	Literacy Foundations for the Primary Grades: First Grade through Fourth Grade	3
ECED 3107	Learning Mathematics for the Primary Grades: First through Fourth Grade ¹	3
TESL 3631	Principles and Practice for Teaching English Learners ²	3
ECED 3109	Science for the Early Years	3
ECED 3187	Practicum for the Primary Grades	3
Credit Hours		15
Spring		
ECED 3296	Differentiated Literacy and Assessment	3
ECED 3207	Mathematics and Science Pedagogical Content Knowledge	3
ECED 3208	Social Studies for the Early Years, Pre K-4	3
SPED 3201	Effective Instructional Strategies for Students with Moderate to Significant Disabilities	3
SPED 3287	Practicum for Diverse Learners	3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
Credit Hours		18
Year 4		
Fall		
ECED 4802	Senior Seminar I in Early Childhood Education	3
ECED 4187	Senior Practicum in Early Childhood Education	6
SPED 4103	Classroom Management and Positive Behavior Support	3
SPED 4198	Literacy Instruction and Assessment in Special Education	3
Credit Hours		15
Spring		
ECED 4588	Student Teaching in Early Childhood Education	9
ECED 4803	Senior Seminar II in Early Childhood Education	3
SPED 4201	Effective Transition for Students with Disabilities	3
Credit Hours		15
Total Credit Hours		126

1

Completion of 1) MATH 1015, 2) MATH 1021 or EDUC 1016 and 3) ECED 3107 constitute the waiver for the GenEd Quantitative Literacy (GQ) category if the courses are completed with a C- or better.

2

Completion of 1) SPED 2231, 2) ECED 2101 and 3) TESL 3631 constitute the waiver for the GenEd Human Behavior (GB) category if the courses are completed with a C- or better.

3

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits (Intellectual Heritage I: The Good Life or Intellectual Heritage II: The Common Good); no 0700 or pre-college level courses can count toward these requirements.

4

Students selecting MATH 1021 should do so in consultation with a CEHD academic advisor.

Education Minor

Overview

The **Minor in Education** is designed for Temple University undergraduate students who have either a professional or personal interest in education, urban schools, or children but are majoring in another discipline. The Education minor provides undergraduate students with broad, foundational knowledge about the state of education, adolescent development, and community and school relationships. Students whose research interests are content-based, such as political science, history, and geography and urban studies, but have connections to education will benefit from exposure to schools through field placements and education theory. This minor is also ideal for students who plan to enter occupations in fields such as policy, counseling, and child psychology, which have connections to education. Finally, this minor is an opportunity for students to investigate careers in education. Through coursework and field experiences students will be interacting with education majors and working in schools, thus providing them with a sample of some of the work that pre-service teachers do. This carefully designed sequence of courses includes field experiences such as tutoring, observations in after school programs, and work in community centers to support in-class learning.

Campus Location: Main

Contact Information

Undergraduate Advising, College of Education and Human Development
edadvising@temple.edu

Tim Fukawa-Connelly, Program Coordinator
tim.fc@temple.edu

Requirements

This minor consists of 18 credits. Students must take the following six courses:

Code	Title	Credit Hours
EDUC 2103	Socio-cultural Foundations of Education in the United States	3
EDUC 2109	Adolescent Development for Educators	3
ECED 4106	The Learning Community: Family and Community Relationships	3
EDUC 4441	Discourse Practices in Diverse Communities	3
URBE 4496	Understanding Urban Communities	3
EDUC 4091	Capstone Project: Minor in Education	3
Total Credit Hours		18

English Language Teaching Certificate

Overview

Designed for students in almost any program throughout the university, the **Certificate in English Language Teaching**, offered by the Department of Teaching and Learning, equips participants with a foundational understanding of language structure and development and strategies for teaching and working with English language learners beyond the K-12 classroom (in the U.S.).¹ Grounded in a socio-cultural perspective, the program provides first-hand practical experience to build language teaching skills, including lesson planning/delivery, curriculum development, and assessment. Upon completion, students will find themselves knowledgeable of the cultural, social, and political complexities of language education, learning and use, and be able to skillfully draw on this awareness in a broad range of international, professional, and teaching contexts. This program is ideal for those who want to develop a solid foundation for teaching English to non-native speakers.

1

This certificate does not lead to Pennsylvania Department of Education teacher certification; it is not intended for teacher education students. Students enrolled in teacher education majors (programs) are advised to enroll in courses that lead to Pennsylvania Department of Education certification in Teaching English (ESL) K-12. Students enrolled in a teacher education program leading towards Pennsylvania Instructional I certification (and those who currently hold this certification) should contact College of Education and Human Development advising at edadvising@temple.edu for information on courses toward Teaching English K-12 (ESL).

Campus Location: Main, Online

Program Code: ED-ELTC-CERT

Contact Information

Undergraduate Advising, College of Education and Human Development
edadvising@temple.edu

Elvis Wagner, Program Coordinator
elvis.wagner@temple.edu

Learn more about the undergraduate certificate in English Language Teaching.

Requirements

Number of Didactic Credits Required to Complete the Certificate: 12

Code	Title	Credit Hours
TESL 4442	Strategies for Teaching English as an Additional Language	3
TESL 4443	Teaching English World-Wide	3
TESL 4444	English Language Teaching: Curriculum and Assessment	3
EDUC 4441	Discourse Practices in Diverse Communities	3
or TESL 3613	Understanding Multilingual Students' Language and Literacy Development	
Total Credit Hours		12

Human Development and Community Engagement BS

Overview

Offered by the Department of Psychological Studies in Education, the **Bachelor of Science in Human Development and Community Engagement** (HDCE) prepares students to influence the programs, policies and practices of schools, agencies and governmental bodies. Graduates with this major will be prepared for careers in areas such as non-profit programming, human services, and other fields that require the application and understanding of human development. This program provides the training needed to understand factors that impede or facilitate the cognitive, social and physical development of individuals, particularly in urban communities.

This program includes coursework in child development, intercultural communication, research and program evaluation methods, organizational development, urban education, and leadership. The HDCE major nurtures future professionals who are committed to serving their community. A unique feature of the major is the opportunity for undergraduate students to gain practical, hands-on experience through a year-long practicum and internship at a local community organization.

In order to tailor the degree to students' interests and goals, students **are required to select and complete courses in one of the following concentrations:**

- **Applied Behavior Analysis:** Students will specialize their knowledge in Applied Behavior Analysis. They will learn to apply behavior analytic skills to tackle problems important to society in a variety of settings such as educational institutions, behavioral health, and community organizations. This coursework meets the coursework requirements for the Board-Certified assistant Behavior Analyst Examination® and is a BACB verified course sequence.
- **Community Education:** Students concentrating in Community Education are interested in working in community related educational settings. They will master the theories and the techniques of teaching effectively outside the classroom. They will learn to tailor instructional approaches to the unique circumstances of widely diverse communities. Students with this concentration are interested in pursuing job opportunities at out-of-school-time programs, early learning centers, community and recreation centers, museums and more.
- **Human Services:** Human services is a broadly defined field that seeks to improve the overall quality of life of individuals (with particular focus on children and vulnerable populations) through the prevention and remediation of problems. Students will gain theoretical and practical understanding

of various psychological constructs at the individual and societal levels. This concentration prepares students for entry-level positions and graduate degree programs in fields such as school psychology, counseling psychology, and social work.

- **Non-Profit Management and Social Entrepreneurship:** Students concentrating in Non-Profit Management and Social Entrepreneurship will gain an understanding of the non-profit sector and for-profits focused on social, cultural, and environmental change. They will gain insight about the issues that leaders face in this growing field and learn how to communicate in order to lead systemic change in communities and organizations. They will also learn about the design and structure of financial management, nonprofit and social enterprise organizations, revenue generation, and strategic and project-based management.

Campus Location: Main

Program Code: ED-HDCE-BS

Accelerated +1 Programs

The College of Education and Human Development offers accelerated programs, including the opportunity for Human Development and Community Engagement majors to pursue the following +1 Accelerated Programs:

- +1 Accelerated Program in Human Development and Community Engagement BS + Applied Behavior Analysis MEd
- +1 Accelerated Program in Any Temple Major + Advocacy and Organizational Development MEd
- +1 Accelerated Program in Any Temple Major + Higher Education MEd
- +1 Accelerated Program in Any Temple Major + Teaching English to Speakers of Other Languages MEd

Qualified students earn a bachelor's and a master's degree in a five-year course of study. Learn more about the College of Education and Human Development's +1 Accelerated Programs.

Contact Information

Undergraduate Advising, College of Education and Human Development
edadvising@temple.edu

Kelly McGinn, Program Coordinator
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Shanta Hattikudur, Psychological Studies in Education Department Chair
shanta@temple.edu

Learn more about the Bachelor of Science in Human Development and Community Engagement.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary Of Requirements

University Requirements

- All students must complete Temple University's General Education (GenEd (p. 83)) curriculum.
- All students must take a minimum of two writing-intensive courses at Temple University (including transfer students). The specific writing-intensive courses required for this major are AOD 3396 and URBE 4496.

College Requirements

- Refer to the College Requirements (p. 559) for specific information.

Program Requirements

- Students must complete 42 credit hours in the major, including a community internship of 6-12 credits.
- All courses in the major must be passed with a grade of "C-" or better and students must maintain a 2.0 cumulative GPA.

Code	Title	Credit Hours
AOD 1166	Interpersonal Processes through the Life Span	3
HDCE 3332	Professional Seminar in Human Development and Community Engagement I	1
HDCE 3333	Professional Seminar in Human Development and Community Engagement II	1
HDCE 3334	Professional Seminar in Human Development and Community Engagement III	1
Choose two of the following:		6

ECED 2101	Child Development, Birth to Nine	
EDUC 2109	Adolescent Development for Educators	
AOD 3317	Adult and Workforce Development	
EPSY 2325	Statistics for Decision Making	3
AOD 3396	Organizational Processes (WI)	3
HDCE 2304	Families and the Community	3
EDUC 4441	Discourse Practices in Diverse Communities	3
HDCE 4305	Curriculum and Training Design	3
HDCE 4333	Program Evaluation	3
URBE 4496	Understanding Urban Communities (WI)	3
HDCE 4187	Practicum in Applied Development	3
HDCE 4185	Community Internship and Seminar	6 TO 12
Total Credit Hours		42-48

Concentration Requirements

- Students must choose one of the following concentrations:
 - Applied Behavior Analysis
 - Community Education
 - Human Services
 - Non-Profit Management and Social Entrepreneurship
- Students must complete the five courses (15 credits) required for the chosen concentration. See the Academic Plan for details.

Suggested Academic Plan

Bachelor of Science in Human Development and Community Engagement

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

(Certain courses require that a student secure clearances as per the College of Education and Human Development policy; students should check the current list of courses that require clearances on the College of Education and Human Development web site.)

Year 1		
Fall		Credit Hours
GenEd Quantitative Literacy Course ^{GQ}		4
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Spring		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		13
Year 2		
Fall		
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
HDCE 3332	Professional Seminar in Human Development and Community Engagement I	1
Choose one of the following:		3
ECED 2101	Child Development, Birth to Nine	
EDUC 2109	Adolescent Development for Educators	

AOD 3317	Adult and Workforce Development	
Content Course ¹		3
Elective		3
Elective		3
Credit Hours		16
Spring		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
AOD 1166	Interpersonal Processes through the Life Span	3
Elective		3
Elective		3
Content Course ¹		3
Credit Hours		15
Year 3		
Fall		
HDCE 3334	Professional Seminar in Human Development and Community Engagement III	1
HDCE 2304	Families and the Community	3
EDUC 4441	Discourse Practices in Diverse Communities	3
Choose one of the following:		3
ECED 2101	Child Development, Birth to Nine	
EDUC 2109	Adolescent Development for Educators	
AOD 3317	Adult and Workforce Development	
Content Course ¹		3
Concentration Course		3
Credit Hours		16
Spring		
HDCE 3333	Professional Seminar in Human Development and Community Engagement II ²	1
AOD 3396	Organizational Processes	3
EPSY 2325	Statistics for Decision Making	3
Content Course ¹		3
Concentration Course		3
Concentration Course		3
Credit Hours		16
Year 4		
Fall		
URBE 4496	Understanding Urban Communities	3
HDCE 4187	Practicum in Applied Development ²	3
HDCE 4305	Curriculum and Training Design	3
Concentration Course		3
Concentration Course		3
Credit Hours		15
Spring		
HDCE 4185	Community Internship and Seminar (6, 9, or 12 credits) ³	6-12
HDCE 4333	Program Evaluation	3
Elective credits to meet 122 minimum credits		6-0
Credit Hours		15
Total Credit Hours		122

1

A content course is a course that is part of any program/major offered in the University. All four content courses must come from the same program/major.

2

All Professional Seminars (HDCE 3332, HDCE 3333, and HDCE 3334) must be completed before taking the Practicum in Applied Development (HDCE 4187).

3

Students are able to elect to take an Internship for 6/9/12 credits and must earn at least 122 credits for this degree.

Students are required to choose one of the following concentrations:

Applied Behavior Analysis Concentration:

Code	Title	Credit Hours
ABA 2103	Concepts and Principles of Behavior Analysis	3
ABA 3301	Understanding Autism	3
ABA 3302	Analyzing and Changing Behavior	3
ABA 3303	Evaluating Behavior Change Intervention	3
ABA 3304	Ethics and Applied Behavior Analysis	3
Total Credit Hours		15

Community Education Concentration:

Code	Title	Credit Hours
AOD 2218	Leadership in Organizations	3
SPED 2231	Introduction to Special Education	3
EDUC 2296	Effective Teaching: Theory and Practice	3
URBE 4301	Partnerships between Schools and Communities	3
HDCE 4302	Economics for Education	3
Total Credit Hours		15

Human Services Concentration:

Code	Title	Credit Hours
SPED 2231	Introduction to Special Education	3
CPSY 2301	Helping Professions for Diverse Populations	3
CPSY 2302	Can We Talk? Real World Interviewing	3
SPSY 2303	The Impact of Trauma on the Individual and Society	3
ABA 3301	Understanding Autism	3
Total Credit Hours		15

Non-Profit Management and Social Entrepreneurship Concentration:

Code	Title	Credit Hours
AOD 2176	Team Process in Education	3
AOD 2218	Leadership in Organizations	3
AOD 3318	Systems Approach to Organizational Change	3
AOD 3319	Skill Building for Social Entrepreneurship and Community Engagement	3
AOD 4376	Innovation and Mission-Driven Organizations	3
Total Credit Hours		15

Human Development and Community Engagement Minor

Overview

The **Minor in Human Development and Community Engagement** (HDCE) is designed for Temple University undergraduate students who have either a professional or personal interest in influencing the programs, policies and practices of schools, agencies, non-profit organizations and governmental bodies. This minor is also ideal for students who plan to enter occupations related to applied child development, such as child psychology, teaching,

public health, counseling and social work. Courses in applied statistics and program evaluation equip students with the skills needed to evaluate and improve community programs.

Campus Location: Main

Contact Information

Undergraduate Advising, College of Education and Human Development
edadvising@temple.edu

Kelly McGinn, Program Coordinator
kelly.mcginn@temple.edu

Requirements

The minor in Human Development and Community Engagement consists of 18 credit hours in coursework from programs across the College of Education and Human Development.

Students must complete the following courses:

Code	Title	Credit Hours
Required Courses		
HDCE 2304	Families and the Community	3
URBE 4496	Understanding Urban Communities	3
EPSY 2325	Statistics for Decision Making	3
HDCE 4333	Program Evaluation	3
Development Course		
Select one of the following:		3
ECED 2101	Child Development, Birth to Nine	
EDUC 2109	Adolescent Development for Educators	
AOD 3317	Adult and Workforce Development	
Communication Course		
Select one of the following:		3
AOD 1166	Interpersonal Processes through the Life Span	
EDUC 4441	Discourse Practices in Diverse Communities	
Total Credit Hours		18

All courses must be completed with a minimum grade of C-.

Leadership and Military Science Certificate

Overview

The 14-credit **Certificate in Leadership and Military Science**, offered by the Department of Policy, Organizational and Leadership Studies, is designed for Temple University undergraduate students who participate in the United States Army Reserve Officer Training Corps (ROTC) program. These students have invested a large portion of time in and out of the classroom to prepare themselves to lead soldiers. This academic certificate along with their Army leadership experience makes them highly competitive and marketable to employers.

Campus Location: Main

Program Code: ED-LMS-CERT

Contact Information

Undergraduate Advising, College of Education and Human Development
edadvising@temple.edu

Shanta Hattikudur, Program Coordinator
shanta@temple.edu

Learn more about the undergraduate certificate in Leadership and Military Science.

Requirements

Code	Title	Credit Hours
Military Science		
MLSC 3001	Applied Leadership and Management I	2
MLSC 3002	Applied Leadership and Management II	2
MLSC 4001	Advanced Leadership and Management I	2
MLSC 4002	Advanced Leadership and Management II	2
MLSC 4003	Leadership Lab (required with MLSC 3001, MLSC 3002, MLSC 4001 and MLSC 4002)	0
History		
Select one of the following:		3
HIST 2216	U.S. Civil War	
HIST 2217	Vietnam War	
HIST 2803	Soldiers, Wars, and Societies: The British Army	
HIST 2811	World War I	
HIST 2812	World War II	
HIST 2817	Gender, War, and Society	
HIST 3229	Superpower America	
Adult & Organizational Development		
Select one of the following:		3
AOD 2214	Conflict Processes	
AOD 2218	Leadership in Organizations	
Total Credit Hours		14

Middle Grades Education BSEd with Language Arts Concentration

Overview

Offered by the the Department of Teaching and Learning, the **Bachelor of Science in Education in Middle Grades Education** prepares undergraduate students for middle level teaching (fourth to eighth grades). Middle grades teachers are increasingly sought out and in high-demand in Pennsylvania as well as across the country.

The College of Education and Human Development's program in Middle Grades Education is designed to ensure not only that there are certified teachers to fill the growing vacancies, but that our students graduate highly knowledgeable about learning and teaching as well as committed to pre/adolescent learners from diverse ethnic, economic and geographic backgrounds. To that end, our program focuses on building deep content-specific pedagogical knowledge aligned to the breadth of academic standards and the wide-ranging developmental needs of middle grades students. To develop a strong link between learning theories and actual pedagogical practice, we also require that our students engage in early, often and strategic field/clinical education experiences in middle grades settings.

Our program stands out as cutting-edge because we prepare undergraduate students to teach in both the upper elementary and middle grades classrooms.

Middle Grades Education students **must select one of the following concentrations:**

- Language Arts
- Mathematics
- Mathematics and Language Arts
- Mathematics and Science
- Science
- Science and Language Arts
- Social Studies

In addition to becoming certified to teach all elementary subjects in 4-6th grades, all students in the **BSEd in Middle Grades Education with a Concentration in Language Arts** will pursue certification for 7-8th grades in the area of language arts.

Campus Location: Main

Program Code: ED-MGRE-BSED

GPA Requirements

In order to maintain good standing in Middle Grades Education, students must maintain a 3.0 cumulative grade point average and a 2.0 grade point average in the course work in their concentration area.

Accreditation

The program is approved as a teacher preparation program by the Pennsylvania Department of Education.

Licensure/Certification

Upon successful completion of the program requirements, candidates may apply for a Pennsylvania Instructional I Teaching Certificate. Please note, Pennsylvania requires assessment of candidates in General Knowledge, Professional Knowledge and/or Subject Area Knowledge prior to issuance of a certificate. Please refer to the PDE web site for testing requirements.

Contact Information

Undergraduate Advising, College of Education and Human Development
edadvising@temple.edu

Tim Fukawa-Connelly, Program Coordinator
tim.fc@temple.edu

Kristie Newton, Teaching and Learning Department Chair
KJNewton@temple.edu

Learn more about the Bachelor of Science in Education in Middle Grades Education.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All students must take a minimum of two writing-intensive (WI) courses at Temple University. Writing intensive course numbers end in 96, 97 and 98.

College Requirements

Students receive a Bachelor of Science in Education degree with a recommendation for Pennsylvania teacher certification upon the successful completion of their program requirements with a **minimum cumulative GPA of 3.0 or must meet the Pennsylvania Department of Education's qualifying Praxis score standards**. All students seeking to graduate with the recommendation for certification must also meet the requirements for Candidacy.

The required total minimum credit hours for the Middle Grades Education concentration in Language Arts is 124. These credit hours are satisfied by taking courses in four categories:

1. University General Education requirements (General Education)
2. Education courses
3. Teacher Education Certification Courses (i.e. methods and student teaching)
4. Concentration courses

Major Requirements

Code	Title	Credit Hours
EDUC 2103	Socio-cultural Foundations of Education in the United States ¹	3
EDUC 2109	Adolescent Development for Educators ¹	3
MGSE 2111	Applications of Teaching and Learning Theories to Classroom Practice (grades 4-12)	3
SPED 2231	Introduction to Special Education ¹	3
EDUC 2296	Effective Teaching: Theory and Practice (WI)	3
EDUC 2306	Assessment and Evaluation	3

SPED 3187	Integrated Literacy and Special Education Practicum	3
MGSE 3404	Teaching and Learning Math in the Middle Grades	3
MGSE 3405	Teaching and Learning Science in the Middle Grades	3
TESL 3631	Principles and Practice for Teaching English Learners	3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
SPED 4103	Classroom Management and Positive Behavior Support	3
MGSE 3196	Teaching and Learning Literacy in the Middle Grades (WI)	3
MGSE 4296	Cultures, Communities, and Families (WI)	3
MGSE 4801	Senior Seminar and Performance Assessment in Grades 4-12 Education	3
MGSE 4888	Student Teaching in Grades 4-12	9

Total Credit Hours**54**

1

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits: Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG 2000 level course as specified in footnote 2 below the program requirements; no 0700 or pre-college level courses can count toward these requirements.

Program Requirements for Middle Grades Education with Concentration in Language Arts

Code	Title	Credit Hours
BIOL 1011	General Biology I	4
BIOL 1012	General Biology II	4
or PHYS 1022	Introduction to General Physics II	
MATH 1015	Introduction to Numbers & Figures ¹	4
MATH 1021	College Algebra ¹	4
PHYS 1021	Introduction to General Physics I	4
MATH 1022	Precalculus ¹	4
HIST 1101	U.S. History to 1877	3
or HIST 1102	U.S. History since 1877	
CSCD 1108	Introduction to Linguistics	3
or ANTH 2507	Language and Culture	
or ENG 2821	Introduction to Linguistics	
ENG 2000 level course ^{1,2}		3
ENG 2000 level course ^{1,2}		3
ENG 2000 level course ^{1,2}		3
ENG 2000 level course ^{1,2}		3
ENG 2000+ course		3
ENG 2000+ course		3

Total Credit Hours**48**

1

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits: Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG 2000 level course as specified in footnote 2; no 0700 or pre-college level courses can count toward these requirements.

2

Choose one ENG 2000 level course from the following: ENG 2001, ENG 2003, ENG 2004, ENG 2112, ENG 2115, ENG 2501, ENG 2502, ENG 2503, ENG 2831.

Suggested Academic Plan

Bachelor of Science in Education in Middle Grades Education with Language Arts Concentration

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

To best prepare students in this major for the Praxis II exams, we strongly encourage taking the suggested GenEds listed.

(Certain courses require that a student secure clearances as per the College of Education and Human Development policy; students should check the current list of courses that require clearances on the College of Education and Human Development web site.)

Year 1		
Fall		Credit Hours
BIOL 1011	General Biology I ¹	4
MATH 1021	College Algebra ^{3,4}	4
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing ⁴ or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course ⁵		3
Credit Hours		15
Spring		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life ⁴ or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course ⁵		3
PHYS 1021	Introduction to General Physics I ¹	4
MATH 1022	Precalculus ^{3,4}	4
Select one of the following:		3
CSCD 1108	Introduction to Linguistics	
ANTH 2507	Language and Culture	
ENG 2821	Introduction to Linguistics	
Credit Hours		17
Year 2		
Fall		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good ⁴ or Honors Intellectual Heritage II: The Common Good	3
MATH 1015	Introduction to Numbers & Figures ^{3,4}	4
EDUC 2103	Socio-cultural Foundations of Education in the United States ⁴	3
ENG 2000 level course ^{4,6}		3
GenEd Breadth Course ⁵		3
Credit Hours		16
Spring		
EDUC 2109	Adolescent Development for Educators ^{2,4}	3
SPED 2231	Introduction to Special Education ^{2,4}	3
ENG 2000 level course ^{4,6}		3
ENG 2000 level course ^{4,6}		3
Select one of the following: ¹		4
BIOL 1012	General Biology II	
PHYS 1022	Introduction to General Physics II	
Credit Hours		16
Year 3		
Fall		
GenEd Breadth Course ⁵		3
EDUC 2296	Effective Teaching: Theory and Practice	3
MGSE 2111	Applications of Teaching and Learning Theories to Classroom Practice (grades 4-12)	3
ENG 2000+ Course		3

TESL 3631	Principles and Practice for Teaching English Learners ²	3
Credit Hours		15
Spring		
SPED 3187	Integrated Literacy and Special Education Practicum	3
MGSE 3404	Teaching and Learning Math in the Middle Grades ³	3
MGSE 3196	Teaching and Learning Literacy in the Middle Grades	3
MGSE 3405	Teaching and Learning Science in the Middle Grades	3
ENG 2000 level course ^{4,6}		3
Credit Hours		15
Year 4		
Fall		
MGSE 4296	Cultures, Communities, and Families	3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
EDUC 2306	Assessment and Evaluation	3
ENG 2000+ Course		3
Select one of the following:		3
HIST 1101	U.S. History to 1877	
HIST 1102	U.S. History since 1877	
Credit Hours		15
Spring		
MGSE 4888	Student Teaching in Grades 4-12	9
MGSE 4801	Senior Seminar and Performance Assessment in Grades 4-12 Education	3
SPED 4103	Classroom Management and Positive Behavior Support	3
Credit Hours		15
Total Credit Hours		124

1

The sequence of either 1) BIOL 1011 and BIOL 1012 or 2) PHYS 1021 and PHYS 1022 constitutes a waiver for both of the GenEd Science and Technology (GS) courses required in the GenEd Science and Technology (GS) category if the courses are completed with a C- or better. Students must successfully complete all requirements in one sequence or the other.

2

Completion of 1) SPED 2231, 2) EDUC 2109 and 3) TESL 3631 constitute the waiver for the GenEd Human Behavior (GB) category if the courses are completed with a C- or better.

3

Completion of 1) MATH 1015, 2) MATH 1021, 3) MATH 1022, and 4) MGSE 3404 constitutes a waiver for the GenEd Quantitative Literacy (GQ) category if the courses are completed with a C- or better.

4

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits: Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG 2000 level course as specified in footnote 6; no 0700 or pre-college level courses can count toward these requirements.

5

Suggested GenEd courses: Global/World Society (GG) = ANTH 0867 or GUS 0867; Race & Diversity (GD) = AAAS 0829, ANTH 0829, GUS 0829, HIST 0829, POLS 0829, SOC 0829 or SOC 0929; U.S. Society (GU) = AMST 0848 or HIST 0848.

6

Choose one ENG 2000 level course from the following: ENG 2001, ENG 2003, ENG 2004, ENG 2112, ENG 2115, ENG 2501, ENG 2502, ENG 2503, ENG 2831.

Middle Grades Education BSEd with Mathematics and Language Arts Concentration

Overview

Offered by the the Department of Teaching and Learning, the **Bachelor of Science in Education in Middle Grades Education** prepares undergraduate students for middle level teaching (fourth to eighth grades). Middle grades teachers, particularly in math and science education, are increasingly sought out and in high-demand in Pennsylvania as well as across the country.

The College of Education and Human Development's program in Middle Grades Education is designed to ensure not only that there are certified teachers to fill the growing vacancies, but that our students graduate highly knowledgeable about learning and teaching as well as committed to pre/adolescent learners from diverse ethnic, economic and geographic backgrounds. To that end, our program focuses on building deep content-specific pedagogical knowledge aligned to the breadth of academic standards and the wide-ranging developmental needs of middle grades students. To develop a strong link between learning theories and actual pedagogical practice, we also require that our students engage in early, often and strategic field/clinical education experiences in middle grades settings.

Our program stands out as cutting-edge because we prepare undergraduate students to teach in both the upper elementary and middle grades classrooms.

Middle Grades Education students **must select one of the following concentrations:**

- Language Arts
- Mathematics
- Mathematics and Language Arts
- Mathematics and Science
- Science
- Science and Language Arts
- Social Studies

In addition to becoming certified to teach all elementary subjects in 4-6th grades, all students in the **BSEd in Middle Grades Education with a Concentration in Mathematics and Language Arts** will pursue dual certification for 7-8th grades in the areas of mathematics and language arts. The required minimum number of credit hours is 126.

Campus Location: Main

Program Code: ED-MGRE-BSED

GPA Requirements

In order to maintain good standing in Middle Grades Education, students must maintain a 3.0 cumulative grade point average and a 2.0 grade point average in the course work in their concentration area.

Accreditation

The program is approved as a teacher preparation program by the Pennsylvania Department of Education.

Licensure/Certification

Upon successful completion of the program requirements, candidates may apply for a Pennsylvania Instructional I Teaching Certificate. Please note, Pennsylvania requires assessment of candidates in General Knowledge, Professional Knowledge and/or Subject Area Knowledge prior to issuance of a certificate. Please refer to the PDE web site for testing requirements.

Contact Information

Undergraduate Advising, College of Education and Human Development
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Tim Fukawa-Connelly, Program Coordinator
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Kristie Newton, Teaching and Learning Department Chair
KJNewton@temple.edu

Learn more about the Bachelor of Science in Education in Middle Grades Education.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All students must take a minimum of two writing-intensive (WI) courses at Temple University. Writing intensive course numbers end in 96, 97 and 98.

College Requirements

Students receive a Bachelor of Science in Education degree with a recommendation for Pennsylvania teacher certification upon the successful completion of their program requirements with a **minimum cumulative GPA of 3.0 or must meet the Pennsylvania Department of Education's qualifying Praxis score standards.**

The required total minimum credit hours for the Middle Grades Education concentration in Mathematics and Language Arts is 126. These credit hours are satisfied by taking courses in four categories:

1. University General Education requirements (General Education)
2. Education courses
3. Teacher Education Certification Courses (i.e. methods and student teaching)
4. Concentration courses

All students seeking to graduate with the recommendation for certification must also meet the requirements for Candidacy.

Major Requirements

Code	Title	Credit Hours
EDUC 2103	Socio-cultural Foundations of Education in the United States ¹	3
EDUC 2109	Adolescent Development for Educators ¹	3
MGSE 2111	Applications of Teaching and Learning Theories to Classroom Practice (grades 4-12)	3
SPED 2231	Introduction to Special Education ¹	3
EDUC 2296	Effective Teaching: Theory and Practice ¹	3
EDUC 2306	Assessment and Evaluation	3
SPED 3187	Integrated Literacy and Special Education Practicum	3
MGSE 3404	Teaching and Learning Math in the Middle Grades	3
MGSE 3405	Teaching and Learning Science in the Middle Grades	3
TESL 3631	Principles and Practice for Teaching English Learners	3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
SPED 4103	Classroom Management and Positive Behavior Support	3
MGSE 3196	Teaching and Learning Literacy in the Middle Grades	3
MGSE 4296	Cultures, Communities, and Families	3
MGSE 4801	Senior Seminar and Performance Assessment in Grades 4-12 Education	3
MGSE 4888	Student Teaching in Grades 4-12	9
Total Credit Hours		54

1

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits: Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG 2000 level course as specified in footnote 2 below the program requirements; no 0700 or pre-college level courses can count toward these requirements.

Program Requirements for Middle Grades Education with Concentration in Mathematics and Language Arts

Code	Title	Credit Hours
BIOL 1011	General Biology I	4
BIOL 1012	General Biology II	4
or PHYS 1022	Introduction to General Physics II	
MATH 1013	Elements of Statistics ¹	3
or MATH 2031	Probability and Statistics	
or MATH 2021	Functions and Modeling	
MATH 1015	Introduction to Numbers & Figures	4
PHYS 1021	Introduction to General Physics I	4
MATH 1022	Precalculus ¹	4
MATH 1041	Calculus I ¹	4
MATH 1042	Calculus II ¹	4
HIST 1101	U.S. History to 1877	3
or HIST 1102	U.S. History since 1877	
CSCD 1108	Introduction to Linguistics	3
or ENG 2821	Introduction to Linguistics	
or ANTH 2507	Language and Culture	
ENG 2000 level course ²		3
ENG 2000 level course ²		3
ENG 2000 level course ²		3
MATH 2061	Euclidean Geometry	3
Total Credit Hours		49

1

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits: Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG 2000 level course as specified in footnote 2; no 0700 or pre-college level courses can count toward these requirements.

2

Choose one ENG 2000 level course from the following: ENG 2001, ENG 2003, ENG 2004, ENG 2112, ENG 2115, ENG 2501, ENG 2502, ENG 2503, ENG 2831.

Suggested Academic Plan

Bachelor of Science in Education in Middle Grades Education with Mathematics and Language Arts Concentration

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

To best prepare students in this major for the Praxis II exams, we strongly encourage taking the suggested GenEds listed.

(Certain courses require that a student secure clearances as per the College of Education and Human Development policy; students should check the current list of courses that require clearances on the College of Education and Human Development web site.)

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing ⁴	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Breadth Course ⁵		3
BIOL 1011	General Biology I (includes a lab) ¹	4
MATH 1022	Precalculus ⁴	4
Credit Hours		15

Spring		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life ⁴ or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course ⁵		3
PHYS 1021	Introduction to General Physics I ¹	4
MATH 1041	Calculus I ^{3,4}	4
Select one of the following:		3
CSCD 1108	Introduction to Linguistics	
ENG 2821	Introduction to Linguistics	
ANTH 2507	Language and Culture	
Credit Hours		17
Year 2		
Fall		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good ⁴ or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course ⁵		3
MATH 1042	Calculus II ^{3,4}	4
EDUC 2103	Socio-cultural Foundations of Education in the United States ⁴	3
ENG 2000 level course ⁶		3
Credit Hours		16
Spring		
EDUC 2109	Adolescent Development for Educators ^{2,4}	3
SPED 2231	Introduction to Special Education ^{2,4}	3
Select one of the following: ¹		4
BIOL 1012	General Biology II ((includes a lab))	
PHYS 1022	Introduction to General Physics II ((includes a lab))	
ENG 2000 level course ⁶		3
Select one of the following: ⁴		3
MATH 1013	Elements of Statistics	
MATH 2031	Probability and Statistics	
MATH 2021	Functions and Modeling	
Credit Hours		16
Year 3		
Fall		
GenEd Breadth Course ⁵		4
EDUC 2296	Effective Teaching: Theory and Practice	3
MGSE 2111	Applications of Teaching and Learning Theories to Classroom Practice (grades 4-12)	3
TESL 3631	Principles and Practice for Teaching English Learners ²	3
MATH 1015	Introduction to Numbers & Figures	4
Credit Hours		17
Spring		
MGSE 3404	Teaching and Learning Math in the Middle Grades	3
MGSE 3196	Teaching and Learning Literacy in the Middle Grades ((Spring only))	3
MGSE 3405	Teaching and Learning Science in the Middle Grades	3
SPED 3187	Integrated Literacy and Special Education Practicum	3
MATH 2061	Euclidean Geometry ((Spring only))	3
Credit Hours		15
Year 4		
Fall		
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
MGSE 4296	Cultures, Communities, and Families	3
EDUC 2306	Assessment and Evaluation	3

Select one of the following:		3
HIST 1101	U.S. History to 1877	
HIST 1102	U.S. History since 1877	
ENG 2000 level course ⁶		3
	Credit Hours	15
Spring		
MGSE 4888	Student Teaching in Grades 4-12	9
MGSE 4801	Senior Seminar and Performance Assessment in Grades 4-12 Education	3
SPED 4103	Classroom Management and Positive Behavior Support	3
	Credit Hours	15
	Total Credit Hours	126

1

The sequence of either 1) BIOL 1011 and BIOL 1012 or 2) PHYS 1021 and PHYS 1022 constitute a waiver for both of the GenEd Science and Technology (GS) courses required in the GenEd Science and Technology (GS) category if the courses are completed with a C- or better. Students must successfully complete all requirements in one sequence or the other.

2

Completion of 1) SPED 2231, 2) EDUC 2109 and 3) TESL 3631 constitute the waiver for the GenEd Human Behavior (GB) category if the courses are completed with a C- or better.

3

Completion of either 1) MATH 1041/MATH 1941 or 2) MATH 1042/MATH 1942 constitutes a waiver for the GenEd Quantitative Literacy (GQ) category if the course is completed with a C- or better.

4

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits: Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG 2000 level course as specified in footnote 6; no 0700 or pre-college level courses can count toward these requirements.

5

Suggested GenEd courses: Global/World Society (GG) = ANTH 0867 or GUS 0867; Race & Diversity (GD) = AAAS 0829, ANTH 0829, GUS 0829, HIST 0829, POLS 0829, SOC 0829 or SOC 0929; U.S. Society (GU) = AMST 0848 or HIST 0848.

6

Choose one ENG 2000 level course from the following: ENG 2001, ENG 2003, ENG 2004, ENG 2112, ENG 2115, ENG 2501, ENG 2502, ENG 2503, ENG 2831.

Middle Grades Education BSEd with Mathematics and Science Concentration

Overview

Offered by the the Department of Teaching and Learning, the **Bachelor of Science in Education in Middle Grades Education** prepares undergraduate students for middle level teaching (fourth to eighth grades). Middle grades teachers, particularly in math and science education, are increasingly sought out and in high-demand in Pennsylvania as well as across the country.

The College of Education and Human Development's program in Middle Grades Education is designed to ensure not only that there are certified teachers to fill the growing vacancies, but that our students graduate highly knowledgeable about learning and teaching as well as committed to pre/adolescent learners from diverse ethnic, economic and geographic backgrounds. To that end, our program focuses on building deep content-specific pedagogical knowledge aligned to the breadth of academic standards and the wide-ranging developmental needs of middle grades students. To develop a strong link between learning theories and actual pedagogical practice, we also require that our students engage in early, often and strategic field/clinical education experiences in middle grades settings.

Our program stands out as cutting-edge because we prepare undergraduate students to teach in both the upper elementary and middle grades classrooms.

Middle Grades Education students **must select one of the following concentrations:**

- Language Arts
- Mathematics
- Mathematics and Language Arts
- Mathematics and Science
- Science
- Science and Language Arts
- Social Studies

In addition to becoming certified to teach all elementary subjects in 4-6th grades, all students in the **BSEd in Middle Grades Education with a Concentration in Mathematics and Science** will pursue dual certification for 7-8th grades in the areas of math and science. The required number of credit hours is 127 credits for this concentration.

Campus Location: Main

Program Code: ED-MGRE-BSED

GPA Requirements

In order to maintain good standing in Middle Grades Education, students must maintain a 3.0 cumulative grade point average and a 2.0 grade point average in the course work in their concentration area.

Accreditation

The program is approved as a teacher preparation program by the Pennsylvania Department of Education.

Licensure/Certification

Upon successful completion of the program requirements, candidates may apply for a Pennsylvania Instructional I Teaching Certificate. Please note, Pennsylvania requires assessment of candidates in General Knowledge, Professional Knowledge and/or Subject Area Knowledge prior to issuance of a certificate. Please refer to the PDE web site for testing requirements.

Contact Information

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Learn more about the Bachelor of Science in Education in Middle Grades Education.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All students must take a minimum of two writing-intensive (WI) courses at Temple University. Writing intensive course numbers end in 96, 97 and 98.

College Requirements

Students receive a Bachelor of Science in Education degree with a recommendation for Pennsylvania teacher certification upon the successful completion of their program requirements with a **minimum cumulative GPA of 3.0 or must meet the Pennsylvania Department of Education's qualifying Praxis score standards.**

The required total minimum credit hours for the Middle Grades Education concentration in Mathematics and Science is 127. These credit hours are satisfied by taking courses in four categories:

1. University General Education requirements (General Education)
2. Education courses

3. Teacher Education Certification Courses (i.e. methods and student teaching)
4. Concentration courses

All students seeking to graduate with the recommendation for Instructional I Certification from Pennsylvania must also meet the requirements for Candidacy.

Major Requirements

Code	Title	Credit Hours
EDUC 2103	Socio-cultural Foundations of Education in the United States ¹	3
EDUC 2109	Adolescent Development for Educators ¹	3
MGSE 2111	Applications of Teaching and Learning Theories to Classroom Practice (grades 4-12)	3
SPED 2231	Introduction to Special Education ¹	3
EDUC 2296	Effective Teaching: Theory and Practice	3
EDUC 2306	Assessment and Evaluation	3
SPED 3187	Integrated Literacy and Special Education Practicum	3
MGSE 3404	Teaching and Learning Math in the Middle Grades	3
MGSE 3405	Teaching and Learning Science in the Middle Grades	3
TESL 3631	Principles and Practice for Teaching English Learners	3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
SPED 4103	Classroom Management and Positive Behavior Support	3
MGSE 3196	Teaching and Learning Literacy in the Middle Grades	3
MGSE 4296	Cultures, Communities, and Families	3
MGSE 4801	Senior Seminar and Performance Assessment in Grades 4-12 Education	3
MGSE 4888	Student Teaching in Grades 4-12	9
Total Credit Hours		54

1

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits: Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG 2000 level course, as specified; no 0700 or pre-college level courses can count toward these requirements.

Program Requirements for Middle Grades Education with Concentration in Mathematics and Science

Code	Title	Credit Hours
Select one of the following:		3-4
PHYS 1004	Introduction to Astronomy	
EES 1001	Introductory Geology	
BIOL 1011	General Biology I	4
BIOL 1012	General Biology II	4
MATH 1013	Elements of Statistics	3
or MATH 2031	Probability and Statistics	
or MATH 2021	Functions and Modeling	
CHEM 1021	Introduction to Chemistry I	3
PHYS 1021	Introduction to General Physics I	4
CHEM 1022	Introduction to Chemistry II	3
MATH 1022	Precalculus ¹	4
CHEM 1023	Introduction to Chemistry Laboratory I	1
CHEM 1024	Introduction to Chemistry Laboratory II	1
MATH 1041	Calculus I ¹	4
MATH 1042	Calculus II ¹	4

MATH 1015	Introduction to Numbers & Figures	4
HIST 1101	U.S. History to 1877	3
or HIST 1102	U.S. History since 1877	
MATH 2061	Euclidean Geometry	3
ENG 2501	Introduction to British Writing ¹	3
or ENG 2502	Introduction to American Writing	
or ENG 2503	Introduction to Global Writing	

Total Credit Hours**51-52**

1

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits: Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG 2000 level course, as specified; no 0700 or pre-college level courses can count toward these requirements.

Suggested Academic Plan**Bachelor of Science in Education in Middle Grades Education with Mathematics and Science Concentration****Suggested Plan for New Students Starting in the 2023-2024 Academic Year**

To best prepare students in this major for the Praxis II exams, we strongly encourage taking the suggested GenEds listed.

(Certain courses require that a student secure clearances as per the College of Education and Human Development policy; students should check the current list of courses that require clearances on the College of Education and Human Development web site.)

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing ⁴	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Breadth Course ⁵		3
BIOL 1011	General Biology I (includes a lab) ¹	4
MATH 1022	Precalculus ⁴	4
Credit Hours		15
Spring		
IH 0851	Intellectual Heritage I: The Good Life ⁴	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
GenEd Breadth Course ⁵		3
GenEd Breadth Course ⁵		3
MATH 1041	Calculus I ^{3,4}	4
Select one of the following: ¹		3-4
PHYS 1004	Introduction to Astronomy	
EES 1001	Introductory Geology	
Credit Hours		16-17
Year 2		
Fall		
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
MATH 1042	Calculus II ^{3,4}	4
CHEM 1021	Introduction to Chemistry I ¹	3
CHEM 1023	Introduction to Chemistry Laboratory I ¹	1
EDUC 2103	Socio-cultural Foundations of Education in the United States ⁴	3
Select one of the following: ⁴		3
ENG 2501	Introduction to British Writing	

ENG 2502	Introduction to American Writing	
ENG 2503	Introduction to Global Writing	
Credit Hours		17
Spring		
BIOL 1012	General Biology II ¹	4
CHEM 1022	Introduction to Chemistry II ¹	3
CHEM 1024	Introduction to Chemistry Laboratory II ¹	1
EDUC 2109	Adolescent Development for Educators ^{2,4}	3
SPED 2231	Introduction to Special Education ^{2,4}	3
GenEd Breadth Course ⁵		3
Credit Hours		17
Year 3		
Fall		
PHYS 1021	Introduction to General Physics I ¹	4
EDUC 2296	Effective Teaching: Theory and Practice	3
MGSE 2111	Applications of Teaching and Learning Theories to Classroom Practice (grades 4-12)	3
TESL 3631	Principles and Practice for Teaching English Learners ²	3
MATH 1015	Introduction to Numbers & Figures	4
Credit Hours		17
Spring		
MGSE 3404	Teaching and Learning Math in the Middle Grades	3
MGSE 3196	Teaching and Learning Literacy in the Middle Grades	3
MGSE 3405	Teaching and Learning Science in the Middle Grades	3
SPED 3187	Integrated Literacy and Special Education Practicum	3
MATH 2061	Euclidean Geometry	3
Credit Hours		15
Year 4		
Fall		
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
MGSE 4296	Cultures, Communities, and Families	3
EDUC 2306	Assessment and Evaluation	3
Select one of the following:		3
HIST 1101	U.S. History to 1877	
HIST 1102	U.S. History since 1877	
Select one of the following:		3
MATH 1013	Elements of Statistics	
MATH 2031	Probability and Statistics	
MATH 2021	Functions and Modeling	
Credit Hours		15
Spring		
MGSE 4888	Student Teaching in Grades 4-12	9
MGSE 4801	Senior Seminar and Performance Assessment in Grades 4-12 Education	3
SPED 4103	Classroom Management and Positive Behavior Support	3
Credit Hours		15
Total Credit Hours		127-128

1

The sequence of either 1) BIOL 1011 and BIOL 1012 or 2) CHEM 1021 + CHEM 1023 and CHEM 1022 + CHEM 1024 constitutes a waiver for the two (2) GenEd Science and Technology (GS) courses required in the GenEd Science and Technology (GS) category if the courses are completed with a C- or better; students must complete all requirements in one sequence or the other. Completion of PHYS 1004 with a C- or better constitutes a waiver for one (1) of the two courses required in the GenEd Science and Technology (GS) category. Completion of PHYS 1021 with a C- or better constitutes a waiver for one (1) of the two courses required in the GenEd Science and Technology (GS) category. Completion of EES 1001 with a C- or better constitutes a waiver for one (1) of the two courses required in the GenEd Science and Technology (GS) category.

2

Completion of 1) SPED 2231, 2) EDUC 2109 and 3) TESL 3631 constitutes the waiver for the GenEd Human Behavior (GB) category if the courses are completed with a C- or better.

3

Completion of either 1) MATH 1041/MATH 1941 or 2) MATH 1042/MATH 1942 constitutes a waiver for the GenEd Quantitative Literacy (GQ) category if the course is completed with a C- or better.

4

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits: Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG 2000 level course, as specified; no 0700 or pre-college level courses can count toward these requirements.

5

Suggested GenEd courses: Global/World Society (GG) = ANTH 0867 or GUS 0867; Race & Diversity (GD) = AAAS 0829, ANTH 0829, GUS 0829, HIST 0829, POLS 0829, SOC 0829 or SOC 0929; U.S. Society (GU) = AMST 0848 or HIST 0848.

Middle Grades Education BSEd with Mathematics Concentration

Overview

Offered by the the Department of Teaching and Learning, the **Bachelor of Science in Education in Middle Grades Education** prepares undergraduate students for middle level teaching (fourth to eighth grades). Middle grades teachers are increasingly sought out and in high-demand in Pennsylvania as well as across the country.

The College of Education and Human Development's program in Middle Grades Education is designed to ensure not only that there are certified teachers to fill the growing vacancies, but that our students graduate highly knowledgeable about learning and teaching as well as committed to pre/adolescent learners from diverse ethnic, economic and geographic backgrounds. To that end, our program focuses on building deep content-specific pedagogical knowledge aligned to the breadth of academic standards and the wide-ranging developmental needs of middle grades students. To develop a strong link between learning theories and actual pedagogical practice, we also require that our students engage in early, often and strategic field/clinical education experiences in middle grades settings.

Our program stands out as cutting-edge because we prepare undergraduate students to teach in both the upper elementary and middle grades classrooms.

Middle Grades Education students **must select one of the following concentrations**:

- Language Arts
- Mathematics
- Mathematics and Language Arts
- Mathematics and Science
- Science
- Science and Language Arts
- Social Studies

In addition to becoming certified to teach all elementary subjects in 4-6th grades, all students in the **BSEd in Middle Grades Education with a Concentration in Mathematics** will pursue certification for 7-8th grades in the area of mathematics.

Campus Location: Main

Program Code: ED-MGRE-BSED

GPA Requirements

In order to maintain good standing in Middle Grades Education, students must maintain a 3.0 cumulative grade point average and a 2.0 grade point average in the course work in their concentration area.

Accreditation

The program is approved as a teacher preparation program by the Pennsylvania Department of Education.

Licensure/Certification

Upon successful completion of the program requirements, candidates may apply for a Pennsylvania Instructional I Teaching Certificate. Please note, Pennsylvania requires assessment of candidates in General Knowledge, Professional Knowledge and/or Subject Area Knowledge prior to issuance of a certificate. Please refer to the PDE web site for testing requirements.

Contact Information

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Learn more about the Bachelor of Science in Education in Middle Grades Education.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All students must take a minimum of two writing-intensive (WI) courses at Temple University. Writing intensive course numbers end in 96, 97 and 98.

College Requirements

Students receive a Bachelor of Science in Education degree with a recommendation for Pennsylvania teacher certification upon the successful completion of their program requirements with a **minimum cumulative GPA of 3.0 or must meet the Pennsylvania Department of Education's qualifying Praxis score standards**. All students seeking to graduate with the recommendation for certification must also meet the requirements for Candidacy.

The required total minimum credit hours for the Middle Grades Education concentration in Mathematics is 124. These credit hours are satisfied by taking courses in four categories:

1. University General Education requirements (General Education)
2. Education courses
3. Teacher Education Certification Courses (i.e. methods and student teaching)
4. Concentration courses

Major Requirements

Code	Title	Credit Hours
EDUC 2103	Socio-cultural Foundations of Education in the United States ¹	3
EDUC 2109	Adolescent Development for Educators ¹	3
MGSE 2111	Applications of Teaching and Learning Theories to Classroom Practice (grades 4-12)	3
SPED 2231	Introduction to Special Education ¹	3
EDUC 2296	Effective Teaching: Theory and Practice	3
EDUC 2306	Assessment and Evaluation	3
SPED 3187	Integrated Literacy and Special Education Practicum	3
MGSE 3404	Teaching and Learning Math in the Middle Grades	3
MGSE 3405	Teaching and Learning Science in the Middle Grades	3
TESL 3631	Principles and Practice for Teaching English Learners	3
SPED 4103	Classroom Management and Positive Behavior Support	3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
MGSE 3196	Teaching and Learning Literacy in the Middle Grades	3
MGSE 4296	Cultures, Communities, and Families	3

MGSE 4801	Senior Seminar and Performance Assessment in Grades 4-12 Education	3
MGSE 4888	Student Teaching in Grades 4-12	9
Total Credit Hours		54

1

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits: Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG 2000 level course, as specified; no 0700 or pre-college level courses can count toward these requirements.

Program Requirements for Middle Grades Education with Concentration in Mathematics

Code	Title	Credit Hours
BIOL 1011	General Biology I	4
MATH 1041	Calculus I ¹	4
MATH 1042	Calculus II ¹	4
PHYS 1021	Introduction to General Physics I	4
MATH 2101	Linear Algebra ¹	3
ENG 2501	Introduction to British Writing	3
or ENG 2502	Introduction to American Writing	
or ENG 2503	Introduction to Global Writing	
MATH 2021	Functions and Modeling ¹	3
or MATH 2043	Calculus III	
MATH 2111	Basic Concepts of Math ¹	3
BIOL 1012	General Biology II	4
or PHYS 1022	Introduction to General Physics II	
MATH 1015	Introduction to Numbers & Figures	4
HIST 1101	U.S. History to 1877	3
or HIST 1102	U.S. History since 1877	
MATH 2061	Euclidean Geometry	3
MATH 1013	Elements of Statistics	3
or MATH 2031	Probability and Statistics	
MATH 3096	Introduction to Modern Algebra	3
or MATH 3003	Theory of Numbers	
Total Credit Hours		48

1

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits: Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG 2000 level course, as specified; no 0700 or pre-college level courses can count toward these requirements.

Suggested Academic Plan

Bachelor of Science in Education in Middle Grades Education with Mathematics Concentration

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

To best prepare students in this major for the Praxis II exams, we strongly encourage taking the suggested GenEds listed.

(Certain courses require that a student secure clearances as per the College of Education and Human Development policy; students should check the current list of courses that require clearances on the College of Education and Human Development web site.)

Year 1		Credit Hours
Fall		
BIOL 1011	General Biology I ¹	4
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing ⁴ or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course ⁵		3
MATH 1015	Introduction to Numbers & Figures ⁴	4
Credit Hours		15
Spring		
MATH 1041	Calculus I ^{3,4}	4
PHYS 1021	Introduction to General Physics I ¹	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life ⁴ or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course ⁵		3
GenEd Breadth Course ⁵		3
Credit Hours		17
Year 2		
Fall		
MATH 1042	Calculus II ^{3,4}	4
EDUC 2103	Socio-cultural Foundations of Education in the United States ⁴	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Select one of the following:		3
ENG 2501	Introduction to British Writing	
ENG 2502	Introduction to American Writing	
ENG 2503	Introduction to Global Writing	
Select one of the following: ⁴		3-4
MATH 2021	Functions and Modeling ⁴	
MATH 2043	Calculus III ^{3,4}	
Credit Hours		16-17
Spring		
MATH 2101	Linear Algebra ⁴	3
EDUC 2109	Adolescent Development for Educators ^{2,4}	3
SPED 2231	Introduction to Special Education ^{2,4}	3
Select one of the following: ¹		4
BIOL 1012	General Biology II	
PHYS 1022	Introduction to General Physics II	
GenEd Breadth Course ⁵		3
Credit Hours		16
Year 3		
Fall		
EDUC 2296	Effective Teaching: Theory and Practice	3
MGSE 2111	Applications of Teaching and Learning Theories to Classroom Practice (grades 4-12)	3
MATH 2111	Basic Concepts of Math	3
TESL 3631	Principles and Practice for Teaching English Learners ²	3
Select one of the following:		3
HIST 1101	U.S. History to 1877	
HIST 1102	U.S. History since 1877	
Credit Hours		15
Spring		
MGSE 3404	Teaching and Learning Math in the Middle Grades	3
MGSE 3196	Teaching and Learning Literacy in the Middle Grades	3

MGSE 3405	Teaching and Learning Science in the Middle Grades	3
SPED 3187	Integrated Literacy and Special Education Practicum	3
MATH 2061	Euclidean Geometry	3
Credit Hours		15
Year 4		
Fall		
MGSE 4296	Cultures, Communities, and Families	3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
EDUC 2306	Assessment and Evaluation	3
Select one of the following:		3
MATH 1013	Elements of Statistics	
MATH 2031	Probability and Statistics	
Select one of the following:		3
MATH 3096	Introduction to Modern Algebra	
MATH 3003	Theory of Numbers	
Credit Hours		15
Spring		
MGSE 4888	Student Teaching in Grades 4-12	9
MGSE 4801	Senior Seminar and Performance Assessment in Grades 4-12 Education	3
SPED 4103	Classroom Management and Positive Behavior Support	3
Credit Hours		15
Total Credit Hours		124-125

1

The sequence of either 1) BIOL 1011 and BIOL 1012 or 2) PHYS 1021 and PHYS 1022 constitutes a waiver for both of the GenEd Science and Technology (GS) courses required in the GenEd Science and Technology (GS) category if the courses are completed with a C- or better. Students must successfully complete all requirements in one sequence or the other.

2

Completion of 1) SPED 2231, 2) EDUC 2109 and 3) TESL 3631 constitutes the waiver for the GenEd Human Behavior (GB) category if the courses are completed with a C- or better.

3

Completion of 1) MATH 1041/MATH 1941, 2) MATH 1042/MATH 1942, or 3) MATH 2043 constitutes a waiver for the GenEd Quantitative Literacy (GQ) category if the course is completed with a C- or better.

4

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits: Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG 2000 level course, as specified; no 0700 or pre-college level courses can count toward these requirements.

5

Suggested Gen Ed courses: Global/World Society courses (GG) = ANTH 0867 or GUS 0867; Race & Diversity (GD) = AAAS 0829, ANTH 0829, GUS 0829, HIST 0829, POLS 0829, SOC 0829, or SOC 0929; U.S. Society (GU) = AMST 0848 or HIST 0848.

Middle Grades Education BSEd with Science and Language Arts Concentration

Overview

Offered by the the Department of Teaching and Learning, the **Bachelor of Science in Education in Middle Grades Education** prepares undergraduate students for middle level teaching (fourth to eighth grades).

The College of Education and Human Development's program in Middle Grades Education is designed to ensure not only that there are certified teachers to fill the growing vacancies, but that our students graduate highly knowledgeable about learning and teaching as well as committed to pre/adolescent learners from diverse ethnic, economic and geographic backgrounds. To that end, our program focuses on building deep content-specific pedagogical knowledge aligned to the breadth of academic standards and the wide-ranging developmental needs of middle grades students. To develop

a strong link between learning theories and actual pedagogical practice, we also require that our students engage in early, often and strategic field/clinical education experiences in middle grades settings.

Our program stands out as cutting-edge because we prepare undergraduate students to teach in both the upper elementary and middle grades classrooms.

Middle Grades Education students **must select one of the following concentrations:**

- Language Arts
- Mathematics
- Mathematics and Language Arts
- Mathematics and Science
- Science
- Science and Language Arts
- Social Studies

In addition to becoming certified to teach all elementary subjects in 4-6th grades, all students in the **BSEd in Middle Grades Education with a Concentration in Science and Language Arts** will pursue dual certification for 7-8th grades in the ;areas of science and language arts. The required number of credit hours is 126 credits for this concentration.

Campus Location: Main

Program Code: ED-MGRE-BSED

GPA Requirements

In order to maintain good standing in Middle Grades Education, students must maintain a 3.0 cumulative grade point average and a 2.0 grade point average in the course work in their concentration area.

Accreditation

The program is approved as a teacher preparation program by the Pennsylvania Department of Education.

Licensure/Certification

Upon successful completion of the program requirements, candidates may apply for a Pennsylvania Instructional I Teaching Certificate. Please note, Pennsylvania requires assessment of candidates in General Knowledge, Professional Knowledge and/or Subject Area Knowledge prior to issuance of a certificate. Please refer to the PDE web site for testing requirements.

Contact Information

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Learn more about the Bachelor of Science in Education in Middle Grades Education.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All students must take a minimum of two writing-intensive (WI) courses at Temple University. Writing intensive course numbers end in 96, 97 and 98.

College Requirements

Students receive a Bachelor of Science in Education degree with a recommendation for Pennsylvania teacher certification upon the successful completion of their program requirements with a **minimum cumulative GPA of 3.0 or must meet the Pennsylvania Department of Education's qualifying Praxis score standards.**

The required total minimum credit hours for Middle Grades Education concentration in Science and Language Arts is 126. These credit hours are satisfied by taking courses in four categories:

1. University General Education requirements (General Education)
2. Education courses
3. Teacher Education Certification Courses (i.e. methods and student teaching)
4. Concentration courses

All students seeking to graduate with the recommendation for Instructional I Certification from Pennsylvania must also meet the requirements for Candidacy.

Major Requirements

Code	Title	Credit Hours
EDUC 2103	Socio-cultural Foundations of Education in the United States ¹	3
EDUC 2109	Adolescent Development for Educators ¹	3
MGSE 2111	Applications of Teaching and Learning Theories to Classroom Practice (grades 4-12)	3
SPED 2231	Introduction to Special Education ¹	3
EDUC 2296	Effective Teaching: Theory and Practice	3
EDUC 2306	Assessment and Evaluation	3
SPED 3187	Integrated Literacy and Special Education Practicum	3
MGSE 3404	Teaching and Learning Math in the Middle Grades	3
MGSE 3405	Teaching and Learning Science in the Middle Grades	3
TESL 3631	Principles and Practice for Teaching English Learners	3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
SPED 4103	Classroom Management and Positive Behavior Support	3
MGSE 3196	Teaching and Learning Literacy in the Middle Grades	3
MGSE 4296	Cultures, Communities, and Families	3
MGSE 4801	Senior Seminar and Performance Assessment in Grades 4-12 Education	3
MGSE 4888	Student Teaching in Grades 4-12	9
Total Credit Hours		54

1

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits: Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG 2000 level course as specified in footnote 2 below the program requirements; no 0700 or pre-college level courses can count toward these requirements.

Program Requirements for Middle Grades Education with Concentration in Science and Language Arts

Code	Title	Credit Hours
Select one of the following:		3-4
PHYS 1004	Introduction to Astronomy	
EES 1001	Introductory Geology	
MATH 1015	Introduction to Numbers & Figures	4
BIOL 1011	General Biology I	4
BIOL 1012	General Biology II	4
MATH 1021	College Algebra ¹	4
MATH 1022	Precalculus ¹	4

CHEM 1021	Introduction to Chemistry I	3
PHYS 1021	Introduction to General Physics I	4
CHEM 1022	Introduction to Chemistry II	3
CHEM 1023	Introduction to Chemistry Laboratory I	1
CHEM 1024	Introduction to Chemistry Laboratory II	1
HIST 1101	U.S. History to 1877	3
or HIST 1102	U.S. History since 1877	
CSCD 1108	Introduction to Linguistics	3
or ENG 2821	Introduction to Linguistics	
or ANTH 2507	Language and Culture	
ENG 2000 level course ²		3
ENG 2000 level course ²		3
ENG 2000 level course ²		3
Total Credit Hours		50-51

1

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits: Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG 2000 level course as specified in footnote 2; no 0700 or pre-college level courses can count toward these requirements.

2

Choose one ENG 2000 level course from the following: ENG 2001, ENG 2003, ENG 2004, ENG 2112, ENG 2115, ENG 2501, ENG 2502, ENG 2503, ENG 2831.

Suggested Academic Plan

Bachelor of Science in Education in Middle Grades Education with Science and Language Arts Concentration

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

To best prepare students in this major for the Praxis II exams, we strongly encourage taking the suggested GenEds listed.

(Certain courses require that a student secure clearances as per the College of Education and Human Development policy; students should check the current list of courses that require clearances on the College of Education and Human Development web site.)

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing ⁴	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Breadth Course ⁵		3
MATH 1021	College Algebra ^{3,4}	4
BIOL 1011	General Biology I (includes a lab) ¹	4
Credit Hours		15
Spring		
IH 0851	Intellectual Heritage I: The Good Life ⁴	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
GenEd Breadth Course ⁵		3
GenEd Breadth Course ⁵		3
MATH 1022	Precalculus ^{3,4}	4
BIOL 1012	General Biology II ¹	4
Credit Hours		17

Year 2		
Fall		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
MATH 1015	Introduction to Numbers & Figures ^{3,4}	4
CHEM 1021	Introduction to Chemistry I ¹	3
CHEM 1023	Introduction to Chemistry Laboratory I ¹	1
EDUC 2103	Socio-cultural Foundations of Education in the United States	3
ENG 2000 level course ⁶		3
Credit Hours		17
Spring		
GenEd Breadth Course ⁵		3
CHEM 1022	Introduction to Chemistry II ¹	3
CHEM 1024	Introduction to Chemistry Laboratory II ¹	1
EDUC 2109	Adolescent Development for Educators ^{2,4}	3
SPED 2231	Introduction to Special Education ^{2,4}	3
Select one of the following:		3
CSCD 1108	Introduction to Linguistics	
ENG 2821	Introduction to Linguistics	
ANTH 2507	Language and Culture	
Credit Hours		16
Year 3		
Fall		
TESL 3631	Principles and Practice for Teaching English Learners ²	3
EDUC 2296	Effective Teaching: Theory and Practice	3
MGSE 2111	Applications of Teaching and Learning Theories to Classroom Practice (grades 4-12)	3
ENG 2000 level course ⁶		3
Select one of the following:		3
HIST 1101	U.S. History to 1877	
HIST 1102	U.S. History since 1877	
Credit Hours		15
Spring		
MGSE 3404	Teaching and Learning Math in the Middle Grades ³	3
MGSE 3196	Teaching and Learning Literacy in the Middle Grades	3
MGSE 3405	Teaching and Learning Science in the Middle Grades	3
SPED 3187	Integrated Literacy and Special Education Practicum	3
Select one of the following: ¹		3-4
PHYS 1004	Introduction to Astronomy	
EES 1001	Introductory Geology	
Credit Hours		15-16
Year 4		
Fall		
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
MGSE 4296	Cultures, Communities, and Families	3
PHYS 1021	Introduction to General Physics I ¹	4
EDUC 2306	Assessment and Evaluation	3
ENG 2000 level course ⁶		3
Credit Hours		16
Spring		
MGSE 4888	Student Teaching in Grades 4-12	9
MGSE 4801	Senior Seminar and Performance Assessment in Grades 4-12 Education	3

SPED 4103	Classroom Management and Positive Behavior Support	3
	Credit Hours	15
	Total Credit Hours	126-127

1

The sequence of either 1) BIOL 1011 and BIOL 1012 or 2) CHEM 1021 + CHEM 1023 and CHEM 1022 + CHEM 1024 constitutes the waiver for both of the GenEd Science and Technology (GS) courses required in the GenEd Science and Technology (GS) category if the courses are completed with a C- or better. Students must successfully complete all requirements in one sequence or the other. Completion of PHYS 1004 with a C- or better constitutes a waiver for one (1) of the two courses required in the GenEd Science and Technology (GS) category. Completion of PHYS 1021 with a C- or better constitutes a waiver for one (1) of the two courses required in the GenEd Science and Technology (GS) category. Completion of EES 1001 with a C- or better constitutes a waiver for one (1) of the two courses required in the GenEd Science and Technology (GS) category.

2

Completion of 1) SPED 2231, 2) EDUC 2109 and 3) TESL 3631 constitutes the waiver for the GenEd Human Behavior (GB) category if the courses are completed with a C- or better.

3

Completion of 1) MATH 1015, 2) MATH 1021, 3) MATH 1022, and 4) MGSE 3404 constitutes a waiver for the GenEd Quantitative Literacy (GQ) category if the courses are completed with a C- or better.

4

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits: Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG 2000 level course as specified in footnote 6; no 0700 or pre-college level courses can count toward these requirements.

5

Suggested GenEd courses: Global/World Society (GG) = ANTH 0867 or GUS 0867; Race & Diversity (GD) = AAAS 0829, ANTH 0829, GUS 0829, HIST 0829, POLS 0829, SOC 0829 or SOC 0929; U.S. Society (GU) = AMST 0848 or HIST 0848.

6

Choose one ENG 2000 level course from the following: ENG 2001, ENG 2003, ENG 2004, ENG 2112, ENG 2115, ENG 2501, ENG 2502, ENG 2503, ENG 2831.

Middle Grades Education BSEd with Science Concentration

Overview

Offered by the the Department of Teaching and Learning, the **Bachelor of Science in Education in Middle Grades Education** prepares undergraduate students for middle level teaching (fourth to eighth grades). Middle grades teachers are increasingly sought out and in high-demand in Pennsylvania as well as across the country.

The College of Education and Human Development's program in Middle Grades Education is designed to ensure not only that there are certified teachers to fill the growing vacancies, but that our students graduate highly knowledgeable about learning and teaching as well as committed to pre/adolescent learners from diverse ethnic, economic and geographic backgrounds. To that end, our program focuses on building deep content-specific pedagogical knowledge aligned to the breadth of academic standards and the wide-ranging developmental needs of middle grades students. To develop a strong link between learning theories and actual pedagogical practice, we also require that our students engage in early, often and strategic field/clinical education experiences in middle grades settings.

Our program stands out as cutting-edge because we prepare undergraduate students to teach in both the upper elementary and middle grades classrooms.

Middle Grades Education students **must select one of the following concentrations:**

- Language Arts
- Mathematics
- Mathematics and Language Arts
- Mathematics and Science
- Science
- Science and Language Arts
- Social Studies

In addition to becoming certified to teach all elementary subjects in 4-6th grades, all students in the **BSEd in Middle Grades Education with a Concentration in Science** will pursue certification for 7-8th grades in the area of science.

Campus Location: Main

Program Code: ED-MGRE-BSED

GPA Requirements

In order to maintain good standing in Middle Grades Education, students must maintain a 3.0 cumulative grade point average and a 2.0 grade point average in the course work in their concentration area.

Accreditation

The program is approved as a teacher preparation program by the Pennsylvania Department of Education.

Licensure/Certification

Upon successful completion of the program requirements, candidates may apply for a Pennsylvania Instructional I Teaching Certificate. Please note, Pennsylvania requires assessment of candidates in General Knowledge, Professional Knowledge and/or Subject Area Knowledge prior to issuance of a certificate. Please refer to the PDE web site for testing requirements.

Contact Information

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Learn more about the Bachelor of Science in Education in Middle Grades Education.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All students must take a minimum of two writing-intensive (WI) courses at Temple University. Writing intensive course numbers end in 96, 97 and 98.

College Requirements

Students receive a Bachelor of Science in Education degree with a recommendation for Pennsylvania teacher certification upon the successful completion of their program requirements with a **minimum cumulative GPA of 3.0 or must meet the Pennsylvania Department of Education's qualifying Praxis score standards**. All students seeking to graduate with the recommendation for certification must also meet the requirements for Candidacy.

The required total minimum credit hours for the Middle Grades Education concentration in Science is 125. These credit hours are satisfied by taking courses in four categories:

1. University General Education requirements (General Education)
2. Education courses
3. Teacher Education Certification Courses (i.e. methods and student teaching)
4. Concentration courses

Major Requirements

Code	Title	Credit Hours
EDUC 2103	Socio-cultural Foundations of Education in the United States ¹	3
EDUC 2109	Adolescent Development for Educators ¹	3

MGSE 2111	Applications of Teaching and Learning Theories to Classroom Practice (grades 4-12)	3
SPED 2231	Introduction to Special Education ¹	3
EDUC 2296	Effective Teaching: Theory and Practice	3
EDUC 2306	Assessment and Evaluation	3
SPED 3187	Integrated Literacy and Special Education Practicum	3
MGSE 3404	Teaching and Learning Math in the Middle Grades	3
MGSE 3405	Teaching and Learning Science in the Middle Grades	3
TESL 3631	Principles and Practice for Teaching English Learners	3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
SPED 4103	Classroom Management and Positive Behavior Support	3
MGSE 3196	Teaching and Learning Literacy in the Middle Grades	3
MGSE 4296	Cultures, Communities, and Families	3
MGSE 4801	Senior Seminar and Performance Assessment in Grades 4-12 Education	3
MGSE 4888	Student Teaching in Grades 4-12	9
Total Credit Hours		54

1

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits: Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG 2000 level course, as specified; no 0700 or pre-college level courses can count toward these requirements.

Program Requirements for Middle Grades Education with Concentration in Science

Code	Title	Credit Hours
Select one of the following:		3-4
PHYS 1004	Introduction to Astronomy	
EES 1001	Introductory Geology	
BIOL 1011	General Biology I	4
BIOL 1012	General Biology II	4
MATH 1015	Introduction to Numbers & Figures ¹	4
CHEM 1021 & CHEM 1023	Introduction to Chemistry I and Introduction to Chemistry Laboratory I	4
MATH 1021	College Algebra ¹	4
PHYS 1021	Introduction to General Physics I	4
CHEM 1022 & CHEM 1024	Introduction to Chemistry II and Introduction to Chemistry Laboratory II	4
MATH 1022	Precalculus ¹	4
HIST 1101 or HIST 1102	U.S. History to 1877 U.S. History since 1877	3
EES 2001	Physical Geology	4
EES 2096	Climate Change: Oceans To Atmosphere	4
ENG 2501 or ENG 2502 or ENG 2503	Introduction to British Writing ¹ Introduction to American Writing Introduction to Global Writing	3
Total Credit Hours		49-50

1

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits: Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG 2000 level course, as specified; no 0700 or pre-college level courses can count toward these requirements.

Suggested Academic Plan

Bachelor of Science in Education in Middle Grades Education with Science Concentration

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

To best prepare students in this major for the Praxis II exams, we strongly encourage taking the suggested GenEds listed.

(Certain courses require that a student secure clearances as per the College of Education and Human Development policy; students should check the current list of courses that require clearances on the College of Education and Human Development web site.)

Year 1		Credit Hours
Fall		
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing ⁴ or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course ⁵		3
MATH 1021	College Algebra ^{3,4}	4
Select one of the following: ¹		4
BIOL 1011	General Biology I	
CHEM 1021 & CHEM 1023	Introduction to Chemistry I and Introduction to Chemistry Laboratory I	
Credit Hours		15
Spring		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life ⁴ or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course ⁵		3
GenEd Breadth Course ⁵		3
MATH 1022	Precalculus ^{3,4}	4
Select one of the following: ¹		4
BIOL 1011	General Biology I	
CHEM 1021 & CHEM 1023	Introduction to Chemistry I and Introduction to Chemistry Laboratory I	
Credit Hours		17
Year 2		
Fall		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good ⁴ or Honors Intellectual Heritage II: The Common Good	3
MATH 1015	Introduction to Numbers & Figures ^{3,4}	4
EDUC 2103	Socio-cultural Foundations of Education in the United States ⁴	3
Select one of the following: ¹		4
BIOL 1012	General Biology II	
CHEM 1022 & CHEM 1024	Introduction to Chemistry II and Introduction to Chemistry Laboratory II	
Credit Hours		14
Spring		
EDUC 2109	Adolescent Development for Educators ^{2,4}	3
SPED 2231	Introduction to Special Education ^{2,4}	3
Select one of the following:		3
HIST 1101	U.S. History to 1877	
HIST 1102	U.S. History since 1877	
Select one of the following: ¹		4
BIOL 1012	General Biology II	
CHEM 1022 & CHEM 1024	Introduction to Chemistry II and Introduction to Chemistry Laboratory II	
Select one of the following: ⁴		3

ENG 2501	Introduction to British Writing	
ENG 2502	Introduction to American Writing	
ENG 2503	Introduction to Global Writing	
Credit Hours		16
Year 3		
Fall		
TESL 3631	Principles and Practice for Teaching English Learners ²	3
PHYS 1021	Introduction to General Physics I ¹	4
EDUC 2296	Effective Teaching: Theory and Practice	3
MGSE 2111	Applications of Teaching and Learning Theories to Classroom Practice (grades 4-12)	3
Select one of the following: ¹		3-4
PHYS 1004	Introduction to Astronomy	
EES 1001	Introductory Geology	
Credit Hours		16-17
Spring		
EES 2096	Climate Change: Oceans To Atmosphere	4
MGSE 3404	Teaching and Learning Math in the Middle Grades ³	3
MGSE 3196	Teaching and Learning Literacy in the Middle Grades	3
MGSE 3405	Teaching and Learning Science in the Middle Grades	3
SPED 3187	Integrated Literacy and Special Education Practicum	3
Credit Hours		16
Year 4		
Fall		
MGSE 4296	Cultures, Communities, and Families	3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
EDUC 2306	Assessment and Evaluation	3
EES 2001	Physical Geology	4
GenEd Breadth Course ⁵		3
Credit Hours		16
Spring		
MGSE 4888	Student Teaching in Grades 4-12	9
MGSE 4801	Senior Seminar and Performance Assessment in Grades 4-12 Education	3
SPED 4103	Classroom Management and Positive Behavior Support	3
Credit Hours		15
Total Credit Hours		125-126

1

The sequence of either 1) BIOL 1011 and BIOL 1012 or 2) CHEM 1021 + CHEM 1023 and CHEM 1022 + CHEM 1024 constitutes the waiver for both of the GenEd Science and Technology (GS) courses required in the GenEd Science and Technology (GS) category if the courses are completed with a C- or better. Students must successfully complete all requirements in one sequence or the other. Completion of PHYS 1004 with a C- or better constitutes a waiver for one (1) of the two courses required in the GenEd Science and Technology (GS) category. Completion of PHYS 1021 with a C- or better constitutes a waiver for one (1) of the two courses required in the GenEd Science and Technology (GS) category. Completion of EES 1001 with a C- or better constitutes a waiver for one (1) of the two courses required in the GenEd Science and Technology (GS) category.

2

Completion of 1) SPED 2231, 2) EDUC 2109 and 3) TESL 3631 constitutes the waiver for the GenEd Human Behavior (GB) category if the courses are completed with a C- or better.

3

Completion of 1) MATH 1015, 2) MATH 1021, 3) MATH 1022, and 4) MGSE 3404 constitutes a waiver for the GenEd Quantitative Literacy (GQ) category if the courses are completed with a C- or better.

4

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits: Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG 2000 level course, as specified; no 0700 or pre-college level courses can count toward these requirements.

5

Suggested GenEd courses: Global/World Society (GG) = ANTH 0867 or GUS 0867; Race & Diversity (GD) = AAAS 0829, ANTH 0829, GUS 0829, HIST 0829, POLS 0829, SOC 0829 or SOC 0929; U.S. Society (GU) = AMST 0848 or HIST 0848.

Middle Grades Education BSEd with Social Studies Concentration

Overview

Offered by the the Department of Teaching and Learning, the **Bachelor of Science in Education in Middle Grades Education** prepares undergraduate students for middle level teaching (fourth to eighth grades). Middle grades teachers are increasingly sought out and in high-demand in Pennsylvania as well as across the country.

The College of Education and Human Development's program in Middle Grades Education is designed to ensure not only that there are certified teachers to fill the growing vacancies, but that our students graduate highly knowledgeable about learning and teaching as well as committed to pre/adolescent learners from diverse ethnic, economic and geographic backgrounds. To that end, our program focuses on building deep content-specific pedagogical knowledge aligned to the breadth of academic standards and the wide-ranging developmental needs of middle grades students. To develop a strong link between learning theories and actual pedagogical practice, we also require that our students engage in early, often and strategic field/clinical education experiences in middle grades settings.

Our program stands out as cutting-edge because we prepare undergraduate students to teach in both the upper elementary and middle grades classrooms.

Middle Grades Education students **must select one of the following concentrations**:

- Language Arts
- Mathematics
- Mathematics and Language Arts
- Mathematics and Science
- Science
- Science and Language Arts
- Social Studies

In addition to becoming certified to teach all elementary subjects in 4-6th grades, all students in the **BSEd in Middle Grades Education with a Concentration in Social Studies** will pursue certification for 7-8th grades in the area of social studies.

Campus Location: Main

Program Code: ED-MGRE-BSED

GPA Requirements

In order to maintain good standing in Middle Grades Education, students must maintain a 3.0 cumulative grade point average and a 2.0 grade point average in the course work in their concentration area.

Accreditation

The program is approved as a teacher preparation program by the Pennsylvania Department of Education.

Licensure/Certification

Upon successful completion of the program requirements, candidates may apply for a Pennsylvania Instructional I Teaching Certificate. Please note, Pennsylvania requires assessment of candidates in General Knowledge, Professional Knowledge and/or Subject Area Knowledge prior to issuance of a certificate. Please refer to the PDE web site for testing requirements.

Contact Information

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Learn more about the Bachelor of Science in Education in Middle Grades Education.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All students must take a minimum of two writing-intensive (WI) courses at Temple University. Writing intensive course numbers end in 96, 97 and 98.

College Requirements

Students receive a Bachelor of Science in Education degree with a recommendation for Pennsylvania teacher certification upon the successful completion of their program requirements with a **minimum cumulative GPA of 3.0 or must meet the Pennsylvania Department of Education's qualifying Praxis score standards**. All students seeking to graduate with the recommendation for certification must also meet the requirements for Candidacy.

The required total minimum credit hours for the Middle Grades Education concentration in Social Studies is 124. These credit hours are satisfied by taking courses in four categories:

1. University General Education requirements (General Education)
2. Education courses
3. Teacher Education Certification Courses (i.e. methods and student teaching)
4. Concentration courses

Major Requirements

Code	Title	Credit Hours
EDUC 2103	Socio-cultural Foundations of Education in the United States ¹	3
EDUC 2109	Adolescent Development for Educators ¹	3
MGSE 2111	Applications of Teaching and Learning Theories to Classroom Practice (grades 4-12)	3
SPED 2231	Introduction to Special Education ¹	3
EDUC 2296	Effective Teaching: Theory and Practice	3
EDUC 2306	Assessment and Evaluation	3
SPED 3187	Integrated Literacy and Special Education Practicum	3
MGSE 3404	Teaching and Learning Math in the Middle Grades	3
MGSE 3405	Teaching and Learning Science in the Middle Grades	3
TESL 3631	Principles and Practice for Teaching English Learners	3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
SPED 4103	Classroom Management and Positive Behavior Support	3
MGSE 3196	Teaching and Learning Literacy in the Middle Grades	3
MGSE 4296	Cultures, Communities, and Families	3
MGSE 4801	Senior Seminar and Performance Assessment in Grades 4-12 Education	3
MGSE 4888	Student Teaching in Grades 4-12	9
Total Credit Hours		54

1

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits: Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG 2000 level course, as specified; no 0700 or pre-college level courses can count toward these requirements.

Program Requirements for Middle Grades Education with Concentration in Social Studies

Code	Title	Credit Hours
HIST 2103 or HIST 3101	African American History to 1865 Colonial America	3
ECON 1001 or ECON 1103	Introduction to the Economy Global Economics	3
BIOL 1011	General Biology I	4
BIOL 1012 or PHYS 1022	General Biology II Introduction to General Physics II	4
MATH 1015	Introduction to Numbers & Figures ¹	4
MATH 1021	College Algebra ¹	4
PHYS 1021	Introduction to General Physics I	4
MATH 1022	Precalculus ¹	4
HIST 1101 or HIST 1102	U.S. History to 1877 U.S. History since 1877	3
POLS 1301 or POLS 1101	International Politics The American Political System	3
HIST 1702 or HIST 2304 or HIST 2511	World History Modern 20th Century Europe: A Continent in Crisis Introduction to African History	3
GUS 2002 or GUS 2014	Space and Place Urban Geography	3
HIST 2104 or HIST 2111 or HIST 2216 or HIST 2217	African American History 1865-Present Recent American History U.S. Civil War Vietnam War	3
ENG 2501 or ENG 2502 or ENG 2503	Introduction to British Writing Introduction to American Writing Introduction to Global Writing	3
Total Credit Hours		48

1

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits: Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG 2000 level course, as specified; no 0700 or pre-college level courses can count toward these requirements.

Suggested Academic Plan

Bachelor of Science in Education in Middle Grades Education with Social Studies Concentration

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

To best prepare students in this major for the Praxis II exams, we strongly encourage taking the suggested GenEds listed.

(Certain courses require that a student secure clearances as per the College of Education and Human Development policy; students should check the current list of courses that require clearances on the College of Education and Human Development web site.)

Year 1		
Fall		Credit Hours
BIOL 1011	General Biology I ¹	4
GenEd Breadth Course ⁵		3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing ⁴ or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
MATH 1021	College Algebra ^{3,4}	4
Credit Hours		15
Spring		
PHYS 1021	Introduction to General Physics I ¹	4
GenEd Breadth Course ⁵		3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life ⁴ or Honors Intellectual Heritage I: The Good Life	3
MATH 1015	Introduction to Numbers & Figures ^{3,4}	4
Select one of the following:		3
GUS 2002	Space and Place	
GUS 2014	Urban Geography	
Credit Hours		17
Year 2		
Fall		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good ⁴ or Honors Intellectual Heritage II: The Common Good	3
MATH 1022	Precalculus ^{3,4}	4
EDUC 2103	Socio-cultural Foundations of Education in the United States ⁴	3
Select one of the following: ⁴		3
ENG 2501	Introduction to British Writing	
ENG 2502	Introduction to American Writing	
ENG 2503	Introduction to Global Writing	
Select one of the following:		3
HIST 2103	African American History to 1865	
HIST 3101	Colonial America	
Credit Hours		16
Spring		
EDUC 2109	Adolescent Development for Educators ^{2,4}	3
SPED 2231	Introduction to Special Education ^{2,4}	3
Select one of the following: ¹		4
BIOL 1012	General Biology II	
PHYS 1022	Introduction to General Physics II	
Select one of the following:		3
HIST 1101	U.S. History to 1877	
HIST 1102	U.S. History since 1877	
GenEd Breadth Course ⁵		3
Credit Hours		16
Year 3		
Fall		
EDUC 2296	Effective Teaching: Theory and Practice	3
MGSE 2111	Applications of Teaching and Learning Theories to Classroom Practice (grades 4-12)	3
TESL 3631	Principles and Practice for Teaching English Learners ²	3
GenEd Breadth Course ⁵		3

Select one of the following:		3
HIST 1702	World History Modern	
HIST 2304	20th Century Europe: A Continent in Crisis	
HIST 2511	Introduction to African History	
Credit Hours		15
Spring		
MGSE 3404	Teaching and Learning Math in the Middle Grades ³	3
MGSE 3196	Teaching and Learning Literacy in the Middle Grades	3
MGSE 3405	Teaching and Learning Science in the Middle Grades	3
SPED 3187	Integrated Literacy and Special Education Practicum	3
Select one of the following:		3
HIST 2104	African American History 1865-Present	
HIST 2111	Recent American History	
HIST 2216	U.S. Civil War	
HIST 2217	Vietnam War	
Credit Hours		15
Year 4		
Fall		
MGSE 4296	Cultures, Communities, and Families	3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
EDUC 2306	Assessment and Evaluation	3
Select one of the following:		3
ECON 1001	Introduction to the Economy	
ECON 1103	Global Economics	
Select one of the following:		3
POLS 1301	International Politics	
POLS 1101	The American Political System	
Credit Hours		15
Spring		
MGSE 4888	Student Teaching in Grades 4-12	9
MGSE 4801	Senior Seminar and Performance Assessment in Grades 4-12 Education	3
SPED 4103	Classroom Management and Positive Behavior Support	3
Credit Hours		15
Total Credit Hours		124

1

The sequence of either 1) BIOL 1011 and BIOL 1012 or 2) PHYS 1021 and PHYS 1022 constitutes a waiver for both of the GenEd Science and Technology (GS) courses required in the GenEd Science and Technology (GS) category if the courses are completed with a C- or better. Students must successfully complete all requirements in one sequence or the other.

2

Completion of 1) SPED 2231, 2) EDUC 2109, and 3) TESL 3631 constitutes the waiver for the GenEd Human Behavior (GB) category if the courses are completed with a C- or better.

3

Completion of 1) MATH 1015, 2) MATH 1021, 3) MATH 1022, and 4) MGSE 3404 constitutes a waiver for the GenEd Quantitative Literacy (GQ) category if the courses are completed with a C- or better.

4

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits: Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG 2000 level course, as specified; no 0700 or pre-college level courses can count toward these requirements.

5

Suggested GenEd courses: Global/World Society (GG) = ANTH 0867 or GUS 0867; Race & Diversity (GD) = AAAS 0829, ANTH 0829, GUS 0829, HIST 0829, POLS 0829, SOC 0829 or SOC 0929; U.S. Society (GU) = AMST 0848 or HIST 0848.

Secondary Education / English Education BSEd

Overview

The **Bachelor of Science in Education in Secondary Education / English Education** is offered by the Department of Teaching and Learning.

Students must complete all coursework and fieldwork requirements needed to make them eligible for Pennsylvania certification in Secondary Education: English. Passing the required Praxis exam(s) as stipulated by the Pennsylvania Department of Education is required to apply for Pennsylvania certification.

Students wishing to complete the full English major should meet with a College of Education and Human Development academic advisor to declare English as a second major; students may need to take additional courses as defined by the English BA (p. 1010) in the College of Liberal Arts (CLA).

In order to assure that students gain the content knowledge specified by the Pennsylvania Department of Education, we strongly recommend students choose English electives that include the following areas: Linguistics, Shakespeare and African American literature.

Campus Location: Main

Program Code: ED-SEEN-BSED

GPA Requirements

In order to maintain good standing in Secondary Education, students must maintain a 3.0 cumulative grade point average and a 2.0 grade point average in the course work in their content area.

Accreditation

The program is approved as a teacher preparation program by the Pennsylvania Department of Education.

Licensure/Certification

Upon successful completion of the program requirements, candidates may apply for a Pennsylvania Instructional I Teaching Certificate. Please note, Pennsylvania requires assessment of candidates in General Knowledge, Professional Knowledge and/or Subject Area Knowledge prior to issuance of a certificate. Please refer to the PDE web site for testing requirements.

Contact Information

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Learn more about the Bachelor of Science in Education in Secondary Education / English Education.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All students (including transfer students) must take a minimum of two writing-intensive (WI) courses at Temple University. Writing intensive course numbers end in 96, 97 and 98.

College Requirements

Students receive a Bachelor of Science in Education degree by meeting the following minimum College requirements:

- Completion of program requirements as detailed on the academic plan.
- Earn a "C-" or above in all required Education Courses.
- Earn a "C-" or above in all required University General Education Courses.
- Students in Secondary Education must maintain a 3.0 cumulative GPA and a 2.0 GPA in their content area courses.

For additional college and certification requirements, refer to the College Requirements page (p. 559).

Major Requirements

Code	Title	Credit Hours
EDUC 2103	Socio-cultural Foundations of Education in the United States ¹	3
EDUC 2109	Adolescent Development for Educators ¹	3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
MGSE 2111	Applications of Teaching and Learning Theories to Classroom Practice (grades 4-12)	3
SPED 2231	Introduction to Special Education ¹	3
EDUC 2296	Effective Teaching: Theory and Practice (WI)	3
EDUC 2306	Assessment and Evaluation	3
SPED 3187	Integrated Literacy and Special Education Practicum	3
TESL 3631	Principles and Practice for Teaching English Learners	3
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12) (WI)	3
SPED 4103	Classroom Management and Positive Behavior Support	3
MGSE 4801	Senior Seminar and Performance Assessment in Grades 4-12 Education	3
MGSE 4888	Student Teaching in Grades 4-12	9
Total Credit Hours		45

1

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits (Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG (literature, but not children's literature) course). No 0700 or pre-college level course can count.

Program Requirements for Secondary Education / English Education

Code	Title	Credit Hours
EDUC 1016 or MATH 1021	Mathematics for Educators ¹ College Algebra	4
MGSE 4641	Teaching Literature and Reading: 7-12	3
MGSE 4642	Teaching Written Composition: 7-12	3
Total Credit Hours		10

1

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits (Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG (literature, but not children's literature) course). No 0700 or pre-college level course can count.

Suggested Academic Plan

Bachelor of Science in Education in Secondary Education / English Education

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

(Certain courses require that a student secure clearances as per the College of Education and Human Development policy; students should check the current list of courses that require clearances on the College of Education and Human Development web site.)

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing ³	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ 3}		4
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		17
Spring		
IH 0851	Intellectual Heritage I: The Good Life ³	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
GenEd Breadth Course		3
EDUC 2103	Socio-cultural Foundations of Education in the United States ³	3
ENG Second Program (Major) Course ^{1,3}		3
Select one of the following: ^{3,4}		4
EDUC 1016	Mathematics for Educators	
MATH 1021	College Algebra	
Credit Hours		16
Year 2		
Fall		
IH 0852	Intellectual Heritage II: The Common Good ³	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
GenEd Breadth Course		3
SPED 2231	Introduction to Special Education ^{2,3}	3
ENG Second Program (Major) Course ^{1,3}		3
ENG Second Program (Major) Course ^{1,3}		3
Credit Hours		15
Spring		
GenEd Breadth Course		3
EDUC 2109	Adolescent Development for Educators ^{2,3}	3
EDUC 2306	Assessment and Evaluation	3
ENG Second Program (Major) Course ^{1,3}		3
ENG Second Program (Major) Course ^{1,3}		3
Credit Hours		15
Year 3		
Fall		
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
ENG Second Program (Major) Course ¹		3
ENG Second Program (Major) Course ¹		3
ENG Second Program (Major) Course ¹		3
ENG Second Program (Major) Course ¹		3
Credit Hours		15
Spring		
EDUC 2296	Effective Teaching: Theory and Practice	3
MGSE 2111	Applications of Teaching and Learning Theories to Classroom Practice (grades 4-12)	3
TESL 3631	Principles and Practice for Teaching English Learners ²	3
MGSE 4642	Teaching Written Composition: 7-12	3
ENG Second Program (Major) Course ¹		3
Credit Hours		15

Year 4**Fall**

MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3
MGSE 4641	Teaching Literature and Reading: 7-12	3
SPED 3187	Integrated Literacy and Special Education Practicum	3
ENG Second Program (Major) Course ¹		3
ENG Second Program (Major) Course ¹		3

Credit Hours**15****Spring**

MGSE 4888	Student Teaching in Grades 4-12	9
MGSE 4801	Senior Seminar and Performance Assessment in Grades 4-12 Education	3
SPED 4103	Classroom Management and Positive Behavior Support	3

Credit Hours**15****Total Credit Hours****123**

1

ENG course selection must be aligned with the degree requirements of the Bachelor of Arts degree as specified in the College of Liberal Arts degree requirements; courses should be selected so that the second major can be completed.

2

Completion of 1) SPED 2231, 2) EDUC 2109 and 3) TESL 3631 constitute a waiver for the GenEd Human Behavior (GB) category if the courses are completed with a C- or better.

3

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits (Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG (literature, but not children's literature) course). No 0700 or pre-college level course can count.

4

Students selecting MATH 1021 should do so in consultation with a CEHD academic advisor.

Secondary Education / Mathematics Education BSEd

Overview

The **Bachelor of Science in Education in Secondary Education / Mathematics Education** is offered by the Department of Teaching and Learning.

Students must complete all coursework and fieldwork requirements needed to make them eligible for Pennsylvania certification in Secondary Education: Mathematics. Passing the required Praxis exam(s) as stipulated by the Pennsylvania Department of Education is required to apply for Pennsylvania certification.

Students wishing to complete the full Mathematics (BA) major will need to take additional courses as defined by the Mathematics BA (p. 1661) which is housed in the College of Science and Technology (CST). Students planning to complete the entirety of this major must declare the second major of Mathematics through CST.

Campus Location: Main

Program Code: ED-SEME-BSED

GPA Requirements

In order to maintain good standing in Secondary Education, students must maintain a 3.0 cumulative grade point average and a 2.0 grade point average in the course work in their content area.

Accreditation

The program is approved as a teacher preparation program by the Pennsylvania Department of Education.

Licensure/Certification

Upon successful completion of the program requirements, candidates may apply for a Pennsylvania Instructional I Teaching Certificate. Please note, Pennsylvania requires assessment of candidates in General Knowledge, Professional Knowledge and/or Subject Area Knowledge prior to issuance of a certificate. Please refer to the PDE web site for testing requirements.

Contact Information

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Kristie Newton, Teaching and Learning Department Chair
KJNewton@temple.edu

Learn more about the Bachelor of Science in Education in Secondary Education / Mathematics Education.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All students (including transfer students) must take a minimum of two writing-intensive (WI) courses at Temple University. Writing intensive course numbers end in 96, 97 and 98.

College Requirements

Students receive a Bachelor of Science in Education degree by meeting the following minimum College requirements:

- Completion of program requirements as detailed on the academic plan.
- Earn a "C-" or above in all required Education Courses.
- Earn a "C-" or above in all required University General Education Courses.
- Earn minimum grades required by CST in all Mathematics courses.
- Students in Secondary Education must maintain a 3.0 cumulative GPA and a 2.0 GPA in their content area courses.

For additional college and certification requirements, refer to the College Requirements page (p. 559).

Major Requirements

Code	Title	Credit Hours
EDUC 2103	Socio-cultural Foundations of Education in the United States ¹	3
EDUC 2109	Adolescent Development for Educators ¹	3
MGSE 2111	Applications of Teaching and Learning Theories to Classroom Practice (grades 4-12)	3
SPED 2231	Introduction to Special Education ¹	3
EDUC 2296	Effective Teaching: Theory and Practice (WI)	3
EDUC 2306	Assessment and Evaluation	3
SPED 3187	Integrated Literacy and Special Education Practicum	3
TESL 3631	Principles and Practice for Teaching English Learners	3
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12) (WI)	3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
SPED 4103	Classroom Management and Positive Behavior Support	3
MGSE 4801	Senior Seminar and Performance Assessment in Grades 4-12 Education	3
MGSE 4888	Student Teaching in Grades 4-12	9
Total Credit Hours		45

1

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits (Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG (literature, but not children's literature) course). No 0700 or pre-college level course can count.

Program Requirements for Secondary Education / Mathematics Education

Code	Title	Credit Hours
MATH 1041	Calculus I ¹	4
MATH 1042	Calculus II ¹	4
PHYS 1061	Elementary Classical Physics I	4
MATH 2111	Basic Concepts of Math ¹	3
MATH 2043	Calculus III ¹	4
PHYS 1062	Elementary Classical Physics II	4
MATH 2021	Functions and Modeling ¹	3
MATH 2101	Linear Algebra ¹	3
MAES 4371 or SCTC 3001	History of Mathematics History of Science	3
MATH 3096	Introduction to Modern Algebra (WI)	3
MATH 3137	Real & Complex Analysis I	3
MATH 3138	Real & Complex Analysis II	3
MGSE 3404	Teaching and Learning Math in the Middle Grades	3
MATH 3003	Theory of Numbers	3
MATH 3061 or MATH 2061	Modern Geometry I Euclidean Geometry	3
MATH 4096	Senior Problem Solving (WI)	3
MGSE 4189	Project-Based Instruction	3
MATH 2031	Probability and Statistics	3
Total Credit Hours		59

1

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits (Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG (literature, but not children's literature) course). No 0700 or pre-college level course can count.

Suggested Academic Plan

Bachelor of Science in Education in Secondary Education / Mathematics Education

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

(Certain courses require that a student secure clearances as per the College of Education and Human Development policy; students should check the current list of courses that require clearances on the College of Education and Human Development web site.)

Year 1		Credit Hours
Fall		
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing ⁴ or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3

MATH 1041	Calculus I ^{3,4}	4
Credit Hours		17
Spring		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life ⁴ or Honors Intellectual Heritage I: The Good Life	3
EDUC 2103	Socio-cultural Foundations of Education in the United States ⁴	3
EDUC 2109	Adolescent Development for Educators ^{2,4}	3
MATH 1042	Calculus II ^{3,4}	4
PHYS 1061	Elementary Classical Physics I ¹	4
Credit Hours		17
Year 2		
Fall		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good ⁴ or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
MATH 2111	Basic Concepts of Math ⁴	3
MATH 2043	Calculus III ^{3,4}	4
PHYS 1062	Elementary Classical Physics II ¹	4
Credit Hours		17
Spring		
SPED 2231	Introduction to Special Education ^{2,4}	3
MATH 2021	Functions and Modeling ⁴	3
EDUC 2306	Assessment and Evaluation	3
MATH 2101	Linear Algebra ⁴	3
Select one of the following:		3
MAES 4371	History of Mathematics	
SCTC 3001	History of Science	
Credit Hours		15
Year 3		
Fall		
EDUC 2296	Effective Teaching: Theory and Practice	3
MGSE 2111	Applications of Teaching and Learning Theories to Classroom Practice (grades 4-12)	3
TESL 3631	Principles and Practice for Teaching English Learners ²	3
MATH 3096	Introduction to Modern Algebra	3
MATH 3137	Real & Complex Analysis I	3
Credit Hours		15
Spring		
MATH 3138	Real & Complex Analysis II	3
MGSE 3404	Teaching and Learning Math in the Middle Grades	3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
MATH 3003	Theory of Numbers	3
Select one of the following:		3
MATH 3061	Modern Geometry I	
MATH 2061	Euclidean Geometry	
Credit Hours		15
Year 4		
Fall		
MATH 4096	Senior Problem Solving	3
MGSE 4189	Project-Based Instruction	3
SPED 3187	Integrated Literacy and Special Education Practicum	3
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3

MATH 2031	Probability and Statistics	3
Credit Hours		15
Spring		
MGSE 4888	Student Teaching in Grades 4-12	9
MGSE 4801	Senior Seminar and Performance Assessment in Grades 4-12 Education	3
SPED 4103	Classroom Management and Positive Behavior Support	3
Credit Hours		15
Total Credit Hours		126

1

The sequence of PHYS 1061 and PHYS 1062 constitutes a waiver for both of the GenEd Science and Technology (GS) courses required in the GenEd Science and Technology (GS) category if the courses are completed with a C- or better. Students must successfully complete both courses in the sequence to have both of the GS courses waived. If a student completes just one of these two courses with a C- or better, just one GS course of the two required will be waived.

2

Completion of 1) SPED 2231, 2) EDUC 2109 and 3) TESL 3631 constitute the waiver for the GenEd Human Behavior (GB) category if the courses are completed with a C- or better.

3

Completion of either 1) MATH 1041, 2) MATH 1042 or 3) MATH 2043 constitutes a waiver for the GenEd Quantitative Literacy (GQ) category if the course is completed with a C- or better.

4

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits (Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG (literature, but not children's literature) course). No 0700 or pre-college level course can count.

Secondary Education / Social Studies Education BSEd

Overview

The **Bachelor of Science in Education in Secondary Education / Social Studies Education** is offered by the Department of Teaching and Learning.

Students must complete all coursework and fieldwork requirements needed to make them eligible for Pennsylvania certification in Secondary Education: Social Studies. Passing the required Praxis exam(s) as stipulated by the Pennsylvania Department of Education is required to apply for Pennsylvania certification.

Students wishing to complete a second major in History, Political Science, Economics, Sociology or Geography and Urban Studies should meet with a College of Education and Human Development academic advisor to declare the desired second major; students may need to take additional courses as defined by the College of Liberal Arts (CLA).

Campus Location: Main

Program Code: ED-SESS-BSED

GPA Requirements

In order to maintain good standing in Secondary Education, students must maintain a 3.0 cumulative grade point average and a 2.0 grade point average in the course work in their content area.

Accreditation

The program is approved as a teacher preparation program by the Pennsylvania Department of Education.

Licensure/Certification

Upon successful completion of the program requirements, candidates may apply for a Pennsylvania Instructional I Teaching Certificate. Please note, Pennsylvania requires assessment of candidates in General Knowledge, Professional Knowledge and/or Subject Area Knowledge prior to issuance of a certificate. Please refer to the PDE web site for testing requirements.

Contact Information

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Kristie Newton, Teaching and Learning Department Chair
KJNewton@temple.edu

Learn more about the Bachelor of Science in Education in Secondary Education / Social Studies Education.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All students (including transfer students) must take a minimum of two writing-intensive (WI) courses at Temple University. Writing intensive course numbers end in 96, 97 and 98.

College Requirements

Students receive a Bachelor of Science in Education degree by meeting the following minimum College requirements:

- Completion of program requirements as detailed on the academic plan.
- Earn a "C-" or above in all required Education Courses.
- Earn a "C-" or above in all required University General Education Courses.
- Students in Secondary Education must maintain a 3.0 cumulative GPA and a 2.0 GPA in their second program (major) courses.

For additional college and certification requirements, refer to the College Requirements page (p. 559).

Major Requirements

Code	Title	Credit Hours
EDUC 2103	Socio-cultural Foundations of Education in the United States ¹	3
EDUC 2109	Adolescent Development for Educators ¹	3
MGSE 2111	Applications of Teaching and Learning Theories to Classroom Practice (grades 4-12)	3
SPED 2231	Introduction to Special Education ¹	3
EDUC 2296	Effective Teaching: Theory and Practice (WI)	3
EDUC 2306	Assessment and Evaluation	3
SPED 3187	Integrated Literacy and Special Education Practicum	3
TESL 3631	Principles and Practice for Teaching English Learners	3
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12) (WI)	3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
SPED 4103	Classroom Management and Positive Behavior Support	3
MGSE 4801	Senior Seminar and Performance Assessment in Grades 4-12 Education	3
MGSE 4888	Student Teaching in Grades 4-12	9
Total Credit Hours		45

1

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits (Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG (literature, but not children's literature) course). No 0700 or pre-college level course can count.

Program Requirements for Secondary Education / Social Studies Education

Code	Title	Credit Hours
EDUC 1016 or MATH 1021	Mathematics for Educators ¹ College Algebra	4
MGSE 3466	Methods and Materials in Secondary Social Studies	3
MGSE 4465	Teaching for Understanding in Secondary Social Studies	3
Total Credit Hours		10

1

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits (Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG (literature, but not children's literature) course). No 0700 or pre-college level course can count.

Academic Content Areas - History, Political Science, Economics, Geography, Sociology and Urban Studies

Second program (major) courses should be chosen in accordance with major requirements outlined by the College of Liberal Arts' relevant Department; requirements can be found in this Undergraduate Bulletin.

Suggested Academic Plan

Bachelor of Science in Education in Secondary Education / Social Studies Education

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

(Certain courses require that a student secure clearances as per the College of Education and Human Development policy; students should check the current list of courses that require clearances on the College of Education and Human Development web site.)

Year 1		Credit Hours
Fall		
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing ³ or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ 3}		4
GenEd Breadth Course		3
GenEd Breadth Course		3
Second Program (Major) Course ¹		3
Credit Hours		17
Spring		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life ³ or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
EDUC 2103	Socio-cultural Foundations of Education in the United States ³	3
Second Program (Major) Course ¹		3
Select one of the following: ^{3, 4}		4
EDUC 1016	Mathematics for Educators	
MATH 1021	College Algebra	
Credit Hours		16
Year 2		
Fall		
GenEd Breadth Course		3
GenEd Breadth Course		3
SPED 2231	Introduction to Special Education ^{2,3}	3
Second Program (Major) Course ¹		3

Second Program (Major) Course ¹		3
Credit Hours		15
Spring		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good ³ or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
EDUC 2109	Adolescent Development for Educators ^{2,3}	3
Second Program (Major) Course ¹		3
Second Program (Major) Course ¹		3
Credit Hours		15
Year 3		
Fall		
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
MGSE 3466	Methods and Materials in Secondary Social Studies	3
EDUC 2306	Assessment and Evaluation	3
Second Program (Major) Course ¹		3
Second Program (Major) Course ¹		3
Credit Hours		15
Spring		
TESL 3631	Principles and Practice for Teaching English Learners ²	3
EDUC 2296	Effective Teaching: Theory and Practice	3
MGSE 4465	Teaching for Understanding in Secondary Social Studies	3
MGSE 2111	Applications of Teaching and Learning Theories to Classroom Practice (grades 4-12)	3
Second Program (Major) Course ¹		3
Credit Hours		15
Year 4		
Fall		
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3
SPED 3187	Integrated Literacy and Special Education Practicum	3
Second Program (Major) Course ¹		3
Second Program (Major) Course ¹		3
Second Program (Major) Course ¹		3
Credit Hours		15
Spring		
MGSE 4888	Student Teaching in Grades 4-12	9
MGSE 4801	Senior Seminar and Performance Assessment in Grades 4-12 Education	3
SPED 4103	Classroom Management and Positive Behavior Support	3
Credit Hours		15
Total Credit Hours		123

¹
Second Program (Major) course selection must be aligned with the degree requirements of the Bachelor of Arts degree as specified in the College of Liberal Arts degree requirements; courses should be selected so that the second major can be completed.

²
Completion of 1) SPED 2231, 2) EDUC 2109 and 3) TESL 3631 constitute a waiver for the GenEd Human Behavior (GB) category if the courses are completed with a C- or better.

³
These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits (Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG (literature, but not children's literature) course). No 0700 or pre-college level course can count.

Students selecting MATH 1021 should do so in consultation with a CEHD academic advisor.

Secondary Education / World Languages Education BSEd

Overview

The **Bachelor of Science in Education in Secondary Education / World Languages Education** is offered by the Department of Teaching and Learning.

In the state of Pennsylvania, certification in a world language is a K-12 certificate. World Language certification at Temple University College of Education and Human Development is available in Chinese, French, German, Italian, Latin, and Spanish.

Students must complete all coursework and fieldwork requirements needed to make them eligible for Pennsylvania certification in Secondary Education: World Languages. Passing the required Praxis exam(s) as stipulated by the Pennsylvania Department of Education is required to apply for Pennsylvania certification.

Students wishing to complete a second major in Chinese (p. 982), French (p. 1021), German, Italian (p. 1079), Latin (p. 992), or Spanish (p. 1166) should meet with a College of Education and Human Development academic advisor to declare the desired second major; students may need to take additional courses as defined by the College of Liberal Arts (CLA).

Study Abroad

Secondary Education / World Languages Education majors are encouraged to study overseas, when possible, in relevant foreign language speaking areas through Temple or external study abroad programs. Temple offers semester and year-long programs at Temple campuses in Rome and Oviedo, Spain, as well as exchange options at the University of Puerto Rico and Universities of Hamburg and Tübingen in Germany. Temple offers various summer language programs in Rome, Germany, Spain and France. The Latin American Studies Semester program is an immersion experience available at Temple's Main Campus to all Spanish majors during spring semesters. Students interested in study abroad should consult with the office of Education Abroad and Overseas Campuses and College of Education and Human Development Academic Advising to explore program options and develop a study abroad academic plan in advance.

Campus Location: Main

Program Code: ED-SEWL-BSED

GPA Requirements

In order to maintain good standing in Secondary Education, students must maintain a 3.0 cumulative grade point average and a 2.0 grade point average in the course work in their content area.

Accreditation

The program is approved as a teacher preparation program by the Pennsylvania Department of Education.

Licensure/Certification

Upon successful completion of the program requirements, candidates may apply for a Pennsylvania Instructional I Teaching Certificate. Please note, Pennsylvania requires assessment of candidates in General Knowledge, Professional Knowledge and/or Subject Area Knowledge prior to issuance of a certificate. Please refer to the PDE web site for testing requirements.

Contact Information

Undergraduate Advising, College of Education and Human Development
edadvising@temple.edu

Tim Fukawa-Connelly, Program Coordinator
tim.fc@temple.edu

Kristie Newton, Teaching and Learning Department Chair
KJNewton@temple.edu

Learn more about the Bachelor of Science in Education in Secondary Education / World Languages Education.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All students (including transfer students) must take a minimum of two writing-intensive (WI) courses at Temple University. Writing intensive course numbers end in 96, 97 and 98.

College Requirements

Students receive a Bachelor of Science in Education degree by meeting the following minimum College requirements:

- Completion of program requirements as detailed on the academic plan.
- Earn a "C-" or above in all required Education Courses.
- Earn a "C-" or above in all required University General Education Courses.
- Students in Secondary Education must maintain a 3.0 cumulative GPA and a 2.0 GPA in their content area courses.

For additional college and certification requirements, refer to the College Requirements page (p. 559).

Major Requirements

Code	Title	Credit Hours
EDUC 2103	Socio-cultural Foundations of Education in the United States ¹	3
EDUC 2109	Adolescent Development for Educators ¹	3
MGSE 2111	Applications of Teaching and Learning Theories to Classroom Practice (grades 4-12)	3
SPED 2231	Introduction to Special Education ¹	3
EDUC 2296	Effective Teaching: Theory and Practice (WI)	3
EDUC 2306	Assessment and Evaluation	3
SPED 3187	Integrated Literacy and Special Education Practicum	3
TESL 3631	Principles and Practice for Teaching English Learners	3
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12) (WI)	3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
SPED 4103	Classroom Management and Positive Behavior Support	3
MGSE 4801	Senior Seminar and Performance Assessment in Grades 4-12 Education	3
MGSE 4888	Student Teaching in Grades 4-12	9
Total Credit Hours		45

1

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits (Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG (literature, but not children's literature) course). No 0700 or pre-college level course can count.

Program Requirements for Secondary Education / World Languages Education

Code	Title	Credit Hours
EDUC 1016 or MATH 1021	Mathematics for Educators ¹ College Algebra	4
MGSE 4427	Curriculum and Methods of Foreign Language Education	3
MGSE 4428	Innovations in Foreign Language Education	3
Total Credit Hours		10

1

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits (Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG (literature, but not children's literature) course). No 0700 or pre-college level course can count.

Academic Content Area - World Languages

Language courses should be chosen in accordance with major requirements outlined by the relevant department in the College of Liberal Arts.

Suggested Academic Plan

Bachelor of Science in Education in Secondary Education / World Languages Education

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Important Notes:

- **Latin students intending to complete the second major in Latin** must use the Elective to fulfill one of the required World Languages (Latin) courses; consult with the Latin Department for specific course guidance.
- Certain courses require that a student secure clearances as per the College of Education and Human Development policy; students should check the current list of courses that require clearances on the College of Education and Human Development web site.

Year 1		Credit Hours
Fall		
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing ³ or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
GenEd Quantitative Literacy Course ^{GQ 3}		4
World Language Course ¹		3
Credit Hours		14
Spring		
GenEd Breadth Course		3
GenEd Breadth Course		3
EDUC 2103	Socio-cultural Foundations of Education in the United States ³	3
World Language Course ¹		3
Select one of the following: ^{3,4}		4
EDUC 1016	Mathematics for Educators	
MATH 1021	College Algebra	
Credit Hours		16
Year 2		
Fall		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life ³ or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
GenEd Breadth Course		3
SPED 2231	Introduction to Special Education ^{2,3}	3
World Language Course ¹		3
Credit Hours		15
Spring		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good ³ or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
EDUC 2109	Adolescent Development for Educators ^{2,3}	3
World Language Course ¹		3

World Language Course ¹		3
Credit Hours		15
Year 3		
Fall		
EDUC 2306	Assessment and Evaluation	3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
World Language Course ¹		3
World Language Course ¹		3
Elective		3
Credit Hours		15
Spring		
MGSE 4427	Curriculum and Methods of Foreign Language Education	3
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3
SPED 3187	Integrated Literacy and Special Education Practicum	3
TESL 3631	Principles and Practice for Teaching English Learners ²	3
World Language Course ¹		3
Credit Hours		15
Year 4		
Fall		
EDUC 2296	Effective Teaching: Theory and Practice	3
MGSE 2111	Applications of Teaching and Learning Theories to Classroom Practice (grades 4-12)	3
World Language Course ¹		3
World Language Course ¹		3
MGSE 4428	Innovations in Foreign Language Education	3
Credit Hours		15
Spring		
MGSE 4888	Student Teaching in Grades 4-12	9
MGSE 4801	Senior Seminar and Performance Assessment in Grades 4-12 Education	3
SPED 4103	Classroom Management and Positive Behavior Support	3
Credit Hours		15
Total Credit Hours		120

1

World Language course selection must be aligned with the degree requirements of the Bachelor of Arts degree as specified in the College of Liberal Arts degree requirements; courses should be selected so that the second major can be completed.

2

Completion of 1) SPED 2231, 2) EDUC 2109 and 3) TESL 3631 constitute a waiver for the GenEd Human Behavior (GB) category if the courses are completed with a C- or better.

3

These courses must be completed with a C- or better to be eligible for Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits (Intellectual Heritage I: The Good Life, Intellectual Heritage II: The Common Good, or an ENG (literature, but not children's literature) course). No 0700 or pre-college level course can count.

4

Students selecting MATH 1021 should do so in consultation with a CEHD academic advisor.

Special Education (Pre-K-12) BSEd

Overview

Offered by the the Department of Teaching and Learning, the **Bachelor of Science in Education in Special Education (Pre-K-12)** equips teachers with deep understandings of the sociocultural context of education, high-impact instructional practices, and empirically-supported, preventative approaches to provide equitable education to children with disabilities.

The program features uphold and further both the College of Education and Human Development's and the university's mission in the following ways:

- Promoting evidence-based practice and effective implementation in the classroom;
- Recognizing and ameliorating the impact of socio-cultural factors on the education of children with disabilities;
- Advocating inclusive practices both within schools and within society as a whole; and,
- Emphasizing preventative approaches to support improved teaching and learning.

Campus Location: Main

Program Code: ED-SPPK-BSED

Accreditation

The program is approved as a teacher preparation program by the Pennsylvania Department of Education.

Licensure/Certification

Upon successful completion of the program requirements, candidates may apply for a Pennsylvania Instructional I Teaching Certificate. Please note, Pennsylvania requires assessment of candidates in General Knowledge, Professional Knowledge and/or Subject Area Knowledge prior to issuance of a certificate. Please refer to the PDE web site for testing requirements.

Contact Information

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Kristie Newton, Teaching and Learning Department Chair
KJNewton@temple.edu

Learn more about the Bachelor of Science in Education in Special Education (Pre-K-12).

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All students (including transfer students) must take a minimum of two writing-intensive (WI) courses at Temple University. Writing intensive course numbers end in 96, 97 and 98.

College Requirements

Students receive a Bachelor of Science in Education degree by meeting the following minimum College requirements:

- Completion of program requirements as detailed on the academic plan.
- Earn a "C-" or above in all required Education Courses.
- Earn a "C-" or above in all required University General Education Courses.
- Additional University and College requirements are located on the College of Education and Human Development's Academic Policies and Regulations (p. 555) page in this *Bulletin*.

Program Requirements

Code	Title	Credit Hours
MATH 1015	Introduction to Numbers & Figures ¹	4
EDUC 2103	Socio-cultural Foundations of Education in the United States ¹	3
SPED 2128	Assistive Technology and Universal Design for Learning	3
EDUC 1016 or MATH 1021	Mathematics for Educators ¹ College Algebra	4
SPED 2231	Introduction to Special Education ¹	3

ECED 2101	Child Development, Birth to Nine ¹	3
SPED 2201	Language Development and Communication Strategies	3
EDUC 2109	Adolescent Development for Educators ¹	3
ABA 3302	Analyzing and Changing Behavior	3
SPED 4331	Family and Interdisciplinary Collaborative/Consultation Skills	3
ECED 3106	Literacy Foundations for the Primary Grades: First Grade through Fourth Grade	3
ECED 3107	Learning Mathematics for the Primary Grades: First through Fourth Grade	3
ECED 3108	Social Studies for the Early Years, Pre K-4	3
ECED 3109	Science for the Early Years	3
ECED 3187	Practicum for the Primary Grades	3
MGSE 3196	Teaching and Learning Literacy in the Middle Grades	3
MGSE 3404	Teaching and Learning Math in the Middle Grades	3
SPED 3304	Effective Teaching Strategies and Academic Interventions	3
SPED 3187	Integrated Literacy and Special Education Practicum	3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
SPED 4103	Classroom Management and Positive Behavior Support	3
SPED 4105	Assessment in Special Education	3
SPED 4196	Literacy Instruction for Students with Disabilities	3
TESL 3631	Principles and Practice for Teaching English Learners	3
SPED 3201	Effective Instructional Strategies for Students with Moderate to Significant Disabilities	3
SPED 3287	Practicum for Diverse Learners	3
SPED 4201	Effective Transition for Students with Disabilities	3
SPED 4801	Senior Seminar and Performance Assessment in Special Education	3
SPED 4888	Student Teaching in Special Education	9

Total Credit Hours**95**

1

These courses must be completed with a C- or better to be eligible for Candidacy approval; either ECED 2101 or EDUC 2109 must be completed before Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits (Intellectual Heritage I: The Good Life or Intellectual Heritage II: The Common Good); no 0700 or pre-college level courses can count toward these requirements.

Suggested Academic Plan**Bachelor of Science in Education in Special Education (Pre-K-12)****Suggested Plan for New Students Starting in the 2023-2024 Academic Year**

(Certain courses require that a student secure clearances as per the College of Education and Human Development policy; students should check the current list of courses that require clearances on the College of Education and Human Development web site.)

Year 1

Fall		Credit Hours
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing ³ or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
MATH 1015	Introduction to Numbers & Figures ^{1,3}	4
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		14
Spring		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life ³ or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
GenEd Breadth Course		3
EDUC 2103	Socio-cultural Foundations of Education in the United States ³	3

Select one of the following: ^{1,3,4}		4
EDUC 1016	Mathematics for Educators	
MATH 1021	College Algebra	
Credit Hours		16
Year 2		
Fall		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good ³ or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
SPED 2128	Assistive Technology and Universal Design for Learning	3
SPED 2231	Introduction to Special Education ^{2,3}	3
ECED 2101	Child Development, Birth to Nine ^{2,3}	3
Credit Hours		15
Spring		
SPED 2201	Language Development and Communication Strategies	3
EDUC 2109	Adolescent Development for Educators ^{2,3}	3
ABA 3302	Analyzing and Changing Behavior	3
SPED 4331	Family and Interdisciplinary Collaborative/Consultation Skills	3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
ECED 3106	Literacy Foundations for the Primary Grades: First Grade through Fourth Grade	3
ECED 3107	Learning Mathematics for the Primary Grades: First through Fourth Grade ¹	3
ECED 3108	Social Studies for the Early Years, Pre K-4	3
ECED 3109	Science for the Early Years	3
ECED 3187	Practicum for the Primary Grades	3
Credit Hours		15
Spring		
MGSE 3196	Teaching and Learning Literacy in the Middle Grades	3
MGSE 3404	Teaching and Learning Math in the Middle Grades	3
SPED 3304	Effective Teaching Strategies and Academic Interventions	3
SPED 3187	Integrated Literacy and Special Education Practicum	3
SPED 3211	Effective Instructional Strategies for Students with Disabilities	3
Credit Hours		15
Year 4		
Fall		
SPED 4103	Classroom Management and Positive Behavior Support	3
SPED 4105	Assessment in Special Education	3
SPED 4196	Literacy Instruction for Students with Disabilities	3
TESL 3631	Principles and Practice for Teaching English Learners ²	3
SPED 3201	Effective Instructional Strategies for Students with Moderate to Significant Disabilities	3
SPED 3287	Practicum for Diverse Learners	3
Credit Hours		18
Spring		
SPED 4201	Effective Transition for Students with Disabilities	3
SPED 4888	Student Teaching in Special Education	9
SPED 4801	Senior Seminar and Performance Assessment in Special Education	3
Credit Hours		15
Total Credit Hours		123

1

Completion of 1) MATH 1015, 2) MATH 1021 or EDUC 1016, and 3) ECED 3107 constitutes the waiver for the GenEd Quantitative Literacy (GQ) category if the courses are completed with a C- or better.

2

Completion of 1) SPED 2231, 2) EDUC 2109 or ECED 2101, and 3) TESL 3631 constitutes the waiver for the GenEd Human Behavior (GB) category if the courses are completed with a C- or better.

3

These courses must be completed with a C- or better to be eligible for Candidacy approval; either ECED 2101 or EDUC 2109 must be completed before Candidacy approval. Pre-Candidacy coursework includes a variety of courses, including a minimum of 1) two college-level math courses totaling at least six credits, 2) one college-level writing/composition course with a minimum of three credits (GenEd Analytical Reading and Writing), and 3) one literature course with a minimum of three credits (Intellectual Heritage I: The Good Life or Intellectual Heritage II: The Common Good); no 0700 or pre-college level courses can count toward these requirements.

4

Students selecting MATH 1021 should do so in consultation with a CEHD advisor.

College of Engineering

Overview

This is a time of tremendous opportunity for engineers. The demand for professionals with the capability to make a difference to our planet, improve our infrastructure, make health-related advances and innovate technology have never been greater.

Temple's College of Engineering (COE) is a rising institution—consistently improving in the rankings and with rapid expansion of research. The college offers the best of both worlds, a tight knit community and small class sizes with large university amenities. While the college is experiencing rapid changes, one thing has been constant—the commitment to provide a high-quality education to a diverse and vibrant student population.

The college's programs are accredited by the national accreditation board, ABET. Upgrades to the curriculum are always ongoing so that students receive the best cutting-edge and relevant knowledge. This is evident in the excellent job placement rates—among the highest at the University—with our graduates hired by companies like Comcast, GE, Johnson & Johnson, Verizon, Boeing, Lockheed Martin, Pennoni Construction, NASA, PennDot, PGW, Turner Construction, Metrologic and many more.

Mission

The College of Engineering's mission is to provide students with a high-quality and globally-competitive learning experience in engineering, engineering technology and the applied sciences. We aim to equip our engineering graduates to be confident professionals with the technical, problem-solving and communication skills required to succeed in industry and contribute to the betterment of our society.

The college fosters the creation of knowledge through engineering and cross-disciplinary applied research. Great value is placed on scholarship, integrity, practice and service aimed at improving the quality of life and the economic viability of our society. This value system is reflected in how we assess faculty for promotion and tenure and how we grade student work.

We strive to pursue these objectives in a learning environment that celebrates ethnic and gender diversity, respects experience and encourages problem-solving through teamwork.

The college offers undergraduate curricula in engineering and engineering technology. Our engineering programs, leading to the Bachelor of Science in Engineering degree, prepare students for positions in engineering that require a broad preparation in mathematics and the engineering sciences at the entry level. They are recommended for those who expect to become registered professional engineers, pursue an advanced degree, or become involved in conceptual design, planning, research and development in industry. The programs in engineering technology, which lead to the Bachelor of Science in Engineering Technology degree, educate students for careers as applied engineering professionals, translating concepts into functioning systems and supervising subsequent implementation by technicians and craftsmen.

Academic Departments

The College of Engineering consists of the following departments:

- Bioengineering
- Civil and Environmental Engineering
- Electrical and Computer Engineering
- Engineering, Technology and Management
- Mechanical Engineering

Accreditation

The Bioengineering (BS) program is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and Program Criteria for Bioengineering and Biomedical and Similarly Named Engineering Programs.

The Civil Engineering (BS) program is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and Program Criteria for Civil and Similarly Named Engineering Programs.

The Electrical Engineering (BS) program is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and Program Criteria for Electrical, Computer, Communications, Telecommunication(s) and Similarly Named Engineering Programs.

The Environmental Engineering (BS) program is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and Program Criteria for Environmental Engineering and Similarly Named Engineering Programs.

The Mechanical Engineering (BS) program is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and Program Criteria for Mechanical and Similarly Named Engineering Programs.

The Construction Engineering Technology (BS) program is accredited by the Engineering Technology Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and Program Criteria for Construction Engineering Technology and Similarly Named Programs.

The Engineering Technology (BS) program is accredited by the Engineering Technology Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria.

ABET is a non-profit and non-governmental accrediting agency for academic programs in the disciplines of applied science, computing, engineering, and engineering technology recognized by the Council for Higher Education Accreditation (CHEA).

Study Abroad at Temple Rome

Temple engineering students have an exciting opportunity to take a semester abroad in Rome, Italy. Sophomore Mechanical and Civil Engineering majors may study at the Temple Rome campus, with access to cultural activities and organized outings, located just north of Piazza del Popolo—a short distance from the Spanish steps. This unique study abroad program allows you to take the same classes in Rome as you would on main campus—three engineering classes—plus Italian I. Temple's College of Engineering is one of the few able to offer engineering coursework so that you won't miss a beat in the demanding engineering curriculum.

Cooperative Education and Internship

Students in the cooperative education (co-op) program work a minimum of 35 hours a week in positions related to their degree, while considered full-time students, gaining at least one semester of professional relevant work experience. These students have the same course requirements so it may take additional time to complete the degree. College of Engineering students may register and receive technical elective credits for their work experience with the co-op courses (ENGR 2181, ENGR 3181).

Relevant work experience may also be gained through internships. The positions are typically available during the summer terms, allowing students to stay on the traditional four-year academic plan while obtaining professional engineering experience.

A dedicated career development team in the College of Engineering Dean's Office helps guide students through the co-op program and advises on career resources. For more information contact Michael Madera by phone at 215-204-2537 or by e-mail at michael.madera@temple.edu.

+1 Bachelor to Master's Accelerated Degree Program

High-achieving undergraduates can earn both a bachelor's degree and a master's degree within five years. Students apply for this program in sophomore year, and four graduate-level courses are taken in place of undergraduate requirements during junior and senior years. After the bachelor's degree is earned, one graduate-level course is taken in the summer followed by full-time study in the subsequent Fall and Spring semesters to complete the master's degree study.

The +1 program is offered in the following areas:

- Bachelor of Science in Bioengineering and Master of Science in Bioengineering
- Bachelor of Science in Civil Engineering and Master of Science in Civil Engineering
- Bachelor of Science in Civil Engineering and Master of Science in Environmental Engineering
- Bachelor of Science in Electrical Engineering and Master of Science in Electrical Engineering
- Bachelor of Science in Electrical Engineering (Computer Engineering concentration) and Master of Science in Electrical Engineering
- Bachelor of Science in Environmental Engineering and Master of Science in Environmental Engineering
- Bachelor of Science in Mechanical Engineering and Master of Science in Mechanical Engineering

Learn more about the admissions requirements and how to apply.

Student Organizations

The following are a few of the professional societies and organizations located within the College of Engineering:

- American Society of Heating, Refrigeration, and Air Conditioning
- American Society of Civil Engineers
- American Society of Highway Engineers
- American Society of Mechanical Engineers
- Biomedical Engineering Society
- Construction Management Association of America
- Engineers Without Borders
- Eta Kappa Nu Honor Society - (IEEE-HKN)
- Institute of Electrical and Electronics Engineers
- Institute of Industrial and Systems Engineers
- Materials Research Society of Temple University
- National Society of Black Engineers
- Society of Asian Scientists and Engineers

- Society of Automotive Engineers (Temple Formula Racing)
- Society of Environmental Engineers and Scientists
- Society of Hispanic Professional Engineers
- Society of Women Engineers
- TUARC - K3TU: The Temple University Amateur Radio Club
- Temple Prosthetics and Orthotics
- Temple Robotics
- Theta Tau Colony

Special Facilities

The college is continuously investing in resources in order to provide the best education and advancements through research. Our more than 20 labs, institutes and centers and more than a dozen teaching labs are home to state-of-the-art equipment and tools. Temple Engineering recently debuted the **Innovation, Design, Engineering and Applied Science (IDEAS) Hub**, a 7,000 square-foot renovation that is part of a collaborative ecosystem in the college. The IDEAS Hub will empower students to use engineering for good. From 3D printing, motion capture and drone stations to robotics, soldering an circuitry, our students and faculty have the tools to do more than learn engineering, they can now make their ideas for changing the world a reality. Learn more about our research and lab facilities.

Additionally, students have access to the Ambler Arboretum at Temple University, the Temple University Field Station at Ambler, and the Temple University Ambler Campus Greenhouse Education and Research Complex where faculty and students can use these resources in coursework and research.

Dean's Office

Keya Sadeghipour, PhD, Dean
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Undergraduate Programs

- Bioengineering BS BIOE with Cellular Engineering Concentration (p. 657)
- Bioengineering BS BIOE with Engineering Devices Concentration (p. 663)
- Bioengineering BS BIOE with Pre-Health Concentration (p. 668)
- Civil Engineering BSCE (p. 674)
- Civil Engineering BSCE with Cooperative Education Program Concentration (p. 680)
- Civil Engineering BSCE with Environmental Engineering & Cooperative Education Program Concentrations (p. 686)
- Civil Engineering BSCE with Environmental Engineering Concentration (p. 691)
- Construction Engineering Technology BSCET (p. 696)
- Construction Engineering Technology BSCET with Cooperative Education Program Concentration (p. 701)

- Electrical Engineering BSEE (p. 706)
- Electrical Engineering BSEE with Bioelectrical Engineering and Cooperative Education Program (p. 711)
- Electrical Engineering BSEE with Bioelectrical Engineering Concentration (p. 716)
- Electrical Engineering BSEE with Computer Engineering and Cooperative Education Program (p. 721)
- Electrical Engineering BSEE with Computer Engineering Concentration (p. 726)
- Electrical Engineering BSEE with Cooperative Education Program Concentration (p. 731)
- Engineering (Undeclared) (p. 736)
- Engineering BSE (p. 737)
- Engineering BSE with Electromechanical Engineering Concentration (p. 742)
- Engineering BSE with Energy and Power Engineering Concentration (p. 747)
- Engineering Technology BSET (p. 752)
- Engineering Technology BSET with Cooperative Education Program Concentration (p. 757)
- Environmental Engineering BSEnvE (p. 762)
- Environmental Engineering Minor (p. 766)
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- Mechanical Engineering BSME (p. 772)
- Mechanical Engineering BSME with Cooperative Education Program Concentration (p. 779)
- Mechanical Engineering Technology BSMET (p. 784)

Academic Policies and Regulations

Please see the full listing of university-wide Academic Policies (p. 1835). The university policies and regulations generally apply to all undergraduate students and provide a framework within which schools and colleges may specify further conditions or variations appropriate to students in their courses or programs. Students are responsible for complying with all university-wide academic policies that apply to their individual academic status.

Changing Majors

Current students within the College of Engineering should schedule an academic advising appointment to discuss changing their major. Advisors will review how major changes might impact the student's overall graduation plan.

Students outside of the College of Engineering must complete the Change of Program (COP) form found on the Temple University COP Canvas. Students wishing to transfer into the College of Engineering should be in Academic Good Standing with a cumulative GPA of 2.0 or higher.

Co-requisites and Prerequisites

Students may be de-enrolled from courses for which they do not meet prerequisites and co-requisites. (Please see the Prerequisites and Co-requisites (p. 1860) policy for more information.) Students are responsible for reviewing and abiding by all course prerequisites and co-requisites in the Course Catalog. The requirements are designed to assure that students are appropriately prepared to be successful in their courses. Prerequisites provide an efficient manner for students to register for the next course in a sequence for which they are prepared. Students who appropriately satisfy prerequisites are permitted to register for a first and second attempt. Completion of a prerequisite does not permit a student to enroll in the third attempt of a repeated course. Students may attempt a course for the third time only if they have received permission from the college, which is not guaranteed and may require additional coursework (See the Repeating a Course Policy below).

Courses Inapplicable to Graduation

Lower-level military science (ROTC) and RCC-enhanced courses are not credited toward the minimum semester hours required for graduation.

Students will not be awarded duplicate credit for courses that are repeated in transfer or at Temple.

Credit for Life Experience

Degree seeking students may be granted academic credits for work experience if it is judged to be an adequate substitute for all or part of particular courses required of the student. Experience must be related to a specific course in the curriculum offered by the college. Work experience must be acquired before entering Temple University. Credit will only be granted after completion of 30 semester hours of coursework. Application forms are available in the Center for Academic Advising and Student Affairs (Engineering Building, Room 349).

Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List (p. 1849) policy for specific GPA and credit-hour requirements.

Fly in 4

Fly in 4 is a partnership between incoming freshmen and the University. It limits the number of hours per week that students have to work for pay and guarantees that students can graduate in four years, potentially saving them thousands of dollars in debt. For more information on this program, see Undergraduate Admissions.

Graduation Procedures

All College of Engineering students should complete a graduation review with an advisor in the Center for Academic Advising and Student Affairs prior to or at the start of their senior year. Students should schedule a review once they have completed 85 semester hours. The graduation review involves a detailing of the courses and credits completed and those that remain to be completed for graduation. Students are expected to be active participants in the review and have equal responsibility for assuring the accuracy and completeness of the review.

Early in the semester in which students will complete their degree requirements, they must apply online via Self-Service Banner (SSB). For application deadlines, see the university's Undergraduate Graduation Procedures (p. 1854).

Non-Traditional Credits

A maximum of 12 semester hours of credit will be allowed by the COE in cooperative education, relevant work experience, approved ROTC courses, and Advanced Placement or CLEP examinations. No other non-traditional credit will be granted.

Overload Requests

Students within the College of Engineering may seek approval to overload by petitioning through the Center for Academic Advising and Student Affairs. An overload petition is required when requesting to take more than 18 credits in either the fall or spring semesters or more than 8 credits in either summer session. Credits over 18 carry additional tuition charges (p. 1800). The following items are considered when reviewing an overload petition:

- Current Academic Standing
- The number of credits successfully completed in previous semesters
- Rigor of the course load requested

Permission to Take Courses at Another Institution

Students in the College of Engineering who wish to take courses at another institution must petition the Center for Academic Advising and Student Affairs for approval prior to enrolling in such a course. Petition forms are available in the Center for Academic Advising and Student Affairs, Engineering Building, Room 349. The student is responsible for obtaining a course description from the other institution and attaching it to the petition form. The student takes the petition to the corresponding Temple department for faculty review and then submits the petition to the Center for Academic Advising and Student Affairs for final approval.

Courses taken without prior approval will not be transferable toward the Temple degree. In addition, students must have completed the prerequisites and have completed or be completing any listed co-requisites of both the Temple equivalent course and course at the host institution.

Please see the University policy on Permission to Complete a Course at Another Institution after Matriculation (p. 1858) for more information.

Plagiarism and Academic Dishonesty

Plagiarism and academic dishonesty are prohibited by the College of Engineering. The development of independent thought and a respect for the thoughts of others is essential to intellectual growth. The prohibition of plagiarism and cheating is intended to foster this independence and respect. See the policy on Plagiarism (p. 1860) in this *Bulletin*.

The penalty for plagiarism or cheating as a first offense is normally an F in the course in which the offense is committed. In such cases, the instructor can either write a report or complete the Settlement of a Charge of Academic Dishonesty form and send it to the Center for Academic Advising and Student Affairs. The Center for Academic Advising and Student Affairs will forward to the Office of Student Conduct and Community Standards. The Office of Student Conduct and Community Standards generally adjudicates all cases and student appeals.

Repeating a Course

Students may attempt a course two times without restriction. Students in the College of Engineering are encouraged to meet with an advisor prior to attempting a course for the second time. A third attempt of any course is not guaranteed and requires permission of the student's home college. Petitions for a third attempt may require additional coursework, remediation and/or academic/personal planning. Please refer to the University policy on Repeating a Course (p. 1860) for further information.

College Graduation Requirements

Anticipation of Graduation

All College of Engineering (COE) students who intend to graduate in May, August or January must complete a graduation review. Students must also submit a graduation application at the beginning of their final semester.

College Requirements for all Majors

Engineering Program

- 30 minimum credits in Math and Science
- 25 minimum credits in University General Education
- 50-65 credits in major (varies with major), minimum 2.0 GPA in the major
- 128 minimum credits total

Engineering Technology (CET, ET, & MET) programs

- 24 minimum credits in Math and Science
- 25 minimum credits in University General Education
- 50-60 credits in major (varies with major), minimum 2.0 GPA in the major
- 124 minimum credits total

Notes:

1. The total number of credit hours at graduation may be greater for some students based on initial placement exams, transfer evaluations, individual curricular choices and academic progress.
2. Students must fulfill the necessary prerequisites for any given course or course sequence. See the Prerequisite and Co-requisite Policy (p. 1860) in the university-wide Academic Policies section in this *Bulletin*.
3. The engineering programs are structured to prepare students for the professional practice of engineering and/or graduate study. The curricula emphasize a rigorous treatment of the mathematical and scientific approaches to the solution of engineering problems.
4. The final two years of study stress the synthesis of unique solutions rooted in the fundamental principles mastered during the first two years. These final years culminate in a design project.

Program Performance

A minimum cumulative GPA of 2.0 is required for graduation. Students majoring in engineering must attain a minimum GPA of 2.0 in their major courses in order to graduate. Students majoring in engineering technology and construction management technology must have a minimum GPA of 2.0 in their major courses.

Independent Research

Independent student work on a laboratory investigation or design project must be approved by the chairperson of the respective department and the assigned faculty supervisor. Work is graded on research methodology, research results and a report. Typically juniors or seniors with a minimum GPA of 3.0 may apply for independent research. Approved projects must be completed in one academic year.

Independent Study

A student is permitted to take no more than two independent study courses. Permission is granted only if a student needs the course to complete his/her studies. They can be taken typically in the junior and senior years. The content of the independent study work must cover the material in one of the courses listed in the curriculum. Students must complete an independent study form in their department prior to registration for the independent study.

Transfer Credit

Transfer credit to the COE can be granted only from an accredited institution of higher learning. Co-op education and credit for life experience are not transferable from other institutions. Advanced placement credits must follow Temple's advanced placement credit policy and equivalencies. Transfer credits are not granted after a student has matriculated into a degree program. Students may take courses at other institutions and have transfer credits awarded provided they are meeting Temple's Permission to Complete Courses at Another Institution After Matriculation (p. 1858) guidelines. The dean must approve permission for such arrangements in advance. *Senior Design Projects or Capstone courses* are not transferable to the college.

Academic Advising

All students in the College of Engineering (COE) have the flexibility to meet with any of the academic advisors in the Center for Academic Advising and Student Affairs once they have officially matriculated in the College of Engineering. The student's academic advisor will confirm that the courses selected yield credits toward a degree and that the requirements of Temple University, COE, and the academic department are being met. Reference should be made to this *Bulletin* and to DARS in planning programs.

Academic advisors attempt to avoid errors when advising students about their program requirements, but schools and colleges cannot assume liability for errors in advising. Therefore, students must assume primary responsibility for knowing the requirements for their degrees and for acquiring current information about their academic status.

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Bioengineering BS BIOE with Cellular Engineering Concentration

Overview

The **Bachelor of Science in Bioengineering** is offered by the Department of Bioengineering.

The Bioengineering program integrates engineering science, rigorous mathematical tools and a quantitative approach to the life sciences and applies this spectrum of knowledge in an interdisciplinary fashion to provide solutions to basic and applied biological and medical problems. This goal will be accomplished by offering to the students an integrated set of courses aimed at providing a thorough introduction to the complex and interdisciplinary field of Bioengineering:

- Teach engineering science, analysis, and design in the context of quantitative approaches to solving life science and medicine-related problems.
- Integrate interdisciplinary aspects of biology, physiology, and engineering within courses and design projects.
- Emphasize the interdisciplinary nature of Bioengineering, in terms of problem solving, design, within the framework of interdisciplinary teams focusing on the dialogue between "biology-inspired engineering" and "biology as a specific arm of applied engineering principles."
- Immerse students in key life science and medical principles, while focusing on understanding cell/molecular-level events through quantitative analysis and modeling.
- Provide an exceptional learning environment with significant instruction by Bioengineering faculty and researchers in collaboration with experts from other fields, especially the Health Science Campus.

In this curriculum, incoming students will first and foremost be trained as solid Temple engineers, focusing on applying engineering science, design, and analysis to real life problems specifically in the areas of biology and medicine. Hands-on engineering experience will be gained through intense laboratory coursework and by solving real-life biomedical problems.

Bioengineering study leads to careers in several fields.

Students **must select** from one of three **concentrations** in:

- Cellular Engineering,
- Engineering Devices, or
- Pre-Health.

Cellular Engineering Concentration

A **concentration in Cellular Engineering** provides students with the skills to apply quantitative approaches to problem solving in cellular and molecular engineering, particularly as they relate to human health. A range of courses include design, development and uses of biomaterials; building functional tissues using cells and scaffolds; and repairing diseased tissues and organs at the cellular and molecular level. It also explores the host-biomaterial interface and interactions.

Campus Location: Main

Program Code: EN-BIOE-BSBE

Accreditation

The Bioengineering (BS) program is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and Program Criteria for Bioengineering and Biomedical and Similarly Named Engineering Programs. ABET is a non-profit and non-governmental accrediting agency for academic programs in the disciplines of applied science, computing, engineering, and engineering technology recognized by the Council for Higher Education Accreditation (CHEA).

+1 Bachelor to Master's Accelerated Degree Program

High-achieving undergraduates can earn both a bachelor's degree and a master's degree within five years. Students apply for this program in sophomore year, and four graduate-level courses are taken in place of undergraduate requirements during junior and senior years. After the bachelor's degree is earned, one graduate-level course is taken in the summer followed by full-time study in the subsequent Fall and Spring semesters to complete the master's degree study. The following accelerated program is available:

- Bachelor of Science in Bioengineering and Master of Science in Bioengineering

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Learn more about the Bachelor of Science in Bioengineering.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

Code	Title	Credit Hours
ENGR 2196 or ENGR 2996	Technical Communication Honors Technical Communication	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project Honors Capstone Senior Design Project	3

Department and Major Requirements

Code	Title	Credit Hours
Required Math & Basic Science Courses		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
Select one of the following:		3
MATH 2041 or MATH 2941	Differential Equations I Honors Differential Equations I	
MATH 3041 or MATH 3941	Differential Equations I Honors Differential Equations I	
Select one of the following:		4
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology Honors Introduction to Cellular and Molecular Biology	
BIOL 1112	Introduction to Biomolecules, Cells and Genomes	
CHEM 1031 or CHEM 1951	General Chemistry I Honors General Chemical Science I	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I Honors Chemical Science Laboratory I	1
Select one of the following:		4
PHYS 1061 or PHYS 1961	Elementary Classical Physics I Honors Elementary Classical Physics I	
PHYS 2021	General Physics I	

or PHYS 2921	Honors General Physics I	
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
or PHYS 1962	Honors Elementary Classical Physics II	
PHYS 2022	General Physics II	
or PHYS 2922	Honors General Physics II	
Required General Education Courses		
Select one of the following:		4
ENG 0802	Analytical Reading and Writing	
ENG 0812	Analytical Reading and Writing: ESL	
ENG 0902	Honors Writing About Literature	
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	Honors Intellectual Heritage I: The Good Life	
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	Honors Intellectual Heritage II: The Common Good	
GenEd 08xx or 09xx (Human Behavior)		3
GenEd 08xx or 09xx (Race and Diversity)		3
GenEd 08xx or 09xx (Global/World Society)		3
GenEd 08xx or 09xx (U.S. Society)		3
GenEd 08xx or 09xx (Arts)		3
Required Bioengineering & Engineering Courses (Common for all Pathways)		
BIOE 2001	Frontiers in Bioengineering	2
BIOE 2101	Engineering Principles of Physiological Systems	3
BIOE 3001	Research Design and Methods in Bioengineering	2
BIOE 3101	Bioelectrical Engineering Lab	3
BIOE 3102	Biomaterials Lab	3
BIOE 3201	Biomedical Instrumentation	2
BIOE 4101	Biomechanics Lab	3
BIOE 4311	The Entrepreneurial Bioengineer	3
ENGR 1101	Introduction to Engineering & Engineering Technology	3
or ENGR 1901	Honors Introduction to Engineering	
ENGR 1102	Introduction to Engineering Problem Solving	3
ENGR 2196	Technical Communication (WI)	3
or ENGR 2996	Honors Technical Communication	
ENGR 3571	Classical and Statistical Thermodynamics	3
Bioengineering Design Course - select one of the following:		3
BIOE 3402	Design Elective: Biodesign	
BIOE 3512		
BIOE 4279		
ENGR 4296	Capstone Senior Design Project (WI)	3
or ENGR 4996	Honors Capstone Senior Design Project	
Required Bioengineering Electives (minimum of 9 credits)		
BIOE 2201	Modeling Fundamentals in Bioengineering	1.5
BIOE 2202	Programming Fundamentals in Bioengineering	1.5
BIOE 3303	Biotransport Phenomena	3
Select from the following list:		3
BIOE 2312	Mechanics for Bioengineering I	
BIOE 2401	Biodesign - Needs and Ideation	
BIOE 3302	Drug Delivery	
BIOE 3331	Principles of Macromolecular Science	
BIOE 3401	Biodesign - Testing and Validation	
BIOE 3511	Interactions of Biomaterials with Living Tissues	

BIOE 3725	Cell Biology for Engineers	
BIOE 4278	Cardiac Devices	
BIOE 3301	Biomedical Signals and Systems (with additional prerequisites)	
Required Technical Electives		
CHEM 1032	General Chemistry II	3
or CHEM 1952	Honors General Chemical Science II	
CHEM 1034	General Chemistry Laboratory II	1
or CHEM 1954	Honors Chemical Science Laboratory II	
CHEM 2201	Organic Chemistry I	3
or CHEM 2921	Organic Chemistry for Honors I	
CHEM 2203	Organic Chemistry Laboratory I	1
or CHEM 2923	Organic Honors Laboratory I	
CHEM 2202	Organic Chemistry II	3
or CHEM 2922	Organic Chemistry for Honors II	
CHEM 2204	Organic Chemistry Laboratory II	1
or CHEM 2924	Organic Honors Laboratory II	
CHEM 3401	Applications of Biochemistry	3
Bioengineering Capstone Course		
Select one of the following:		3
BIOE 4333	Capstone Elective: Applied Biospectroscopy	
BIOE 4411	Capstone Elective: Biomaterials	
BIOE 4431	Capstone Elective: Neuroengineering	
BIOE 4461	Capstone Elective: Principles of Tissue Engineering	
BIOE 4501	Capstone Elective: Regenerative Engineering	
BIOE 4555	Capstone Elective - Biophotonics: Seeing is Believing	
Free Electives		
Free Elective #1		3
Free Elective #2		3
Total Credit Hours		128

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Bioengineering with Concentration in Cellular Engineering

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MATH 1041	Calculus I	4
or MATH 1941	or Honors Calculus I	
CHEM 1031	General Chemistry I	3
or CHEM 1951	or Honors General Chemical Science I	
CHEM 1033	General Chemistry Laboratory I	1
or CHEM 1953	or Honors Chemical Science Laboratory I	
ENGR 1101	Introduction to Engineering & Engineering Technology	3
or ENGR 1901	or Honors Introduction to Engineering	
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
Credit Hours		15
Spring		
MATH 1042	Calculus II	4
or MATH 1942	or Honors Calculus II	
Select one of the following:		4

PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	
PHYS 2021 or PHYS 2921	General Physics I or Honors General Physics I	
BIOE 2001	Frontiers in Bioengineering	2
ENGR 1102	Introduction to Engineering Problem Solving	3
CHEM 1032 or CHEM 1952	General Chemistry II or Honors General Chemical Science II	3
CHEM 1034 or CHEM 1954	General Chemistry Laboratory II or Honors Chemical Science Laboratory II	1
Credit Hours		17
Year 2		
Fall		
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
Select one of the following:		4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	
PHYS 2022 or PHYS 2922	General Physics II or Honors General Physics II	
CHEM 2201 or CHEM 2921	Organic Chemistry I or Organic Chemistry for Honors I	3
CHEM 2203 or CHEM 2923	Organic Chemistry Laboratory I or Organic Honors Laboratory I	1
BIOE 3001	Research Design and Methods in Bioengineering	2
Select one of the following:		4
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology or Honors Introduction to Cellular and Molecular Biology	
BIOL 1112	Introduction to Biomolecules, Cells and Genomes	
Credit Hours		18
Spring		
BIOE 3201	Biomedical Instrumentation	2
BIOE 2101	Engineering Principles of Physiological Systems	3
BIOE 3102	Biomaterials Lab	3
CHEM 2202 or CHEM 2922	Organic Chemistry II or Organic Chemistry for Honors II	3
CHEM 2204 or CHEM 2924	Organic Chemistry Laboratory II or Organic Honors Laboratory II	1
ENGR 3571	Classical and Statistical Thermodynamics	3
BIOE 2201	Modeling Fundamentals in Bioengineering	1.5
BIOE 2202	Programming Fundamentals in Bioengineering	1.5
Credit Hours		18
Year 3		
Fall		
BIOE 3101	Bioelectrical Engineering Lab	3
BIOE 3303	Biotransport Phenomena	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
ENGR 2196 or ENGR 2996	Technical Communication or Honors Technical Communication	3
Select one of the following:		3
MATH 2041 or MATH 2941	Differential Equations I or Honors Differential Equations I	

MATH 3041 or MATH 3941	Differential Equations I or Honors Differential Equations I	
Credit Hours		15
Spring		
CHEM 3401	Applications of Biochemistry	3
BIOE 4101	Biomechanics Lab	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Free Elective #1		3
Credit Hours		15
Year 4		
Fall		
Bioengineering Capstone - select one of the following:		3
BIOE 4333	Capstone Elective: Applied Biospectroscopy	
BIOE 4411	Capstone Elective: Biomaterials	
BIOE 4431	Capstone Elective: Neuroengineering	
BIOE 4461	Capstone Elective: Principles of Tissue Engineering	
BIOE 4501	Capstone Elective: Regenerative Engineering	
BIOE 4555	Capstone Elective - Biophotonics: Seeing is Believing	
Bioengineering Design Course - select one of the following:		3
BIOE 3402	Design Elective: Biodesign	
BIOE 3512		
BIOE 4279		
BIOE Elective		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
ENGR 4296 or ENGR 4996	Capstone Senior Design Project or Honors Capstone Senior Design Project	3
BIOE 4311	The Entrepreneurial Bioengineer	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Free Elective #2		3
Credit Hours		15
Total Credit Hours		128
Code	Title	Credit Hours
Other Approved Technical Electives (check for prerequisites)		
BIOL 3096	Cell Structure and Function	4
BIOL 3352	Systems Neuroscience	3
CIS 1057	Computer Programming in C	4
ECE 2332 & ECE 2333	Principles of Electric Circuits and Principles of Electric Circuits Lab	5
ECE 3412 & ECE 3413	Classical Control Systems and Classical Control Laboratory	4
ECE 3512 or ECE 3912	Signals: Continuous and Discrete Honors Signals: Continuous and Discrete	4
ENGR 2011 or MATH 2101 or MEE 2011	Engineering Analysis & Applications Linear Algebra Linear Systems	3

ENGR 3117	Computer-Aided Design (CAD)	3
ENGR 3201	Material Science for Engineers	3
ENGR 3553	Mechanics of Fluids	3
or ENGR 3953	Honors Mechanics of Fluids	

Bioengineering BS BIOE with Engineering Devices Concentration

Overview

The **Bachelor of Science in Bioengineering** is offered by the Department of Bioengineering.

The Bioengineering program integrates engineering science, rigorous mathematical tools and a quantitative approach to the life sciences and applies this spectrum of knowledge in an interdisciplinary fashion to provide solutions to basic and applied biological and medical problems. This goal will be accomplished by offering to the students an integrated set of courses aimed at providing a thorough introduction to the complex and interdisciplinary field of Bioengineering:

- Teach engineering science, analysis, and design in the context of quantitative approaches to solving life science and medicine-related problems.
- Integrate interdisciplinary aspects of biology, physiology, and engineering within courses and design projects.
- Emphasize the interdisciplinary nature of Bioengineering, in terms of problem solving, design, within the framework of interdisciplinary teams focusing on the dialogue between "biology-inspired engineering" and "biology as a specific arm of applied engineering principles."
- Immerse students in key life science and medical principles, while focusing on understanding cell/molecular-level events through quantitative analysis and modeling.
- Provide an exceptional learning environment with significant instruction by Bioengineering faculty and researchers in collaboration with experts from other fields, especially the Health Science Campus.

In this curriculum, incoming students will first and foremost be trained as solid Temple engineers, focusing on applying engineering science, design, and analysis to real life problems specifically in the areas of biology and medicine. Hands-on engineering experience will be gained through intense laboratory coursework and by solving real-life biomedical problems.

Bioengineering study leads to careers in several fields.

Students **must select** from one of three **concentrations** in:

- Cellular Engineering,
- Engineering Devices, or
- Pre-Health.

Engineering Devices Concentration

A **concentration in Engineering Devices** provides students with the skills to apply engineering principles to design and develop instruments, implants and imaging modalities. A range of courses include topics covering biomechanics, bioinstrumentation and bioimaging.

Campus Location: Main

Program Code: EN-BIOE-BSBE

Accreditation

The Bioengineering (BS) program is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and Program Criteria for Bioengineering and Biomedical and Similarly Named Engineering Programs. ABET is a non-profit and non-governmental accrediting agency for academic programs in the disciplines of applied science, computing, engineering, and engineering technology recognized by the Council for Higher Education Accreditation (CHEA).

+1 Bachelor to Master's Accelerated Degree Program

High-achieving undergraduates can earn both a bachelor's degree and a master's degree within five years. Students apply for this program in sophomore year, and four graduate-level courses are taken in place of undergraduate requirements during junior and senior years. After the bachelor's degree is earned, one graduate-level course is taken in the summer followed by full-time study in the subsequent Fall and Spring semesters to complete the master's degree study. The following accelerated program is available:

- Bachelor of Science in Bioengineering and Master of Science in Bioengineering

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Learn more about the Bachelor of Science in Bioengineering.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) Curriculum.

All Temple students must take a minimum of two writing intensive courses for a total of at least six credits. The writing intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing intensive courses required for this major are:

Code	Title	Credit Hours
ENGR 2196 or ENGR 2996	Technical Communication Honors Technical Communication	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project Honors Capstone Senior Design Project	3

Department and Major Requirements

Code	Title	Credit Hours
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
Select one of the following:		3
MATH 2041 or MATH 2941	Differential Equations I Honors Differential Equations I	
MATH 3041 or MATH 3941	Differential Equations I Honors Differential Equations I	
BIOL 1012	General Biology II	4
CHEM 1031 or CHEM 1951	General Chemistry I Honors General Chemical Science I	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I Honors Chemical Science Laboratory I	1
Select one of the following:		4
PHYS 1061 or PHYS 1961	Elementary Classical Physics I Honors Elementary Classical Physics I	
PHYS 2021 or PHYS 2921	General Physics I Honors General Physics I	
Select one of the following:		4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II Honors Elementary Classical Physics II	

PHYS 2022 or PHYS 2922	General Physics II Honors General Physics II	
Required General Education Courses		
Select from one of the following:		4
ENG 0802	Analytical Reading and Writing	
ENG 0812	Analytical Reading and Writing: ESL	
ENG 0902	Honors Writing About Literature	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life Honors Intellectual Heritage I: The Good Life	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good Honors Intellectual Heritage II: The Common Good	3
GenEd 08xx or 09xx (Human Behavior)		3
GenEd 08xx or 09xx (Race and Diversity)		3
GenEd 08xx or 09xx (Global/World Society)		3
GenEd 08xx or 09xx (U.S. Society)		3
GenEd 08xx or 09xx (Arts)		3
Required Bioengineering & Engineering Courses (Common for all Pathways)		
BIOE 2001	Frontiers in Bioengineering	2
BIOE 2101	Engineering Principles of Physiological Systems	3
BIOE 3001	Research Design and Methods in Bioengineering	2
BIOE 3101	Bioelectrical Engineering Lab	3
BIOE 3102	Biomaterials Lab	3
BIOE 3201	Biomedical Instrumentation	2
BIOE 4101	Biomechanics Lab	3
BIOE 4311	The Entrepreneurial Bioengineer	3
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology Honors Introduction to Engineering	3
ENGR 1102	Introduction to Engineering Problem Solving	3
ENGR 2196 or ENGR 2996	Technical Communication Honors Technical Communication	3
ENGR 3571	Classical and Statistical Thermodynamics	3
Bioengineering Design Course - select one of the following:		3
BIOE 3402	Design Elective: Biodesign	
BIOE 3512		
BIOE 4279		
ENGR 4296 or ENGR 4996	Capstone Senior Design Project Honors Capstone Senior Design Project	3
Required Bioengineering Electives		
BIOE 2312	Mechanics for Bioengineering I	4
BIOE 3312	Mechanics for Bioengineering II	4
BIOE 3301	Biomedical Signals and Systems	3
Required Technical Electives (minimum 15 credits)		
BIOE 2201	Modeling Fundamentals in Bioengineering	1.5
BIOE 2202	Programming Fundamentals in Bioengineering	1.5
BIOE 3303	Biotransport Phenomena	3
CHEM 1032 or CHEM 1952	General Chemistry II Honors General Chemical Science II	3
CHEM 1034 or CHEM 1954	General Chemistry Laboratory II Honors Chemical Science Laboratory II	1
MATH 2101 or ENGR 2011	Linear Algebra Engineering Analysis & Applications	3
Select from the following list:		3

BIOE 2401	Biodesign - Needs and Ideation	
BIOE 3401	Biodesign - Testing and Validation	
BIOE 3511	Interactions of Biomaterials with Living Tissues	
BIOE 3725	Cell Biology for Engineers	
BIOE 4278	Cardiac Devices	
ENGR 3553	Mechanics of Fluids	
ENGR 3117	Computer-Aided Design (CAD)	
ECE 2332	Principles of Electric Circuits	
ECE 2333	Principles of Electric Circuits Lab	
Bioengineering Capstone Course		
Select one of the following:		3
BIOE 4333	Capstone Elective: Applied Biospectroscopy	
BIOE 4431	Capstone Elective: Neuroengineering	
BIOE 4441	Capstone Elective: Biomechanics	
Free Electives		
Free Elective		3
Total Credit Hours		128

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Bioengineering with Concentration in Engineering Devices

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
CHEM 1031 or CHEM 1951	General Chemistry I or Honors General Chemical Science I	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I or Honors Chemical Science Laboratory I	1
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology or Honors Introduction to Engineering	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		15
Spring		
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
Select one of the following:		4
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	
PHYS 2021 or PHYS 2921	General Physics I or Honors General Physics I	
BIOE 2001	Frontiers in Bioengineering	2
CHEM 1032 or CHEM 1952	General Chemistry II or Honors General Chemical Science II	3
CHEM 1034 or CHEM 1954	General Chemistry Laboratory II or Honors Chemical Science Laboratory II	1
BIOL 1012	General Biology II	4
Credit Hours		18

Year 2**Fall**

MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
Select one of the following:		4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	
PHYS 2022 or PHYS 2922	General Physics II or Honors General Physics II	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
BIOE 3001	Research Design and Methods in Bioengineering	2
ENGR 1102	Introduction to Engineering Problem Solving	3
BIOE 2202	Programming Fundamentals in Bioengineering	1.5
Credit Hours		17.5

Spring

BIOE 3201	Biomedical Instrumentation	2
BIOE 2101	Engineering Principles of Physiological Systems	3
BIOE 3102	Biomaterials Lab	3
BIOE 2312	Mechanics for Bioengineering I	4
ENGR 3571	Classical and Statistical Thermodynamics	3
BIOE 2201	Modeling Fundamentals in Bioengineering	1.5
Credit Hours		16.5

Year 3**Fall**

BIOE 3101	Bioelectrical Engineering Lab	3
Select one of the following:		3
ENGR 2011	Engineering Analysis & Applications	
MATH 2101	Linear Algebra	
BIOE 3312	Mechanics for Bioengineering II	4
BIOE 3303	Biotransport Phenomena	3
Select one of the following:		3
MATH 2041 or MATH 2941	Differential Equations I or Honors Differential Equations I	
MATH 3041 or MATH 3941	Differential Equations I or Honors Differential Equations I	
Credit Hours		16

Spring

BIOE 3301	Biomedical Signals and Systems	3
BIOE 4101	Biomechanics Lab	3
Technical Elective Course		3
ENGR 2196 or ENGR 2996	Technical Communication or Honors Technical Communication	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		15

Year 4**Fall**

Bioengineering Capstone - select one of the following:		3
BIOE 4333	Capstone Elective: Applied Biospectroscopy	
BIOE 4441	Capstone Elective: Biomechanics	
BIOE 4431	Capstone Elective: Neuroengineering	
BIOE 4311	The Entrepreneurial Bioengineer	3

Bioengineering Design Course - select one of the following:	3
BIOE 3402 Design Elective: Biodesign	
BIOE 3512	
BIOE 4279	
GenEd Breadth Course	3
GenEd Breadth Course	3
Credit Hours	15
Spring	
ENGR 4296 Capstone Senior Design Project	3
or ENGR 4996 or Honors Capstone Senior Design Project	
GenEd Breadth Course	3
GenEd Breadth Course	3
GenEd Breadth Course	3
Free Elective	3
Credit Hours	15
Total Credit Hours	128

Bioengineering BS BIOE with Pre-Health Concentration

Overview

The **Bachelor of Science in Bioengineering** is offered by the Department of Bioengineering.

The Bioengineering program integrates engineering science, rigorous mathematical tools and a quantitative approach to the life sciences and applies this spectrum of knowledge in an interdisciplinary fashion to provide solutions to basic and applied biological and medical problems. This goal will be accomplished by offering to the students an integrated set of courses aimed at providing a thorough introduction to the complex and interdisciplinary field of Bioengineering:

- Teach engineering science, analysis, and design in the context of quantitative approaches to solving life science and medicine-related problems.
- Integrate interdisciplinary aspects of biology, physiology, and engineering within courses and design projects.
- Emphasize the interdisciplinary nature of Bioengineering, in terms of problem solving, design, within the framework of interdisciplinary teams focusing on the dialogue between "biology-inspired engineering" and "biology as a specific arm of applied engineering principles."
- Immerse students in key life science and medical principles, while focusing on understanding cell/molecular-level events through quantitative analysis and modeling.
- Provide an exceptional learning environment with significant instruction by Bioengineering faculty and researchers in collaboration with experts from other fields, especially the Health Science Campus.

In this curriculum, incoming students will first and foremost be trained as solid Temple engineers, focusing on applying engineering science, design, and analysis to real life problems specifically in the areas of biology and medicine. Hands-on engineering experience will be gained through intense laboratory coursework and by solving real-life biomedical problems.

Bioengineering study leads to careers in several fields.

Students **must select** from one of three **concentrations** in:

- Cellular Engineering,
- Engineering Devices, or
- Pre-Health.

Pre-Health Concentration

A **concentration in Pre-Health** provides students with much of the coursework needed to prepare to take national tests such as the MCAT and DCAT for entrance to graduate school in medicine, dentistry or in other health-related studies. The Pre-Health concentration contains similar courses as Cellular Engineering with the ability for students to pursue the specific coursework requirements for their desired postbaccalaureate program.

Campus Location: Main

Program Code: EN-BIOE-BSBE

Accreditation

The Bioengineering (BS) program is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and Program Criteria for Bioengineering and Biomedical and Similarly Named Engineering Programs. ABET is a non-profit and non-governmental accrediting agency for academic programs in the disciplines of applied science, computing, engineering, and engineering technology recognized by the Council for Higher Education Accreditation (CHEA).

+1 Bachelor to Master's Accelerated Degree Program

High-achieving undergraduates can earn both a bachelor's degree and a master's degree within five years. Students apply for this program in sophomore year, and four graduate-level courses are taken in place of undergraduate requirements during junior and senior years. After the bachelor's degree is earned, one graduate-level course is taken in the summer followed by full-time study in the subsequent Fall and Spring semesters to complete the master's degree study. The following accelerated program is available:

- Bachelor of Science in Bioengineering and Master of Science in Bioengineering

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Learn more about the Bachelor of Science in Bioengineering.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) Curriculum.

All Temple students must take a minimum of two writing intensive courses for a total of at least six credits. The writing intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing intensive courses required for this major are:

Code	Title	Credit Hours
ENGR 2196 or ENGR 2996	Technical Communication Honors Technical Communication	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project Honors Capstone Senior Design Project	3

Department and Major Requirements

Code	Title	Credit Hours
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
Select one of the following:		3
MATH 2041 or MATH 2941	Differential Equations I Honors Differential Equations I	

MATH 3041 or MATH 3941	Differential Equations I Honors Differential Equations I	
BIOL 2112 or BIOL 2912 or BIOL 1112	Introduction to Cellular and Molecular Biology Honors Introduction to Cellular and Molecular Biology Introduction to Biomolecules, Cells and Genomes	4
CHEM 1031 or CHEM 1951	General Chemistry I Honors General Chemical Science I	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I Honors Chemical Science Laboratory I	1
PHYS 2021 or PHYS 2921 or PHYS 1061 or PHYS 1961	General Physics I Honors General Physics I Elementary Classical Physics I Honors Elementary Classical Physics I	4
PHYS 2022 or PHYS 2922 or PHYS 1062 or PHYS 1962	General Physics II Honors General Physics II Elementary Classical Physics II Honors Elementary Classical Physics II	4
Required General Education Courses		
Select one of the following:		4
ENG 0802	Analytical Reading and Writing	
ENG 0812	Analytical Reading and Writing: ESL	
ENG 0902	Honors Writing About Literature	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life Honors Intellectual Heritage I: The Good Life	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good Honors Intellectual Heritage II: The Common Good	3
GenEd 08xx or 09xx (Human Behavior)		3
GenEd 08xx or 09xx (Race and Diversity)		3
GenEd 08xx or 09xx (Global/World Society)		3
GenEd 08xx or 09xx (U.S. Society)		3
GenEd 08xx or 09xx (Arts)		3
Required Bioengineering & Engineering Courses (Common for all Pathways)		
BIOE 2001	Frontiers in Bioengineering	2
BIOE 2101	Engineering Principles of Physiological Systems	3
BIOE 3001	Research Design and Methods in Bioengineering	2
BIOE 3101	Bioelectrical Engineering Lab	3
BIOE 3102	Biomaterials Lab	3
BIOE 3201	Biomedical Instrumentation	2
BIOE 4101	Biomechanics Lab	3
BIOE 4311	The Entrepreneurial Bioengineer	3
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology Honors Introduction to Engineering	3
ENGR 1102	Introduction to Engineering Problem Solving	3
ENGR 2196 or ENGR 2996	Technical Communication Honors Technical Communication	3
ENGR 3571	Classical and Statistical Thermodynamics	3
Bioengineering Design Course - select one of the following:		3
BIOE 3402	Design Elective: Biodesign	
BIOE 3512		
BIOE 4279		
ENGR 4296 or ENGR 4996	Capstone Senior Design Project Honors Capstone Senior Design Project	3

Required Bioengineering Electives (minimum 9 credits)

BIOE 2201	Modeling Fundamentals in Bioengineering	1.5
BIOE 2202	Programming Fundamentals in Bioengineering	1.5
BIOE 3303	Biotransport Phenomena	3
Select from the following list:		3
BIOE 2312	Mechanics for Bioengineering I	
BIOE 2401	Biodesign - Needs and Ideation	
BIOE 3302	Drug Delivery	
BIOE 3331	Principles of Macromolecular Science	
BIOE 3401	Biodesign - Testing and Validation	
BIOE 3511	Interactions of Biomaterials with Living Tissues	
BIOE 3725	Cell Biology for Engineers	
BIOE 4278	Cardiac Devices	
Any other approved bioengineering electives (note additional prerequisite courses may need to be taken)		

Required Technical Electives

BIOL 1111	Introduction to Organismal Biology	4
or BIOL 1911	Honors Introduction to Organismal Biology	
CHEM 1032	General Chemistry II	3
or CHEM 1952	Honors General Chemical Science II	
CHEM 1034	General Chemistry Laboratory II	1
or CHEM 1954	Honors Chemical Science Laboratory II	
CHEM 2201	Organic Chemistry I	3
or CHEM 2921	Organic Chemistry for Honors I	
CHEM 2203	Organic Chemistry Laboratory I	1
or CHEM 2923	Organic Honors Laboratory I	
CHEM 2202	Organic Chemistry II	3
or CHEM 2922	Organic Chemistry for Honors II	
CHEM 2204	Organic Chemistry Laboratory II	1
or CHEM 2924	Organic Honors Laboratory II	
CHEM 3401	Applications of Biochemistry	3

Bioengineering Capstone Course

Select one of the following:		3
BIOE 4333	Capstone Elective: Applied Biospectroscopy	
BIOE 4411	Capstone Elective: Biomaterials	
BIOE 4431	Capstone Elective: Neuroengineering	
BIOE 4461	Capstone Elective: Principles of Tissue Engineering	
BIOE 4501	Capstone Elective: Regenerative Engineering	
BIOE 4555	Capstone Elective - Biophotonics: Seeing is Believing	
Other Bioengineering Capstone courses (note additional prerequisite courses may need to be taken)		

Free Elective		2
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Total Credit Hours		128
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Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Bioengineering with Concentration in Pre-Health**Suggested Plan for New Students Starting in the 2023-2024 Academic Year**

Year 1		
Fall		Credit Hours
MATH 1041	Calculus I	4
or MATH 1941	or Honors Calculus I	

CHEM 1031 or CHEM 1951	General Chemistry I or Honors General Chemical Science I	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I or Honors Chemical Science Laboratory I	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology or Honors Introduction to Engineering	3

Credit Hours **15**

Spring

MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
Select one of the following:		4
PHYS 2021 or PHYS 2921	General Physics I or Honors General Physics I	
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	
BIOE 2001	Frontiers in Bioengineering	2
CHEM 1032 or CHEM 1952	General Chemistry II or Honors General Chemical Science II	3
CHEM 1034 or CHEM 1954	General Chemistry Laboratory II or Honors Chemical Science Laboratory II	1
ENGR 1102	Introduction to Engineering Problem Solving	3

Credit Hours **17**

Year 2**Fall**

MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
Select one of the following:		4
PHYS 2022 or PHYS 2922	General Physics II or Honors General Physics II	
PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	
CHEM 2201 or CHEM 2921	Organic Chemistry I or Organic Chemistry for Honors I	3
CHEM 2203 or CHEM 2923	Organic Chemistry Laboratory I or Organic Honors Laboratory I	1
Select one of the following:		4
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology or Honors Introduction to Cellular and Molecular Biology	
BIOL 1112	Introduction to Biomolecules, Cells and Genomes	
BIOE 3001	Research Design and Methods in Bioengineering	2

Credit Hours **18**

Spring

BIOE 3201	Biomedical Instrumentation	2
BIOE 2101	Engineering Principles of Physiological Systems	3
BIOE 3102	Biomaterials Lab	3
CHEM 2202 or CHEM 2922	Organic Chemistry II or Organic Chemistry for Honors II	3
CHEM 2204 or CHEM 2924	Organic Chemistry Laboratory II or Organic Honors Laboratory II	1
BIOE 2201	Modeling Fundamentals in Bioengineering	1.5
BIOE 2202	Programming Fundamentals in Bioengineering	1.5

ENGR 3571	Classical and Statistical Thermodynamics	3
Credit Hours		18
Year 3		
Fall		
BIOE 3101	Bioelectrical Engineering Lab	3
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology or Honors Introduction to Organismal Biology	4
ENGR 2196 or ENGR 2996	Technical Communication or Honors Technical Communication	3
Select one of the following:		3
MATH 2041 or MATH 2941	Differential Equations I or Honors Differential Equations I	
MATH 3041 or MATH 3941	Differential Equations I or Honors Differential Equations I	
BIOE 3303	Biotransport Phenomena	3
Credit Hours		16
Spring		
CHEM 3401	Applications of Biochemistry	3
BIOE 4101	Biomechanics Lab	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Free Elective		2
Credit Hours		14
Year 4		
Fall		
Bioengineering Design Course - select one of the following:		3
BIOE 3402	Design Elective: Biodesign	
BIOE 3512		
BIOE 4279		
Bioengineering Capstone - select one of the following:		3
BIOE 4333	Capstone Elective: Applied Biospectroscopy	
BIOE 4411	Capstone Elective: Biomaterials	
BIOE 4431	Capstone Elective: Neuroengineering	
BIOE 4461	Capstone Elective: Principles of Tissue Engineering	
BIOE 4501	Capstone Elective: Regenerative Engineering	
BIOE 4555	Capstone Elective - Biophotonics: Seeing is Believing	
BIOE 4311	The Entrepreneurial Bioengineer	3
GenEd Breadth Course		3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		15
Spring		
ENGR 4296 or ENGR 4996	Capstone Senior Design Project or Honors Capstone Senior Design Project	3
BIOE Elective Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Total Credit Hours		128

Civil Engineering BSCE

Overview

The **Bachelor of Science in Civil Engineering** is offered by the Department of Civil and Environmental Engineering. The program prepares students for professional engineering careers in the design, construction and maintenance of the built environment.

Civil Engineering professionals plan, design, construct, and operate facilities which are essential to the quality of modern life. The Civil Engineering curriculum is based upon providing a fully-integrated design experience by beginning with introductory courses in the study of engineering history and economics, then progressing through a broad coverage of the primary areas of practice within Civil Engineering (surveying, structures, geotechnical engineering, construction engineering, water resources, transportation and environmental engineering), and finishing with a year-long capstone Civil Engineering senior design project. The goal of the Civil Engineering program is to prepare students to pursue graduate education in their specific areas of interest, to pass the Fundamental of Engineering and Professional Engineer exams in the areas of practice within Civil Engineering, and become involved in design, project planning and research.

Civil Engineering students may complete one or more **optional concentrations** in

- Environmental Engineering
- Cooperative Education Program

Campus Location: Main

Program Code: EN-CEE-BSCE

Accreditation

The Civil Engineering (BS) program is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and Program Criteria for Civil and Similarly Named Engineering Programs. ABET is a non-profit and non-governmental accrediting agency for academic programs in the disciplines of applied science, computing, engineering, and engineering technology recognized by the Council for Higher Education Accreditation (CHEA).

+1 Bachelor to Master's Accelerated Degree Program

High-achieving undergraduates can earn both a bachelor's degree and a master's degree within five years. Students apply for this program in sophomore year, and four graduate-level courses are taken in place of undergraduate requirements during junior and senior years. After the bachelor's degree is earned, one graduate-level course is taken in the summer followed by full-time study in the subsequent Fall and Spring semesters to complete the master's degree study. The following accelerated program is available:

- Bachelor of Science in Civil Engineering and Master of Science in Civil Engineering

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Learn more about the Bachelor of Science in Civil Engineering.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

Code	Title	Credit Hours
ENGR 2196 or ENGR 2996	Technical Communication Honors Technical Communication	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project Honors Capstone Senior Design Project	3

Department Requirements

Code	Title	Credit Hours
Required Math & Basic Science Courses		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
MATH 2041 or MATH 2941 or MATH 3041 or MATH 3941	Differential Equations I Honors Differential Equations I Differential Equations I Honors Differential Equations I	3
CEE 3048	Probability, Statistics & Stochastic Methods	3
PHYS 1061 or PHYS 1961	Elementary Classical Physics I Honors Elementary Classical Physics I	4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II Honors Elementary Classical Physics II	4
CHEM 1035	Chemistry for Engineers	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I Honors Chemical Science Laboratory I	1
Select one of the following:		3-4
CEE 2711	Environmental Chemistry & Microbiology	
EES 1001	Introductory Geology	
EES 2001	Physical Geology	
Required General Education Courses		
Select one of the following:		4
ENG 0802	Analytical Reading and Writing	
ENG 0812	Analytical Reading and Writing: ESL	
ENG 0902	Honors Writing About Literature	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life Honors Intellectual Heritage I: The Good Life	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good Honors Intellectual Heritage II: The Common Good	3
GenEd 08xx or 09xx (U.S. Society)		3
GenEd 08xx or 09xx (Global/World Society)		3
GenEd 08xx or 09xx (Human Behavior)		3

GenEd 08xx or 09xx (The Arts)		3
GenEd 08xx or 09xx (Race and Diversity)		3
Required Civil Engineering Courses		
CEE 1105	Surveying	2
CEE 2011	Civil Engineering Materials	2
CEE 3211	Transportation Engineering	3
CEE 3311	Construction Engineering	3
CEE 3331	Soil Mechanics	3
CEE 3332	Soil Mechanics Laboratory	1
CEE 3411	Structural Analysis	3
CEE 3412	Structural Analysis Laboratory	1
CEE 3441	Steel & Concrete Design	4
CEE 3711	Environmental Engineering	3
CEE 4446	Senior Design Project I for Civil Engineering	3
CEE Approved Technical Electives		6
Free Electives		6
Required Engineering Courses		
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology Honors Introduction to Engineering	3
ENGR 1102	Introduction to Engineering Problem Solving	3
ENGR 1117	Engineering Graphics	2
ENGR 2196 or ENGR 2996	Technical Communication (WI) Honors Technical Communication	3
ENGR 2331 or ENGR 2931	Engineering Statics ¹ Honors Engineering Statics	3
ENGR 2332	Engineering Dynamics ¹	3
ENGR 2333 or ENGR 2933	Mechanics of Solids ¹ Honors Mechanics of Solids	3
ENGR 3553 or ENGR 3953	Mechanics of Fluids Honors Mechanics of Fluids	3
ENGR 3571	Classical and Statistical Thermodynamics	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project (WI) Honors Capstone Senior Design Project	3
MEE 3506	Fluid Mechanics Laboratory	1
Total Credit Hours		128-129

1

Course must be passed with a C- or better.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Civil Engineering

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology or Honors Introduction to Engineering	3
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
CHEM 1035	Chemistry for Engineers	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I or Honors Chemical Science Laboratory I	1

ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		15
Spring		
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	4
ENGR 1117	Engineering Graphics	2
ENGR 1102	Introduction to Engineering Problem Solving	3
CEE 1105	Surveying	2
Credit Hours		15
Year 2		
Fall		
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	4
ENGR 2331 or ENGR 2931	Engineering Statics or Honors Engineering Statics	3
ENGR 2196 or ENGR 2996	Technical Communication or Honors Technical Communication	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		17
Spring		
MATH 2041 or MATH 2941 or MATH 3041 or MATH 3941	Differential Equations I or Honors Differential Equations I or Differential Equations I or Honors Differential Equations I	3
ENGR 2332	Engineering Dynamics	3
ENGR 2333 or ENGR 2933	Mechanics of Solids or Honors Mechanics of Solids	3
ENGR 3571	Classical and Statistical Thermodynamics	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
CEE 2011	Civil Engineering Materials	2
Credit Hours		17
Year 3		
Fall		
ENGR 3553 or ENGR 3953	Mechanics of Fluids or Honors Mechanics of Fluids	3
CEE 3331	Soil Mechanics	3
CEE 3332	Soil Mechanics Laboratory	1
CEE 3411	Structural Analysis	3
CEE 3412	Structural Analysis Laboratory	1
GenEd Breadth Course		3
Free Elective		3
Credit Hours		17
Spring		
CEE 3048	Probability, Statistics & Stochastic Methods	3
CEE 3211	Transportation Engineering	3
CEE 3441	Steel & Concrete Design	4

MEE 3506	Fluid Mechanics Laboratory	1
Select one of the following:		3-4
CEE 2711	Environmental Chemistry & Microbiology	
EES 1001	Introductory Geology	
EES 2001	Physical Geology	
Credit Hours		14-15
Year 4		
Fall		
CEE 3311	Construction Engineering	3
CEE 3711	Environmental Engineering	3
CEE 4446	Senior Design Project I for Civil Engineering	3
Approved Civil Engineering Technical Elective #1		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		18
Spring		
ENGR 4296 or ENGR 4996	Capstone Senior Design Project or Honors Capstone Senior Design Project	3
Approved Civil Engineering Technical Elective #2		3
Free Elective		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Total Credit Hours		128-129

Bachelor of Science in Civil Engineering - Temple Rome Semester Abroad Option

Year 1		
Fall		Credit Hours
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology or Honors Introduction to Engineering	3
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
CHEM 1035	Chemistry for Engineers	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I or Honors Chemical Science Laboratory I	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		15
Spring		
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	4
ENGR 1102	Introduction to Engineering Problem Solving	3
ENGR 1117	Engineering Graphics	2
CEE 1105	Surveying	2
CEE 2011	Civil Engineering Materials	2
Credit Hours		17
Year 2		
Fall		
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4

PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	4
ENGR 2196 or ENGR 2996	Technical Communication or Honors Technical Communication	3
ENGR 2331 or ENGR 2931	Engineering Statics or Honors Engineering Statics	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3

Credit Hours **17**

Spring

Semester Abroad at Temple Rome

ENGR 2332	Engineering Dynamics	3
ENGR 2333 or ENGR 2933	Mechanics of Solids or Honors Mechanics of Solids	3
ENGR 3571	Classical and Statistical Thermodynamics	3
ITAL 1001	Italian Language I	4

Credit Hours **13**

Year 3**Fall**

CEE 3211	Transportation Engineering	3
CEE 3331	Soil Mechanics	3
CEE 3332	Soil Mechanics Laboratory	1
CEE 3411	Structural Analysis	3
CEE 3412	Structural Analysis Laboratory	1
MATH 2041 or MATH 2941 or MATH 3041 or MATH 3941	Differential Equations I or Honors Differential Equations I or Differential Equations I or Honors Differential Equations I	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3

Credit Hours **17**

Spring

CEE 3048	Probability, Statistics & Stochastic Methods	3
CEE 3441	Steel & Concrete Design	4
ENGR 3553 or ENGR 3953	Mechanics of Fluids or Honors Mechanics of Fluids	3
MEE 3506	Fluid Mechanics Laboratory	1
Select one of the following:		3-4
CEE 2711	Environmental Chemistry & Microbiology	
EES 1001	Introductory Geology	
EES 2001	Physical Geology	

Credit Hours **14-15**

Year 4**Fall**

CEE 4446	Senior Design Project I for Civil Engineering	3
Approved Civil Engineering Technical Elective #1		3
CEE 3711	Environmental Engineering	3
CEE 3311	Construction Engineering	3
GenEd Breadth Course ¹		3
Free Elective		3

Credit Hours **18**

Spring

ENGR 4296 or ENGR 4996	Capstone Senior Design Project or Honors Capstone Senior Design Project	3
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Approved Civil Engineering Technical Elective #2	3
GenEd Breadth Course ¹	3
GenEd Breadth Course ¹	3
GenEd Breadth Course ¹	3
Free Elective	2
Credit Hours	17
Total Credit Hours	128-129

1

Students participating in the College of Engineering Temple Rome semester abroad program will not be required to complete the Global/World Society General Education requirement as the abroad experience will waive the Global/World Society requirement.

Approved Civil Engineering Technical Electives

Code	Title	Credit Hours
CEE 3334	Structural Design of Pavements	3
CEE 3611	Hydraulic Engineering	3
CEE 4201	Transportation Systems Management	3
CEE 4211	Bridge Engineering	3
CEE 4221	Intelligent Transportation Systems	3
CEE 4231	Airport Engineering	3
CEE 4244	Introduction to Geosynthetics	3
CEE 4301	Construction Administration	3
CEE 4302	Engineering Project Management	3
CEE 4303	Construction Financial Management	3
CEE 4312	Construction Equipment Management	3
CEE 4421	Structural Dynamics	3
CEE 4431	Behavior and Design of Steel Structures	3
CEE 4432	Behavior and Design of Reinforced Concrete Structures	3
CEE 4433	Behavior and Design of Masonry Structures	3
CEE 4445	Earthquake Engineering and Seismic Design	3
CEE 4531	Life Cycle Assessment and Carbon Footprinting	3
CEE 4622	Fate Pollutants in Subsurface Environments	3
CEE 4623	Contaminant Dynamics in Urban Streams	3
CEE 4631	Environmental Hydrology	3
CEE 4641	Urban Streams and Stormwater Management	3
CEE 4711	Air Pollution Control System	3
CEE 4721	Water and Wastewater Systems Design	3
CEE 4731	Solid & Hazardous Waste Management	3
CEE 4811	Advanced Soil Mechanics	3
CEE 4821	Foundation Engineering	3
CEE 4822	Earth Retaining Systems	3
CEE 4823	Geotechnical Earthquake Engineering	3
ENGR 3001	Engineering Economics	3

Civil Engineering BSCE with Cooperative Education Program Concentration

Overview

The **Bachelor of Science in Civil Engineering** is offered by the Department of Civil and Environmental Engineering. The program prepares students for professional engineering careers in the design, construction and maintenance of the built environment.

Civil Engineering professionals plan, design, construct, and operate facilities which are essential to the quality of modern life. The Civil Engineering curriculum is based upon providing a fully-integrated design experience by beginning with introductory courses in the study of engineering history and

economics, then progressing through a broad coverage of the primary areas of practice within Civil Engineering (surveying, structures, geotechnical engineering, construction engineering, water resources, transportation and environmental engineering), and finishing with a year-long capstone Civil Engineering senior design project. The goal of the Civil Engineering program is to prepare students to pursue graduate education in their specific areas of interest, pass the Fundamental of Engineering and Professional Engineer exams in the areas of practice within Civil Engineering, and become involved in design, project planning and research.

Civil Engineering students may complete one or more **optional concentrations** in

- Environmental Engineering
- Cooperative Education Program

Cooperative Education Program

A **Cooperative Education** (Co-Op) is an optional program available at the College of Engineering where you have the opportunity to gain professional work experience before graduation. It is designed to give you the chance to apply the knowledge learned in the classroom to real life problems. You will be exposed to the latest technology and new ideas at a worksite helping you understand your field of work more extensively. During the Co-Op, you will make valuable connections with professionals in your field. A cooperative education can enhance and strengthen you academically, professionally and personally.

Campus Location: Main

Program Code: EN-CEE-BSCE

Accreditation

The Civil Engineering (BS) program is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and Program Criteria for Civil and Similarly Named Engineering Programs. ABET is a non-profit and non-governmental accrediting agency for academic programs in the disciplines of applied science, computing, engineering, and engineering technology recognized by the Council for Higher Education Accreditation (CHEA).

+1 Bachelor to Master's Accelerated Degree Program

High-achieving undergraduates can earn both a bachelor's degree and a master's degree within five years. Students apply for this program in sophomore year, and four graduate-level courses are taken in place of undergraduate requirements during junior and senior years. After the bachelor's degree is earned, one graduate-level course is taken in the summer followed by full-time study in the subsequent Fall and Spring semesters to complete the master's degree study. The following accelerated program is available:

- Bachelor of Science in Civil Engineering and Master of Science in Civil Engineering

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Learn more about the Bachelor of Science in Civil Engineering.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

Code	Title	Credit Hours
ENGR 2196 or ENGR 2996	Technical Communication Honors Technical Communication	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project Honors Capstone Senior Design Project	3

Department Requirements

Code	Title	Credit Hours
Required Math & Basic Science Courses		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
MATH 2041 or MATH 2941 or MATH 3041 or MATH 3941	Differential Equations I Honors Differential Equations I Differential Equations I Honors Differential Equations I	3
CEE 3048	Probability, Statistics & Stochastic Methods	3
PHYS 1061 or PHYS 1961	Elementary Classical Physics I Honors Elementary Classical Physics I	4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II Honors Elementary Classical Physics II	4
CHEM 1035	Chemistry for Engineers	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I Honors Chemical Science Laboratory I	1
Select one of the following:		3-4
CEE 2711	Environmental Chemistry & Microbiology	
EES 1001	Introductory Geology	
EES 2001	Physical Geology	
Required General Education Courses		
Select one of the following:		4
ENG 0802	Analytical Reading and Writing	
ENG 0812	Analytical Reading and Writing: ESL	
ENG 0902	Honors Writing About Literature	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life Honors Intellectual Heritage I: The Good Life	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good Honors Intellectual Heritage II: The Common Good	3
GenEd 08xx or 09xx (U.S. Society)		3
GenEd 08xx or 09xx (Global/World Society)		3
GenEd 08xx or 09xx (Human Behavior)		3
GenEd 08xx or 09xx (The Arts)		3
GenEd 08xx or 09xx (Race and Diversity)		3
Required Civil Engineering Courses		
CEE 1105	Surveying	2

CEE 2011	Civil Engineering Materials	2
CEE 3211	Transportation Engineering	3
CEE 3311	Construction Engineering	3
CEE 3331	Soil Mechanics	3
CEE 3332	Soil Mechanics Laboratory	1
CEE 3411	Structural Analysis	3
CEE 3412	Structural Analysis Laboratory	1
CEE 3441	Steel & Concrete Design	4
CEE 3711	Environmental Engineering	3
CEE 4446	Senior Design Project I for Civil Engineering	3
CEE Approved Technical Electives		6
Free Electives		6
Required Engineering Courses		
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology Honors Introduction to Engineering	3
ENGR 1102	Introduction to Engineering Problem Solving	3
ENGR 1117	Engineering Graphics	2
ENGR 2196 or ENGR 2996	Technical Communication (WI) Honors Technical Communication	3
ENGR 2331 or ENGR 2931	Engineering Statics ¹ Honors Engineering Statics	3
ENGR 2332	Engineering Dynamics ¹	3
ENGR 2333 or ENGR 2933	Mechanics of Solids ¹ Honors Mechanics of Solids	3
ENGR 3553 or ENGR 3953	Mechanics of Fluids Honors Mechanics of Fluids	3
ENGR 3571	Classical and Statistical Thermodynamics	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project (WI) Honors Capstone Senior Design Project	3
MEE 3506	Fluid Mechanics Laboratory	1
Required Cooperative Education Courses		
ENGR 2181	Co-Op Work Experience I	3
ENGR 3181	Co-Op Work Experience II	3
Total Credit Hours		134-135

1

Course must be passed with a C- or better.

Suggested Academic Plan

Below is the five-year academic plan for the Co-Op program leading to the Bachelor of Science in Civil Engineering. The minimum requirement for graduation is 134 semester hours.

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Civil Engineering with Concentration in Cooperative Education Program

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology or Honors Introduction to Engineering	3
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4

CHEM 1035	Chemistry for Engineers	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I or Honors Chemical Science Laboratory I	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		15
Spring		
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	4
ENGR 1117	Engineering Graphics	2
ENGR 1102	Introduction to Engineering Problem Solving	3
CEE 1105	Surveying	2
Credit Hours		15
Year 2		
Fall		
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	4
ENGR 2331 or ENGR 2931	Engineering Statics or Honors Engineering Statics	3
ENGR 2196 or ENGR 2996	Technical Communication or Honors Technical Communication	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		17
Spring		
MATH 2041 or MATH 2941 or MATH 3041 or MATH 3941	Differential Equations I or Honors Differential Equations I or Differential Equations I or Honors Differential Equations I	3
ENGR 2332	Engineering Dynamics	3
ENGR 2333 or ENGR 2933	Mechanics of Solids or Honors Mechanics of Solids	3
ENGR 3571	Classical and Statistical Thermodynamics	3
CEE 2011	Civil Engineering Materials	2
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		17
Year 3		
Fall		
ENGR 3553 or ENGR 3953	Mechanics of Fluids or Honors Mechanics of Fluids	3
CEE 3331	Soil Mechanics	3
CEE 3332	Soil Mechanics Laboratory	1
CEE 3411	Structural Analysis	3
CEE 3412	Structural Analysis Laboratory	1
GenEd Breadth Course		3
Free Elective		3
Credit Hours		17

Spring

CEE 3048	Probability, Statistics & Stochastic Methods	3
CEE 3211	Transportation Engineering	3
CEE 3441	Steel & Concrete Design	4
MEE 3506	Fluid Mechanics Laboratory	1
Select one of the following:		3-4
CEE 2711	Environmental Chemistry & Microbiology	
EES 1001	Introductory Geology	
EES 2001	Physical Geology	

Credit Hours**14-15****Year 4****Fall**

ENGR 2181	Co-Op Work Experience I	3
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Credit Hours**3****Spring**

ENGR 3181	Co-Op Work Experience II	3
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Credit Hours**3****Year 5****Fall**

CEE 3311	Construction Engineering	3
CEE 3711	Environmental Engineering	3
CEE 4446	Senior Design Project I for Civil Engineering	3
Approved Civil Engineering Technical Elective		3
GenEd Breadth Course		3
GenEd Breadth Course		3

Credit Hours**18****Spring**

ENGR 4296 or ENGR 4996	Capstone Senior Design Project or Honors Capstone Senior Design Project	3
Approved Civil Engineering Technical Elective		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Free Elective		3

Credit Hours**15****Total Credit Hours****134-135****Approved Civil Engineering Technical Electives**

Code	Title	Credit Hours
CEE 3334	Structural Design of Pavements	3
CEE 3611	Hydraulic Engineering	3
CEE 4201	Transportation Systems Management	3
CEE 4211	Bridge Engineering	3
CEE 4221	Intelligent Transportation Systems	3
CEE 4231	Airport Engineering	3
CEE 4244	Introduction to Geosynthetics	3
CEE 4301	Construction Administration	3
CEE 4302	Engineering Project Management	3
CEE 4303	Construction Financial Management	3
CEE 4312	Construction Equipment Management	3
CEE 4321	Geotechnical Engineering	3
CEE 4421	Structural Dynamics	3

CEE 4431	Behavior and Design of Steel Structures	3
CEE 4432	Behavior and Design of Reinforced Concrete Structures	3
CEE 4433	Behavior and Design of Masonry Structures	3
CEE 4445	Earthquake Engineering and Seismic Design	3
CEE 4531	Life Cycle Assessment and Carbon Footprinting	3
CEE 4622	Fate Pollutants in Subsurface Environments	3
CEE 4623	Contaminant Dynamics in Urban Streams	3
CEE 4631	Environmental Hydrology	3
CEE 4641	Urban Streams and Stormwater Management	3
CEE 4711	Air Pollution Control System	3
CEE 4721	Water and Wastewater Systems Design	3
CEE 4731	Solid & Hazardous Waste Management	3
CEE 4811	Advanced Soil Mechanics	3
CEE 4821	Foundation Engineering	3
CEE 4822	Earth Retaining Systems	3
CEE 4823	Geotechnical Earthquake Engineering	3
ENGR 3001	Engineering Economics	3

Civil Engineering BSCE with Environmental Engineering & Cooperative Education Program Concentrations

Overview

The **Bachelor of Science in Civil Engineering** is offered by the Department of Civil and Environmental Engineering. The program prepares students for professional engineering careers in the design, construction and maintenance of the built environment.

Civil Engineering professionals plan, design, construct, and operate facilities which are essential to the quality of modern life. The Civil Engineering curriculum is based upon providing a fully-integrated design experience by beginning with introductory courses in the study of engineering history and economics, then progressing through a broad coverage of the primary areas of practice within Civil Engineering (surveying, structures, geotechnical engineering, construction engineering, water resources, transportation and environmental engineering), and finishing with a year-long capstone Civil Engineering senior design project. The goal of the Civil Engineering program is to prepare students to pursue graduate education in their specific areas of interest, pass the Fundamental of Engineering and Professional Engineer exams in the areas of practice within Civil Engineering, and become involved in design, project planning and research.

Civil Engineering students may complete one or more **optional concentrations** in

- Environmental Engineering
- Cooperative Education Program

Environmental Engineering Concentration

The objective of the **concentration in Environmental Engineering** within the Civil Engineering program at Temple University is to provide students with the skills needed to understand environmental problems and to design environmental systems to reduce and/or mitigate pollution. Environmental Engineering is a hybrid of Civil Engineering and Chemical Engineering, and it is thus natural for a civil engineer to broaden his/her knowledge in Environmental Engineering. Students in this concentration would be in a program that satisfies ABET accreditation for civil engineers, but they are more equipped to pass the Fundamental of Engineering and the Professional Engineer exams in the Environmental Engineering Category.

Cooperative Education Program

A **Cooperative Education** (Co-Op) is an optional program available at the College of Engineering where you have the opportunity to gain professional work experience before graduation. It is designed to give you the chance to apply the knowledge learned in the classroom to real life problems. You will be exposed to the latest technology and new ideas at a worksite helping you understand your field of work more extensively. During the Co-Op, you will make valuable connections with professionals in your field. A cooperative education can enhance and strengthen you academically, professionally and personally.

Campus Location: Main

Program Code: EN-CEE-BSCE

Accreditation

The Civil Engineering (BS) program is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and Program Criteria for Civil and Similarly Named Engineering Programs. ABET is a non-profit and non-governmental accrediting agency for academic programs in the disciplines of applied science, computing, engineering, and engineering technology recognized by the Council for Higher Education Accreditation (CHEA).

+1 Bachelor to Master's Accelerated Degree Program

High-achieving undergraduates can earn both a bachelor's degree and a master's degree within five years. Students apply for this program in sophomore year, and four graduate-level courses are taken in place of undergraduate requirements during junior and senior years. After the bachelor's degree is earned, one graduate-level course is taken in the summer followed by full-time study in the subsequent Fall and Spring semesters to complete the master's degree study. The following accelerated program is available:

- Bachelor of Science in Civil Engineering and Master of Science in Civil Engineering

Contact Information

Department of Civil and Environmental Engineering
Engineering Building, Room 513
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Denise Guiteras, Administrative Specialist of Civil and Environmental Engineering Department
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Learn more about the Bachelor of Science in Civil Engineering.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

Code	Title	Credit Hours
ENGR 2196 or ENGR 2996	Technical Communication Honors Technical Communication	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project Honors Capstone Senior Design Project	3

Department Requirements

Code	Title	Credit Hours
Required Math & Basic Science Courses		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4

MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
MATH 2041 or MATH 2941 or MATH 3041 or MATH 3941	Differential Equations I Honors Differential Equations I Differential Equations I Honors Differential Equations I	3
CEE 3048	Probability, Statistics & Stochastic Methods	3
PHYS 1061 or PHYS 1961	Elementary Classical Physics I Honors Elementary Classical Physics I	4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II Honors Elementary Classical Physics II	4
CHEM 1035	Chemistry for Engineers	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I Honors Chemical Science Laboratory I	1
CEE 2711	Environmental Chemistry & Microbiology	3
Required General Education Courses		
Select one of the following:		4
ENG 0802	Analytical Reading and Writing	
ENG 0812	Analytical Reading and Writing: ESL	
ENG 0902	Honors Writing About Literature	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life Honors Intellectual Heritage I: The Good Life	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good Honors Intellectual Heritage II: The Common Good	3
GenEd 08xx or 09xx (U.S. Society)		3
GenEd 08xx or 09xx (Global/World Society)		3
GenEd 08xx or 09xx (Human Behavior)		3
GenEd 08xx or 09xx (The Arts)		3
GenEd 08xx or 09xx (Race and Diversity)		3
Required Civil & Environmental Engineering Courses		
CEE 1105	Surveying	2
CEE 2011	Civil Engineering Materials	2
CEE 3311	Construction Engineering	3
CEE 3331	Soil Mechanics	3
CEE 3332	Soil Mechanics Laboratory	1
CEE 3711	Environmental Engineering	3
CEE 4446	Senior Design Project I for Civil Engineering	3
CEE 4631	Environmental Hydrology	3
CEE 4711	Air Pollution Control System	3
CEE 4721	Water and Wastewater Systems Design	3
Approved Civil & Environmental Engineering Technical Electives		6
Free Elective		6
Required Engineering Courses		
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology Honors Introduction to Engineering	3
ENGR 1102	Introduction to Engineering Problem Solving	3
ENGR 1117	Engineering Graphics	2
ENGR 2196 or ENGR 2996	Technical Communication (WI) Honors Technical Communication	3
ENGR 2331 or ENGR 2931	Engineering Statics ¹ Honors Engineering Statics	3
ENGR 2332	Engineering Dynamics ¹	3

ENGR 2333 or ENGR 2933	Mechanics of Solids ¹ Honors Mechanics of Solids	3
ENGR 3001	Engineering Economics	3
ENGR 3553 or ENGR 3953	Mechanics of Fluids Honors Mechanics of Fluids	3
ENGR 3571	Classical and Statistical Thermodynamics	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project (WI) Honors Capstone Senior Design Project	3
Required Cooperative Education Courses		
ENGR 2181	Co-Op Work Experience I	3
ENGR 3181	Co-Op Work Experience II	3
Total Credit Hours		134

1

Courses must be passed with a C- or better.

Suggested Academic Plan

Below is the five-year academic plan for the Co-Op program leading to the Bachelor of Science in Civil Engineering with a concentration in Environmental Engineering. The minimum requirement for graduation is 134 semester hours.

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Civil Engineering with Concentrations in Environmental Engineering and Cooperative Education Program

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology or Honors Introduction to Engineering	3
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
CHEM 1035	Chemistry for Engineers	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I or Honors Chemical Science Laboratory I	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		15
Spring		
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	4
ENGR 1102	Introduction to Engineering Problem Solving	3
ENGR 1117	Engineering Graphics	2
CEE 1105	Surveying	2
Credit Hours		15
Year 2		
Fall		
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	4
ENGR 2331 or ENGR 2931	Engineering Statics or Honors Engineering Statics	3

CEE 2711	Environmental Chemistry & Microbiology	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		17
Spring		
MATH 2041 or MATH 2941 or MATH 3041 or MATH 3941	Differential Equations I or Honors Differential Equations I or Differential Equations I or Honors Differential Equations I	3
ENGR 2332	Engineering Dynamics	3
ENGR 2333 or ENGR 2933	Mechanics of Solids or Honors Mechanics of Solids	3
ENGR 3571	Classical and Statistical Thermodynamics	3
CEE 2011	Civil Engineering Materials	2
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		17
Year 3		
Fall		
ENGR 2196 or ENGR 2996	Technical Communication or Honors Technical Communication	3
ENGR 3553 or ENGR 3953	Mechanics of Fluids or Honors Mechanics of Fluids	3
CEE 3331	Soil Mechanics	3
CEE 3332	Soil Mechanics Laboratory	1
CEE 3711	Environmental Engineering	3
GenEd Breadth Course		3
Credit Hours		16
Spring		
ENGR 3001	Engineering Economics	3
CEE 3048	Probability, Statistics & Stochastic Methods	3
CEE 3311	Construction Engineering	3
GenEd Breadth Course		3
Free Elective		3
Credit Hours		15
Year 4		
Fall		
ENGR 2181	Co-Op Work Experience I	3
Credit Hours		3
Spring		
ENGR 3181	Co-Op Work Experience II	3
Credit Hours		3
Year 5		
Fall		
CEE 4446	Senior Design Project I for Civil Engineering	3
CEE 4631	Environmental Hydrology	3
CEE 4711	Air Pollution Control System	3
Approved Civil & Environmental Engineering Technical Elective		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		18

Spring

ENGR 4296 or ENGR 4996	Capstone Senior Design Project or Honors Capstone Senior Design Project	3
CEE 4721	Water and Wastewater Systems Design	3
Approved Civil & Environmental Engineering Technical Elective		3
GenEd Breadth Course		3
Free Elective		3
Credit Hours		15
Total Credit Hours		134

Approved Civil & Environmental Engineering Technical Electives

Code	Title	Credit Hours
CEE 3211	Transportation Engineering	3
CEE 3411 & CEE 3412	Structural Analysis and Structural Analysis Laboratory	4
CEE 3441	Steel & Concrete Design	4
CEE 3611	Hydraulic Engineering	3
CEE 4221	Intelligent Transportation Systems	3
CEE 4244	Introduction to Geosynthetics	3
CEE 4301	Construction Administration	3
CEE 4302	Engineering Project Management	3
CEE 4303	Construction Financial Management	3
CEE 4312	Construction Equipment Management	3
CEE 4321	Geotechnical Engineering	3
CEE 4531	Life Cycle Assessment and Carbon Footprinting	3
CEE 4622	Fate Pollutants in Subsurface Environments	3
CEE 4623	Contaminant Dynamics in Urban Streams	3
CEE 4641	Urban Streams and Stormwater Management	3
CEE 4731	Solid & Hazardous Waste Management	3
CEE 4762	Environmental Organic Chemistry	3

Civil Engineering BSCE with Environmental Engineering Concentration**Overview**

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Civil Engineering students may complete one or more **optional concentrations** in

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Environmental Engineering Concentration

The objective of the **concentration in Environmental Engineering** within the Civil Engineering program at Temple University is to provide students with the skills needed to understand environmental problems and to design environmental systems to reduce and/or mitigate pollution. Environmental

Engineering is a hybrid of Civil Engineering and Chemical Engineering, and it is thus natural for civil engineers to broaden their knowledge in Environmental Engineering. Students in this concentration would be in a program that satisfies ABET accreditation for civil engineers, but they are more equipped to pass the Fundamental of Engineering and the Professional Engineer exams in the Environmental Engineering Category.

Campus Location: Main

Program Code: EN-CEE-BSCE

Accreditation

The Civil Engineering (BS) program is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and Program Criteria for Civil and Similarly Named Engineering Programs. ABET is a non-profit and non-governmental accrediting agency for academic programs in the disciplines of applied science, computing, engineering, and engineering technology recognized by the Council for Higher Education Accreditation (CHEA).

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High-achieving undergraduates can earn both a bachelor's degree and a master's degree within five years. Students apply for this program in sophomore year, and four graduate-level courses are taken in place of undergraduate requirements during junior and senior years. After the bachelor's degree is earned, one graduate-level course is taken in the summer followed by full-time study in the subsequent Fall and Spring semesters to complete the master's degree study. The following accelerated programs are available:

- Bachelor of Science in Civil Engineering and Master of Science in Civil Engineering
- Bachelor of Science in Civil Engineering and Master of Science in Environmental Engineering

Contact Information

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Learn more about the Bachelor of Science in Civil Engineering.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

Code	Title	Credit Hours
ENGR 2196 or ENGR 2996	Technical Communication Honors Technical Communication	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project Honors Capstone Senior Design Project	3

Department Requirements

Code	Title	Credit Hours
Required Math & Basic Science Courses		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
MATH 2041 or MATH 2941 or MATH 3041 or MATH 3941	Differential Equations I Honors Differential Equations I Differential Equations I Honors Differential Equations I	3
CEE 3048	Probability, Statistics & Stochastic Methods	3
PHYS 1061 or PHYS 1961	Elementary Classical Physics I Honors Elementary Classical Physics I	4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II Honors Elementary Classical Physics II	4
CHEM 1035	Chemistry for Engineers	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I Honors Chemical Science Laboratory I	1
CEE 2711	Environmental Chemistry & Microbiology	3
Required General Education Courses		
Select one of the following:		4
ENG 0802	Analytical Reading and Writing	
ENG 0812	Analytical Reading and Writing: ESL	
ENG 0902	Honors Writing About Literature	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life Honors Intellectual Heritage I: The Good Life	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good Honors Intellectual Heritage II: The Common Good	3
GenEd 08xx or 09xx (U.S. Society)		3
GenEd 08xx or 09xx (Global/World Society)		3
GenEd 08xx or 09xx (Human Behavior)		3
GenEd 08xx or 09xx (The Arts)		3
GenEd 08xx or 09xx (Race and Diversity)		3
Required Civil & Environmental Engineering Courses		
CEE 1105	Surveying	2
CEE 2011	Civil Engineering Materials	2
CEE 3311	Construction Engineering	3
CEE 3331	Soil Mechanics	3
CEE 3332	Soil Mechanics Laboratory	1
CEE 3711	Environmental Engineering	3
CEE 4446	Senior Design Project I for Civil Engineering	3
CEE 4631	Environmental Hydrology	3
CEE 4711	Air Pollution Control System	3
CEE 4721	Water and Wastewater Systems Design	3
Approved Civil Engineering Technical Electives		6
Free Elective		6
Required Engineering Courses		
ENGR 1101	Introduction to Engineering & Engineering Technology	3

or ENGR 1901	Honors Introduction to Engineering	
ENGR 1102	Introduction to Engineering Problem Solving	3
ENGR 1117	Engineering Graphics	2
ENGR 2196	Technical Communication (WI)	3
or ENGR 2996	Honors Technical Communication	
ENGR 2331	Engineering Statics ¹	3
or ENGR 2931	Honors Engineering Statics	
ENGR 2332	Engineering Dynamics ¹	3
ENGR 2333	Mechanics of Solids ¹	3
or ENGR 2933	Honors Mechanics of Solids	
ENGR 3001	Engineering Economics	3
ENGR 3553	Mechanics of Fluids	3
or ENGR 3953	Honors Mechanics of Fluids	
ENGR 3571	Classical and Statistical Thermodynamics	3
ENGR 4296	Capstone Senior Design Project (WI)	3
or ENGR 4996	Honors Capstone Senior Design Project	
Total Credit Hours		128

1

Courses must be passed with a C- or better.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Civil Engineering with Concentration in Environmental Engineering Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENGR 1101	Introduction to Engineering & Engineering Technology	3
or ENGR 1901	or Honors Introduction to Engineering	
MATH 1041	Calculus I	4
or MATH 1941	or Honors Calculus I	
CHEM 1035	Chemistry for Engineers	3
CHEM 1033	General Chemistry Laboratory I	1
or CHEM 1953	or Honors Chemical Science Laboratory I	
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
Credit Hours		15
Spring		
MATH 1042	Calculus II	4
or MATH 1942	or Honors Calculus II	
PHYS 1061	Elementary Classical Physics I	4
or PHYS 1961	or Honors Elementary Classical Physics I	
CEE 1105	Surveying	2
ENGR 1117	Engineering Graphics	2
ENGR 1102	Introduction to Engineering Problem Solving	3
Credit Hours		15
Year 2		
Fall		
MATH 2043	Calculus III	4
or MATH 2943	or Honors Calculus III	
PHYS 1062	Elementary Classical Physics II	4
or PHYS 1962	or Honors Elementary Classical Physics II	

ENGR 2331 or ENGR 2931	Engineering Statics or Honors Engineering Statics	3
CEE 2711	Environmental Chemistry & Microbiology	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		17
Spring		
MATH 2041 or MATH 2941 or MATH 3041 or MATH 3941	Differential Equations I or Honors Differential Equations I or Differential Equations I or Honors Differential Equations I	3
ENGR 2332	Engineering Dynamics	3
ENGR 2333 or ENGR 2933	Mechanics of Solids or Honors Mechanics of Solids	3
ENGR 3571	Classical and Statistical Thermodynamics	3
CEE 2011	Civil Engineering Materials	2
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		17
Year 3		
Fall		
ENGR 2196 or ENGR 2996	Technical Communication or Honors Technical Communication	3
ENGR 3553 or ENGR 3953	Mechanics of Fluids or Honors Mechanics of Fluids	3
CEE 3331	Soil Mechanics	3
CEE 3332	Soil Mechanics Laboratory	1
CEE 3711	Environmental Engineering	3
GenEd Breadth Course		3
Credit Hours		16
Spring		
ENGR 3001	Engineering Economics	3
CEE 3048	Probability, Statistics & Stochastic Methods	3
CEE 3311	Construction Engineering	3
GenEd Breadth Course		3
Free Elective		3
Credit Hours		15
Year 4		
Fall		
CEE 4446	Senior Design Project I for Civil Engineering	3
CEE 4631	Environmental Hydrology	3
CEE 4711	Air Pollution Control System	3
Approved Civil & Environmental Engineering Technical Elective		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		18
Spring		
ENGR 4296 or ENGR 4996	Capstone Senior Design Project or Honors Capstone Senior Design Project	3
CEE 4721	Water and Wastewater Systems Design	3
Approved Civil & Environmental Engineering Technical Elective		3
GenEd Breadth Course		3

Free Elective	3
Credit Hours	15
Total Credit Hours	128

Approved Civil & Environmental Engineering Technical Electives

Code	Title	Credit Hours
CEE 3211	Transportation Engineering	3
CEE 3411 & CEE 3412	Structural Analysis and Structural Analysis Laboratory	4
CEE 3441	Steel & Concrete Design	4
CEE 3611	Hydraulic Engineering	3
CEE 4221	Intelligent Transportation Systems	3
CEE 4244	Introduction to Geosynthetics	3
CEE 4301	Construction Administration	3
CEE 4302	Engineering Project Management	3
CEE 4303	Construction Financial Management	3
CEE 4312	Construction Equipment Management	3
CEE 4321	Geotechnical Engineering	3
CEE 4531	Life Cycle Assessment and Carbon Footprinting	3
CEE 4622	Fate Pollutants in Subsurface Environments	3
CEE 4623	Contaminant Dynamics in Urban Streams	3
CEE 4641	Urban Streams and Stormwater Management	3
CEE 4731	Solid & Hazardous Waste Management	3
CEE 4762	Environmental Organic Chemistry	3

Construction Engineering Technology BSCET

Overview

Offered by the Department of Civil and Environmental Engineering, the **Bachelor of Science in Construction Engineering Technology** prepares students for a practitioner's role in industry, government or institution in the area of construction management. Their work involves the translation of the design engineer's blueprints into physical and functional reality. These professionals combine aspects of business, construction and engineering and oversee the implementation of large or small construction projects and their safety and compliance with project requirements.

Graduates are qualified for jobs as construction field supervisors, estimators, expeditors, construction cost analysts, schedulers, plan examiners for government agencies that control construction, and in safety. Graduates can communicate effectively and have the necessary teamwork and leadership skills to work and participate effectively in a team environment. Also, graduates will have professional growth and life-long learning skills that engineering technologists need to succeed in both the workplace and the society in general.

Construction Engineering Technology students may complete an **optional concentration** in Cooperative Education Program (Co-Op).

Campus Location: Main

Day and evening courses are available; however, most technical courses are offered in the evening only.

Program Code: EN-CNET-BSCT

Accreditation

The Construction Engineering Technology (BS) program is accredited by the Engineering Technology Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and Program Criteria for Construction Engineering Technology and Similarly Named Programs. ABET is a non-profit and non-governmental accrediting agency for academic programs in the disciplines of applied science, computing, engineering, and engineering technology recognized by the Council for Higher Education Accreditation (CHEA).

+1 Bachelor to Master's Accelerated Degree Program

High-achieving undergraduates can earn both a bachelor's degree and a master's degree within five years. Students apply for this program in sophomore year, and four graduate-level courses are taken in place of undergraduate requirements during junior and senior years. After the bachelor's

degree is earned, one graduate-level course is taken in the summer followed by full-time study in the subsequent Fall and Spring semesters to complete the master's degree study. The following accelerated program is available:

- Bachelor of Science in Construction Engineering Technology and Master of Science in Civil Engineering

Contact Information

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udoinyan@temple.edu

Learn more about the Bachelor of Science in Construction Engineering Technology.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

Code	Title	Credit Hours
CMT 4396	Capstone in Construction	3
ENG 2696	Technical Writing	3

College and Major Requirements

Code	Title	Credit Hours
Required Math & Basic Science Courses		
MATH 1022	Precalculus	4
MATH 1031	Differential and Integral Calculus	4
STAT 2103	Statistical Business Analytics	4
or STAT 2903	Honors Statistical Business Analytics	
PHYS 1021	Introduction to General Physics I	4
PHYS 1022	Introduction to General Physics II	4
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I	
EES 1001	Introductory Geology	
EES 2001	Physical Geology	
Required General Education Courses		
Select one of the following:		4
ENG 0802	Analytical Reading and Writing	
ENG 0812	Analytical Reading and Writing: ESL	
ENG 0902	Honors Writing About Literature	
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	Honors Intellectual Heritage I: The Good Life	
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	Honors Intellectual Heritage II: The Common Good	
GenEd 08xx or 09xx (U.S. Society)		3

GenEd 08xx or 09xx (Global/World Society)		3
GenEd 08xx or 09xx (Human Behavior)		3
GenEd 08xx or 09xx (The Arts)		3
GenEd 08xx or 09xx (Race and Diversity)		3
Required Construction Management Technology Courses		
CMT 2124	Construction Methods and Materials	3
CMT 2125	Construction Contracts and Specifications	3
CMT 2271	Building Systems	3
CMT 3121	Construction Estimating	3
CMT 3123	Construction Estimating Laboratory	1
CMT 3145	Structural Analysis	3
CMT 3322	Construction Planning and Scheduling	3
CMT 3333	Soils Mechanics	3
CMT 3341	Environmental and Safety Aspects of Construction	2
CMT 3351	Applied Hydraulics	3
CMT 4335	Steel and Wood Structures	3
CMT 4336	Concrete and Masonry Design	3
CMT 4355	Transportation Systems Management	3
CMT 4396	Capstone in Construction	3
Required Civil Engineering Courses		
CEE 1105	Surveying	2
CEE 2011	Civil Engineering Materials	2
Required Engineering Courses		
ENGR 1101	Introduction to Engineering & Engineering Technology	3
or ENGR 1901	Honors Introduction to Engineering	
ENGR 1117	Engineering Graphics	2
Select one of the following:		3
ENGR 3001	Engineering Economics	
FIN 3101	Financial Management ¹	
Required Economics & Technical Writing Courses		
ECON 1101	Macroeconomic Principles	3
or ECON 1901	Honors Macroeconomic Principles	
or ECON 1102	Microeconomic Principles	
or ECON 1902	Honors Microeconomic Principles	
ENG 2696	Technical Writing	3
Required Engineering Technology Courses		
ENGT 2322	Applied Strength of Materials	3
ENGT 2331	Applied Engineering Statics	3
ENGT 4119	Professional Seminar	1
Required Electives		
Special Electives ²		9
Free Elective		2
Total Credit Hours		124

1

Students must complete all published prerequisites prior to enrolling in this course

2

Must be approved prior to registration (see list below for suggested courses)

Approved Specialty Electives

Code	Title	Credit Hours
ECON 1101 or ECON 1901 or ECON 1102 or ECON 1902	Macroeconomic Principles Honors Macroeconomic Principles Microeconomic Principles Honors Microeconomic Principles	3
HRM 1101 or HRM 1901	Leadership and Organizational Management Honors Leadership and Organizational Management	3
MSOM 3101 or MSOM 3901	Operations Management Honors Operations Management	3
MKTG 2101 or MKTG 2901	Marketing Management Honors Marketing Management	3
FIN 3101 or FIN 3901 or CMT 4373	Financial Management Honors Financial Management Construction Financial Management	3
RMI 2101 or RMI 2901	Introduction to Risk Management Honors Introduction to Risk Management	3
ENGT 2521	Applied Fluid Mechanics	3
ENGT 3201	Applied Materials Technology	3
ENGT 3323	Applied Dynamics	3
ENGT 3532	Thermodynamics	3
Other Civil Engineering/Engineering/Engineering Technology courses		3

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Construction Engineering Technology

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology or Honors Introduction to Engineering	3
MATH 1022	Precalculus	4
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		17
Spring		
CEE 1105	Surveying	2
ENGR 1117	Engineering Graphics	2
MATH 1031	Differential and Integral Calculus	4
PHYS 1021	Introduction to General Physics I	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		15
Year 2		
Fall		
CMT 2124	Construction Methods and Materials	3
ENGT 2331	Applied Engineering Statics	3

PHYS 1022	Introduction to General Physics II	4
GenEd Breadth Course		3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		16
Spring		
CEE 2011	Civil Engineering Materials	2
CMT 2125	Construction Contracts and Specifications	3
CMT 2271	Building Systems	3
ENGT 2322	Applied Strength of Materials	3
STAT 2103 or STAT 2903	Statistical Business Analytics or Honors Statistical Business Analytics	4
Credit Hours		15
Year 3		
Fall		
CMT 3121	Construction Estimating	3
CMT 3123	Construction Estimating Laboratory	1
CMT 3341	Environmental and Safety Aspects of Construction	2
CMT 3333	Soils Mechanics	3
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I	
EES 1001	Introductory Geology	
EES 2001	Physical Geology	
Select one of the following:		3
ECON 1101	Macroeconomic Principles	
ECON 1901	Honors Macroeconomic Principles	
ECON 1102	Microeconomic Principles	
ECON 1902	Honors Microeconomic Principles	
Credit Hours		16
Spring		
CMT 3322	Construction Planning and Scheduling	3
CMT 3145	Structural Analysis	3
CMT 3351	Applied Hydraulics	3
ENG 2696	Technical Writing	3
Approved Specialty Elective		3
Credit Hours		15
Year 4		
Fall		
CMT 4336	Concrete and Masonry Design	3
CMT 4355	Transportation Systems Management	3
ENGT 4119	Professional Seminar	1
GenEd Breadth Course		3
Approved Specialty Elective		3
Select one of the following:		3
ENGR 3001	Engineering Economics	
FIN 3101	Financial Management	
Credit Hours		16
Spring		
CMT 4335	Steel and Wood Structures	3
CMT 4396	Capstone in Construction	3

Free Elective	2
Approved Specialty Elective	3
GenEd Breadth Course	3
Credit Hours	14
Total Credit Hours	124

Construction Engineering Technology BSCET with Cooperative Education Program Concentration

Overview

Offered by the Department of Civil and Environmental Engineering, the **Bachelor of Science in Construction Engineering Technology** prepares students for a practitioner's role in industry, government or institution in the area of construction management. Their work involves the translation of the design engineer's blueprints into physical and functional reality. These professionals combine aspects of business, construction and engineering and oversee the implementation of large or small construction projects and their safety and compliance with project requirements.

Graduates are qualified for jobs as construction field supervisors, estimators, expeditors, construction cost analysts, schedulers, plan examiners for government agencies that control construction, and in safety. Graduates can communicate effectively and have the necessary teamwork and leadership skills to work and participate effectively in a team environment. Also, graduates will have professional growth and life-long learning skills that engineering technologists need to succeed in both the workplace and the society in general.

Construction Engineering Technology students may complete an **optional concentration** in Cooperative Education Program (Co-Op).

Cooperative Education Program

A **Cooperative Education** (Co-Op) is an optional program available at the College of Engineering where you have the opportunity to gain professional work experience before graduation. It is designed to give you the chance to apply the knowledge learned in the classroom to real life problems. You will be exposed to the latest technology and new ideas at a worksite helping you understand your field of work more extensively. During the Co-Op, you will make valuable connections with professionals in your field. A cooperative education can enhance and strengthen you academically, professionally and personally.

Campus Location: Main

Day and evening courses are available; however, most technical courses are offered in the evening only.

Program Code: EN-CNET-BSCT

Accreditation

The Construction Engineering Technology (BS) program is accredited by the Engineering Technology Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and Program Criteria for Construction Engineering Technology and Similarly Named Programs. ABET is a non-profit and non-governmental accrediting agency for academic programs in the disciplines of applied science, computing, engineering, and engineering technology recognized by the Council for Higher Education Accreditation (CHEA).

+1 Bachelor to Master's Accelerated Degree Program

High-achieving undergraduates can earn both a bachelor's degree and a master's degree within five years. Students apply for this program in sophomore year, and four graduate-level courses are taken in place of undergraduate requirements during junior and senior years. After the bachelor's degree is earned, one graduate-level course is taken in the summer followed by full-time study in the subsequent Fall and Spring semesters to complete the master's degree study. The following accelerated program is available:

- Bachelor of Science in Construction Engineering Technology and Master of Science in Civil Engineering

Contact Information

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Learn more about the Bachelor of Science in Construction Engineering Technology.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

Code	Title	Credit Hours
CMT 4396	Capstone in Construction	3
ENG 2696	Technical Writing	3

College and Major Requirements

Code	Title	Credit Hours
Required Math & Basic Science Courses		
MATH 1022	Precalculus	4
MATH 1031	Differential and Integral Calculus	4
STAT 2103	Statistical Business Analytics	4
or STAT 2903	Honors Statistical Business Analytics	
PHYS 1021	Introduction to General Physics I	4
PHYS 1022	Introduction to General Physics II	4
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I	
EES 1001	Introductory Geology	
EES 2001	Physical Geology	
Required General Education Courses		
Select one of the following:		4
ENG 0802	Analytical Reading and Writing	
ENG 0812	Analytical Reading and Writing: ESL	
ENG 0902	Honors Writing About Literature	
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	Honors Intellectual Heritage I: The Good Life	
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	Honors Intellectual Heritage II: The Common Good	
GenEd 08xx or 09xx (U.S. Society)		3
GenEd 08xx or 09xx (Global/World Society)		3
GenEd 08xx or 09xx (Human Behavior)		3
GenEd 08xx or 09xx (The Arts)		3
GenEd 08xx or 09xx (Race and Diversity)		3
Required Construction Management Technology Courses		
CMT 2124	Construction Methods and Materials	3
CMT 2125	Construction Contracts and Specifications	3
CMT 2271	Building Systems	3
CMT 3121	Construction Estimating	3
CMT 3123	Construction Estimating Laboratory	1
CMT 3145	Structural Analysis	3
CMT 3322	Construction Planning and Scheduling	3
CMT 3333	Soils Mechanics	3

CMT 3341	Environmental and Safety Aspects of Construction	2
CMT 3351	Applied Hydraulics	3
CMT 4335	Steel and Wood Structures	3
CMT 4336	Concrete and Masonry Design	3
CMT 4355	Transportation Systems Management	3
CMT 4396	Capstone in Construction (WI)	3
Required Civil Engineering Courses		
CEE 1105	Surveying	2
CEE 2011	Civil Engineering Materials	2
Required Engineering Courses		
ENGR 1101	Introduction to Engineering & Engineering Technology	3
or ENGR 1901	Honors Introduction to Engineering	
ENGR 1117	Engineering Graphics	2
Select one of the following:		3
ENGR 3001	Engineering Economics	
FIN 3101	Financial Management ¹	
Required Economics & Technical Writing Courses		
ECON 1101	Macroeconomic Principles	3
or ECON 1901	Honors Macroeconomic Principles	
or ECON 1102	Microeconomic Principles	
or ECON 1902	Honors Microeconomic Principles	
ENG 2696	Technical Writing (WI)	3
Required Engineering Technology Courses		
ENGT 2322	Applied Strength of Materials	3
ENGT 2331	Applied Engineering Statics	3
ENGT 4119	Professional Seminar	1
Required Electives Courses		
Special Electives ²		9
Free Elective		2
Required Cooperative Education Courses		
ENGR 2181	Co-Op Work Experience I	3
ENGR 3181	Co-Op Work Experience II	3
Total Credit Hours		130

1

Students must complete all published prerequisites prior to enrolling in this course.

2

Must be approved prior to registration (see list below for suggested courses).

Approved Specialty Electives

Code	Title	Credit Hours
ECON 1101	Macroeconomic Principles	3
or ECON 1901	Honors Macroeconomic Principles	
or ECON 1102	Microeconomic Principles	
or ECON 1902	Honors Microeconomic Principles	
HRM 1101	Leadership and Organizational Management	3
or HRM 1901	Honors Leadership and Organizational Management	
MSOM 3101	Operations Management	3
or MSOM 3901	Honors Operations Management	
MKTG 2101	Marketing Management	3
or MKTG 2901	Honors Marketing Management	
FIN 3101	Financial Management	3

or FIN 3901	Honors Financial Management	
or CMT 4373	Construction Financial Management	
RMI 2101	Introduction to Risk Management	3
or RMI 2901	Honors Introduction to Risk Management	
ENGT 2521	Applied Fluid Mechanics	3
ENGT 3201	Applied Materials Technology	3
ENGT 3323	Applied Dynamics	3
ENGT 3532	Thermodynamics	3
Other Civil Engineering/Engineering/Engineering Technology courses		3

Suggested Academic Plan

Below is a suggested five-year plan for the Co-Op program leading to the Bachelor of Science in Construction Engineering Technology in Construction Engineering Technology. The minimum requirement for graduation is 130 semester hours.

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Construction Engineering Technology with Concentration in Cooperative Education Program

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MATH 1022	Precalculus	4
ENGR 1101	Introduction to Engineering & Engineering Technology	3
or ENGR 1901	or Honors Introduction to Engineering	
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		17
Spring		
ENGR 1117	Engineering Graphics	2
MATH 1031	Differential and Integral Calculus	4
CEE 1105	Surveying	2
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
PHYS 1021	Introduction to General Physics I	4
Credit Hours		15
Year 2		
Fall		
CMT 2124	Construction Methods and Materials	3
ENGT 2331	Applied Engineering Statics	3
PHYS 1022	Introduction to General Physics II	4
GenEd Breadth Course		3
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
Credit Hours		16
Spring		
CMT 2125	Construction Contracts and Specifications	3
CMT 2271	Building Systems	3
CEE 2011	Civil Engineering Materials	2
ENGT 2322	Applied Strength of Materials	3

STAT 2103 or STAT 2903	Statistical Business Analytics or Honors Statistical Business Analytics	4
Credit Hours		15
Year 3		
Fall		
CMT 3121	Construction Estimating	3
CMT 3123	Construction Estimating Laboratory	1
CMT 3333	Soils Mechanics	3
CMT 3341	Environmental and Safety Aspects of Construction	2
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I	
EES 1001	Introductory Geology	
EES 2001	Physical Geology	
Select one of the following:		3
ECON 1101	Macroeconomic Principles	
ECON 1901	Honors Macroeconomic Principles	
ECON 1102	Microeconomic Principles	
ECON 1902	Honors Microeconomic Principles	
Credit Hours		16
Spring		
CMT 3322	Construction Planning and Scheduling	3
CMT 3145	Structural Analysis	3
CMT 3351	Applied Hydraulics	3
ENG 2696	Technical Writing	3
Approved Specialty Elective		3
Credit Hours		15
Year 4		
Fall		
ENGR 2181	Co-Op Work Experience I	3
Credit Hours		3
Spring		
ENGR 3181	Co-Op Work Experience II	3
Credit Hours		3
Year 5		
Fall		
ENGT 4119	Professional Seminar	1
CMT 4336	Concrete and Masonry Design	3
CMT 4355	Transportation Systems Management	3
GenEd Breadth Course		3
Approved Specialty Elective		3
Select one of the following:		3
ENGR 3001	Engineering Economics	
FIN 3101	Financial Management	
Credit Hours		16
Spring		
CMT 4335	Steel and Wood Structures	3
CMT 4396	Capstone in Construction	3
Free Elective		2
Approved Specialty Elective		3

GenEd Breadth Course	3
Credit Hours	14
Total Credit Hours	130

Electrical Engineering BSEE

Overview

The **Bachelor of Science in Electrical Engineering** is offered by the Department of Electrical and Computer Engineering. The program prepares students for careers as practicing engineers in areas such as digital systems, embedded processor applications, digital communications, control systems, sensor networks, biomedical signal processing, microelectronics, computer security and power networks. These careers are in applications, development, research, and design of electric and electronic systems and devices. Electrical Engineers are involved in the design and development of telecommunications networks, cellular telephones, computer and other microprocessor-based devices, consumer electronics, control systems for space vehicles and robots, and in many aspects of the power and automotive industries.

Electrical Engineering students may complete one or more **optional concentrations** in

- Bioelectrical Engineering,
- Computer Engineering, and/or
- Cooperative Education Program.

Campus Location: Main

Program Code: EN-ECE-BSEE

Accreditation

The Electrical Engineering (BS) program is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and Program Criteria for Electrical, Computer, Communications, Telecommunication(s) and Similarly Named Engineering Programs. ABET is a non-profit and non-governmental accrediting agency for academic programs in the disciplines of applied science, computing, engineering, and engineering technology recognized by the Council for Higher Education Accreditation (CHEA).

+1 Bachelor to Master's Accelerated Degree Program

High-achieving undergraduates can earn both a bachelor's degree and a master's degree within five years. Students apply for this program in sophomore year, and four graduate-level courses are taken in place of undergraduate requirements during junior and senior years. After the bachelor's degree is earned, one graduate-level course is taken in the summer followed by full-time study in the subsequent Fall and Spring semesters to complete the master's degree study. The following accelerated program is available:

- Bachelor of Science in Electrical Engineering and Master of Science in Electrical Engineering

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Learn more about the Bachelor of Science in Electrical Engineering.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

Code	Title	Credit Hours
ENGR 2196 or ENGR 2996	Technical Communication Honors Technical Communication	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project Honors Capstone Senior Design Project	3

College Requirements

The degree of Bachelor of Science in Electrical Engineering may be conferred upon satisfactory completion of a minimum of 128 semester hours of credit with a minimum GPA of 2.0 overall and in the major. Students must also score a minimum grade of C- in each of the following courses before they can take other junior and senior level courses:

Code	Title	Credit Hours
ECE 2342	Circuits and Electronics I	5
ECE 2612	Digital Circuit Design	3
ECE 3516 or ECE 3916	Signals and Systems Honors Signals and Systems	5

Program Requirements

Code	Title	Credit Hours
Required Math & Basic Science Courses		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2041 or MATH 2941	Differential Equations I Honors Differential Equations I	3
ECE 3522	Stochastic Processes in Signals and Systems	3
ENGR 2011	Engineering Analysis & Applications	3
ENGR 2013	Engineering Analysis and Applications Lab	1
PHYS 1061 or PHYS 1961	Elementary Classical Physics I Honors Elementary Classical Physics I	4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II Honors Elementary Classical Physics II	4
CHEM 1035	Chemistry for Engineers	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I Honors Chemical Science Laboratory I	1
Required General Education Courses		
Select one of the following:		4
ENG 0802	Analytical Reading and Writing	
ENG 0812	Analytical Reading and Writing: ESL	
ENG 0902	Honors Writing About Literature	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life Honors Intellectual Heritage I: The Good Life	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good Honors Intellectual Heritage II: The Common Good	3
GenEd 08xx or 09xx (U.S. Society)		3
GenEd 08xx or 09xx (Global/World Society)		3

GenEd 08xx or 09xx (Human Behavior)	3
GenEd 08xx or 09xx (The Arts)	3
GenEd 08xx or 09xx (Race and Diversity)	3
Required Electrical Engineering Courses	
ECE 1111 Engineering Computation I	4
ECE 2342 Circuits and Electronics I	5
ECE 2352 Circuits and Electronics II	5
ECE 2612 Digital Circuit Design	3
ECE 2613 Digital Circuit Design Laboratory	1
ECE 3516 Signals and Systems	5
or ECE 3916 Honors Signals and Systems	
ECE 3612 Processor Systems	3
or ECE 3914 Honors Microprocessor Systems	
ECE 3613 Processor Systems Laboratory	1
or ECE 3915 Honors Microprocessor Systems Lab	
ECE 3712 Introduction to Electromagnetic Fields and Waves	3
ECE 3822 Engineering Computation II	3
Required Engineering Courses	
ENGR 1001 College of Engineering First Year Seminar	1
ENGR 1101 Introduction to Engineering & Engineering Technology	3
or ENGR 1901 Honors Introduction to Engineering	
ENGR 1102 Introduction to Engineering Problem Solving	3
ENGR 2196 Technical Communication (WI)	3
or ENGR 2996 Honors Technical Communication	
ECE 4176 Senior Design Project I: ECE	3
ENGR 4296 Capstone Senior Design Project (WI)	3
or ENGR 4996 Honors Capstone Senior Design Project	
Required Elective Courses	
ECE Technical Electives - may use a combination of 3 credit and/or 4 credit courses	16
Math, Science, or Engineering Electives	6
Free Elective	2
Total Credit Hours	128

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Electrical Engineering

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
MATH 1041 Calculus I		4
or MATH 1941 or Honors Calculus I		
PHYS 1061 Elementary Classical Physics I		4
or PHYS 1961 or Honors Elementary Classical Physics I		
ENGR 1101 Introduction to Engineering & Engineering Technology		3
or ENGR 1901 or Honors Introduction to Engineering		
ENGR 1001 College of Engineering First Year Seminar		1
ENG 0802 Analytical Reading and Writing		4
or ENG 0812 or Analytical Reading and Writing: ESL		
or ENG 0902 or Honors Writing About Literature		
Credit Hours		16

Spring

MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	4
CHEM 1035	Chemistry for Engineers	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I or Honors Chemical Science Laboratory I	1
ENGR 1102	Introduction to Engineering Problem Solving	3
Credit Hours		15

Year 2**Fall**

ENGR 2011	Engineering Analysis & Applications	3
ENGR 2013	Engineering Analysis and Applications Lab	1
ECE 1111	Engineering Computation I	4
ECE 2342	Circuits and Electronics I	5
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		16

Spring

MATH 2041 or MATH 2941	Differential Equations I or Honors Differential Equations I	3
ECE 2352	Circuits and Electronics II	5
ECE 2612	Digital Circuit Design	3
ECE 2613	Digital Circuit Design Laboratory	1
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		15

Year 3**Fall**

ECE 3516 or ECE 3916	Signals and Systems or Honors Signals and Systems	5
ECE 3612 or ECE 3914	Processor Systems or Honors Microprocessor Systems	3
ECE 3613 or ECE 3915	Processor Systems Laboratory or Honors Microprocessor Systems Lab	1
ENGR 2196 or ENGR 2996	Technical Communication or Honors Technical Communication	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		18

Spring

ECE 3522	Stochastic Processes in Signals and Systems	3
ECE 3822	Engineering Computation II	3
ECE Technical Elective #1		3
ECE Technical Elective #2		4
GenEd Breadth Course		3
Credit Hours		16

Year 4**Fall**

ECE 3712	Introduction to Electromagnetic Fields and Waves	3
ECE 4176	Senior Design Project I: ECE	3
ECE Technical Elective #3		3

Math, Science, or Engineering Elective #1	3	
GenEd Breadth Course	3	
Free Elective	2	
Credit Hours	17	
Spring		
ENGR 4296 or ENGR 4996	Capstone Senior Design Project or Honors Capstone Senior Design Project	3
ECE Technical Elective #4		3
ECE Technical Elective #5		3
Math, Science, or Engineering Elective #2		3
GenEd Breadth Course		3
Credit Hours	15	
Total Credit Hours	128	

ECE Technical Electives

Code	Title	Credit Hours
ECE 3412	Classical Control Systems	3
ECE 3413	Classical Control Laboratory	1
ECE 3432	Robotic Control using Robotic Operating System (ROS)	3
ECE 3614	Printed Circuit Board Design	3
ECE 3622	Embedded System Design	3
ECE 3623	Embedded System Design Laboratory	1
ECE 3732	Electromechanical Energy Systems	3
ECE 3733	Electromechanical Energy Systems Laboratory	1
ECE 3824	Engineering Computation III	3
ECE 4110	Special Topics	1 to 4
ECE 4312	Microelectronics II	3
ECE 4322	VLSI Systems Design	3
ECE 4412	Modern Control Theory	3
ECE 4422	Digital Control Systems	3
ECE 4512	Digital Communication Systems	3
ECE 4513	Digital Communication Systems Laboratory	1
ECE 4522	Digital Signal Processing	3
ECE 4527	Introduction to Machine Learning and Pattern Recognition	3
ECE 4532	Data and Computer Communication	3
ECE 4542	Telecommunications Engineering	3
ECE 4612	Advanced Processor Systems	3
ECE 4712	Power System Analysis	3
ECE 4722	Power Electronics	3
ECE 4822	Engineering Computation IV	3

Math, Science, or Engineering Electives

Code	Title	Credit Hours
	Any course 2000-level or above from the College of Science and Technology (CST), excluding MATH 2101, MATH 2103, CIS 3715, CIS 4526.	3
	Any course 2000-level or above from the College of Engineering.	3

Electrical Engineering BSEE with Bioelectrical Engineering and Cooperative Education Program

Overview

The **Bachelor of Science in Electrical Engineering** is offered by the Department of Electrical and Computer Engineering. The program prepares students for careers as practicing engineers in areas such as digital systems, embedded processor applications, digital communications, control systems, sensor networks, biomedical signal processing, microelectronics, computer security and power networks. These careers are in applications, development, research, and design of electric and electronic systems and devices. Electrical Engineers are involved in the design and development of telecommunications networks, cellular telephones, computer and other microprocessor-based devices, consumer electronics, control systems for space vehicles and robots, and in many aspects of the power and automotive industries.

Electrical Engineering students may complete one or more **optional concentrations** in

- Bioelectrical Engineering,
- Computer Engineering, and/or
- Cooperative Education Program.

Bioelectrical Engineering Concentration

The **concentration in Bioelectrical Engineering** prepares students for careers in the emerging areas of biomedical signal and image processing, assistive devices for the impaired, and bioelectronics. The Bioelectrical Engineering concentration utilizes courses in Biology, and Mammalian Anatomy and Physiology from the Department of Kinesiology at Temple University as part of the curriculum.

Cooperative Education Program

A **Cooperative Education** (Co-Op) is an optional program available at the College of Engineering where you have the opportunity to gain professional work experience before graduation. It is designed to give you the chance to apply the knowledge learned in the classroom to real life problems. You will be exposed to the latest technology and new ideas at a worksite helping you understand your field of work more extensively. During the Co-Op, you will make valuable connections with professionals in your field. A cooperative education can enhance and strengthen you academically, professionally and personally.

Campus Location: Main

Program Code: EN-ECE-BSEE

Accreditation

The Electrical Engineering (BS) program is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and Program Criteria for Electrical, Computer, Communications, Telecommunication(s) and Similarly Named Engineering Programs. ABET is a non-profit and non-governmental accrediting agency for academic programs in the disciplines of applied science, computing, engineering, and engineering technology recognized by the Council for Higher Education Accreditation (CHEA).

+1 Bachelor to Master's Accelerated Degree Program

High-achieving undergraduates can earn both a bachelor's degree and a master's degree within five years. Students apply for this program in sophomore year, and four graduate-level courses are taken in place of undergraduate requirements during junior and senior years. After the bachelor's degree is earned, one graduate-level course is taken in the summer followed by full-time study in the subsequent Fall and Spring semesters to complete the master's degree study. The following accelerated program is available:

- Bachelor of Science in Electrical Engineering and Master of Science in Electrical Engineering

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Learn more about the Bachelor of Science in Electrical Engineering.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

Code	Title	Credit Hours
ENGR 2196 or ENGR 2996	Technical Communication Honors Technical Communication	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project Honors Capstone Senior Design Project	3

College Requirements

The degree of Bachelor of Science in Electrical Engineering with a concentration in Bioelectrical Engineering and the optional Cooperative Education program may be conferred upon satisfactory completion of a minimum of 134 semester hours of credit with a minimum GPA of 2.0 overall and in the major. Students must also score a minimum grade of C- in each of the following courses before they can take other junior and senior level courses:

Code	Title	Credit Hours
ECE 2342	Circuits and Electronics I	5
ECE 2612	Digital Circuit Design	3
ECE 3516 or ECE 3916	Signals and Systems Honors Signals and Systems	5

Program Requirements

Code	Title	Credit Hours
Required Math & Basic Science Courses		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2041 or MATH 2941	Differential Equations I Honors Differential Equations I	3
ECE 3522	Stochastic Processes in Signals and Systems	3
ENGR 2011	Engineering Analysis & Applications	3
ENGR 2013	Engineering Analysis and Applications Lab	1
PHYS 1061 or PHYS 1961	Elementary Classical Physics I Honors Elementary Classical Physics I	4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II Honors Elementary Classical Physics II	4
CHEM 1035	Chemistry for Engineers	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I Honors Chemical Science Laboratory I	1
BIOL 1012	General Biology II	4
Required General Education Courses		
Select one of the following:		4
ENG 0802	Analytical Reading and Writing	
ENG 0812	Analytical Reading and Writing: ESL	

ENG 0902	Honors Writing About Literature	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life Honors Intellectual Heritage I: The Good Life	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good Honors Intellectual Heritage II: The Common Good	3
GenEd 08xx or 09xx (U.S. Society)		3
GenEd 08xx or 09xx (Global/World Society)		3
GenEd 08xx or 09xx (Human Behavior)		3
GenEd 08xx or 09xx (The Arts)		3
GenEd 08xx or 09xx (Race and Diversity)		3
Required Electrical and Bioelectrical Engineering Courses		
ECE 1111	Engineering Computation I	4
ECE 2342	Circuits and Electronics I	5
ECE 2352	Circuits and Electronics II	5
ECE 2612	Digital Circuit Design	3
ECE 2613	Digital Circuit Design Laboratory	1
ECE 3516 or ECE 3916	Signals and Systems Honors Signals and Systems	5
ECE 3612 or ECE 3914	Processor Systems Honors Microprocessor Systems	3
ECE 3613 or ECE 3915	Processor Systems Laboratory Honors Microprocessor Systems Lab	1
ECE 3712	Introduction to Electromagnetic Fields and Waves	3
ECE 3822	Engineering Computation II	3
ECE 4522	Digital Signal Processing	3
KINS 1223	Human Anatomy and Physiology I	4
KINS 1224	Human Anatomy and Physiology II	4
Required Engineering Courses		
ENGR 1001	College of Engineering First Year Seminar	1
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology Honors Introduction to Engineering	3
ENGR 1102	Introduction to Engineering Problem Solving	3
ENGR 2196 or ENGR 2996	Technical Communication (WI) Honors Technical Communication	3
ECE 4176	Senior Design Project I: ECE	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project (WI) Honors Capstone Senior Design Project	3
Required Electives		
ECE Technical Elective		4
Math, Science, or Engineering Elective		3
Free Elective		2
Required Cooperative Education Courses		
ENGR 2181	Co-Op Work Experience I	3
ENGR 3181	Co-Op Work Experience II	3
Total Credit Hours		134

Suggested Academic Plan

Below is a suggested five-year plan for the Co-Op program leading to the Bachelor of Science in Electrical Engineering with a concentration in Bioelectrical Engineering. The minimum requirement for graduation is 134 semester hours.

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Electrical Engineering with Concentrations in Bioelectrical Engineering and Cooperative Education Program

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	4
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology or Honors Introduction to Engineering	3
ENGR 1001	College of Engineering First Year Seminar	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		16
Spring		
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	4
CHEM 1035	Chemistry for Engineers	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I or Honors Chemical Science Laboratory I	1
ENGR 1102	Introduction to Engineering Problem Solving	3
Credit Hours		15
Year 2		
Fall		
ENGR 2011	Engineering Analysis & Applications	3
ENGR 2013	Engineering Analysis and Applications Lab	1
ECE 1111	Engineering Computation I	4
ECE 2342	Circuits and Electronics I	5
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		16
Spring		
MATH 2041 or MATH 2941	Differential Equations I or Honors Differential Equations I	3
ECE 2612	Digital Circuit Design	3
ECE 2613	Digital Circuit Design Laboratory	1
ECE 2352	Circuits and Electronics II	5
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		15
Year 3		
Fall		
ECE 3516 or ECE 3916	Signals and Systems or Honors Signals and Systems	5
ECE 3612 or ECE 3914	Processor Systems or Honors Microprocessor Systems	3
ECE 3613 or ECE 3915	Processor Systems Laboratory or Honors Microprocessor Systems Lab	1
ENGR 2196 or ENGR 2996	Technical Communication or Honors Technical Communication	3

GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		18
Spring		
ECE 3522	Stochastic Processes in Signals and Systems	3
ECE 3712	Introduction to Electromagnetic Fields and Waves	3
ECE 3822	Engineering Computation II	3
BIOL 1012	General Biology II	4
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
ENGR 2181	Co-Op Work Experience I	3
Credit Hours		3
Spring		
ENGR 3181	Co-Op Work Experience II	3
Credit Hours		3
Year 5		
Fall		
ECE 4176	Senior Design Project I: ECE	3
ECE 4522	Digital Signal Processing	3
KINS 1223	Human Anatomy and Physiology I	4
ECE Technical Elective		4
GenEd Breadth Course		3
Credit Hours		17
Spring		
ENGR 4296 or ENGR 4996	Capstone Senior Design Project or Honors Capstone Senior Design Project	3
KINS 1224	Human Anatomy and Physiology II	4
Math, Science, or Engineering Elective		3
Free Elective		2
GenEd Breadth Course		3
Credit Hours		15
Total Credit Hours		134

ECE Technical Electives

Code	Title	Credit Hours
ECE 3412	Classical Control Systems	3
ECE 3413	Classical Control Laboratory	1
ECE 3432	Robotic Control using Robotic Operating System (ROS)	3
ECE 3614	Printed Circuit Board Design	3
ECE 3622	Embedded System Design	3
ECE 3623	Embedded System Design Laboratory	1
ECE 3732	Electromechanical Energy Systems	3
ECE 3733	Electromechanical Energy Systems Laboratory	1
ECE 3824	Engineering Computation III	3
ECE 4110	Special Topics	1 to 4
ECE 4312	Microelectronics II	3
ECE 4322	VLSI Systems Design	3
ECE 4412	Modern Control Theory	3
ECE 4422	Digital Control Systems	3

ECE 4512	Digital Communication Systems	3
ECE 4513	Digital Communication Systems Laboratory	1
ECE 4527	Introduction to Machine Learning and Pattern Recognition	3
ECE 4532	Data and Computer Communication	3
ECE 4542	Telecommunications Engineering	3
ECE 4612	Advanced Processor Systems	3
ECE 4712	Power System Analysis	3
ECE 4722	Power Electronics	3
ECE 4822	Engineering Computation IV	3

Math, Science, or Engineering Electives

Code	Title	Credit Hours
	Any course 2000-level or above from the College of Science and Technology (CST), excluding MATH 2101, MATH 2103, CIS 3715, CIS 4526.	3
	Any course 2000-level or above from the College of Engineering.	3

Electrical Engineering BSEE with Bioelectrical Engineering Concentration

Overview

The **Bachelor of Science in Electrical Engineering** is offered by the Department of Electrical and Computer Engineering. The program prepares students for careers as practicing engineers in areas such as digital systems, embedded processor applications, digital communications, control systems, sensor networks, biomedical signal processing, microelectronics, computer security and power networks. These careers are in applications, development, research, and design of electric and electronic systems and devices. Electrical Engineers are involved in the design and development of telecommunications networks, cellular telephones, computer and other microprocessor-based devices, consumer electronics, control systems for space vehicles and robots, and in many aspects of the power and automotive industries.

Electrical Engineering students may complete one or more **optional concentrations** in

- Bioelectrical Engineering,
- Computer Engineering, and/or
- Cooperative Education Program.

Bioelectrical Engineering Concentration

The **concentration in Bioelectrical Engineering** prepares students for careers in the emerging areas of biomedical signal and image processing, assistive devices for the impaired, and bioelectronics. The Bioelectrical Engineering concentration utilizes courses in Biology, and Mammalian Anatomy and Physiology from the Department of Kinesiology at Temple University as part of the curriculum.

Campus Location: Main

Program Code: EN-ECE-BSEE

Accreditation

The Electrical Engineering (BS) program is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and Program Criteria for Electrical, Computer, Communications, Telecommunication(s) and Similarly Named Engineering Programs. ABET is a non-profit and non-governmental accrediting agency for academic programs in the disciplines of applied science, computing, engineering, and engineering technology recognized by the Council for Higher Education Accreditation (CHEA).

+1 Bachelor to Master's Accelerated Degree Program

High-achieving undergraduates can earn both a bachelor's degree and a master's degree within five years. Students apply for this program in sophomore year, and four graduate-level courses are taken in place of undergraduate requirements during junior and senior years. After the bachelor's degree is earned, one graduate-level course is taken in the summer followed by full-time study in the subsequent Fall and Spring semesters to complete the master's degree study. The following accelerated program is available:

- Bachelor of Science in Electrical Engineering and Master of Science in Electrical Engineering

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Learn more about the Bachelor of Science in Electrical Engineering.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

Code	Title	Credit Hours
ENGR 2196 or ENGR 2996	Technical Communication Honors Technical Communication	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project Honors Capstone Senior Design Project	3

College Requirements

The degree of Bachelor of Science in Electrical Engineering with a concentration in Bioelectrical Engineering may be conferred upon satisfactory completion of a minimum of 128 semester hours of credit with a minimum GPA of 2.0 overall and in the major. Students must also score a minimum grade of C- in each of the following courses before they can take other junior and senior level courses:

Code	Title	Credit Hours
ECE 2342	Circuits and Electronics I	5
ECE 2612	Digital Circuit Design	3
ECE 3516 or ECE 3916	Signals and Systems Honors Signals and Systems	5

Program Requirements

Code	Title	Credit Hours
Required Math & Basic Science Courses		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2041 or MATH 2941	Differential Equations I Honors Differential Equations I	3
ECE 3522	Stochastic Processes in Signals and Systems	3
ENGR 2011	Engineering Analysis & Applications	3
ENGR 2013	Engineering Analysis and Applications Lab	1
PHYS 1061	Elementary Classical Physics I	4

or PHYS 1961	Honors Elementary Classical Physics I	
PHYS 1062	Elementary Classical Physics II	4
or PHYS 1962	Honors Elementary Classical Physics II	
CHEM 1035	Chemistry for Engineers	3
CHEM 1033	General Chemistry Laboratory I	1
or CHEM 1953	Honors Chemical Science Laboratory I	
BIOL 1012	General Biology II	4
Required General Education Courses		
Select one of the following:		4
ENG 0802	Analytical Reading and Writing	
ENG 0812	Analytical Reading and Writing: ESL	
ENG 0902	Honors Writing About Literature	
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	Honors Intellectual Heritage I: The Good Life	
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	Honors Intellectual Heritage II: The Common Good	
GenEd 08xx or 09xx (U.S. Society)		3
GenEd 08xx or 09xx (Global/World Society)		3
GenEd 08xx or 09xx (Human Behavior)		3
GenEd 08xx or 09xx (The Arts)		3
GenEd 08xx or 09xx (Race and Diversity)		3
Required Electrical and Bioelectrical Engineering Courses		
ECE 1111	Engineering Computation I	4
ECE 2342	Circuits and Electronics I	5
ECE 2352	Circuits and Electronics II	5
ECE 2612	Digital Circuit Design	3
ECE 2613	Digital Circuit Design Laboratory	1
ECE 3612	Processor Systems	3
or ECE 3914	Honors Microprocessor Systems	
ECE 3613	Processor Systems Laboratory	1
or ECE 3915	Honors Microprocessor Systems Lab	
ECE 3516	Signals and Systems	5
or ECE 3916	Honors Signals and Systems	
ECE 3712	Introduction to Electromagnetic Fields and Waves	3
ECE 3822	Engineering Computation II	3
ECE 4522	Digital Signal Processing	3
KINS 1223	Human Anatomy and Physiology I	4
KINS 1224	Human Anatomy and Physiology II	4
Required Engineering Courses		
ENGR 1001	College of Engineering First Year Seminar	1
ENGR 1101	Introduction to Engineering & Engineering Technology	3
or ENGR 1901	Honors Introduction to Engineering	
ENGR 1102	Introduction to Engineering Problem Solving	3
ENGR 2196	Technical Communication (WI)	3
or ENGR 2996	Honors Technical Communication	
ECE 4176	Senior Design Project I: ECE	3
ENGR 4296	Capstone Senior Design Project (WI)	3
or ENGR 4996	Honors Capstone Senior Design Project	
Required Electives		
ECE Technical Elective		4
Math, Science, or Engineering Elective		3

Free Elective	2
Total Credit Hours	128

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Electrical Engineering with Concentration in Bioelectrical Engineering Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	4
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology or Honors Introduction to Engineering	3
ENGR 1001	College of Engineering First Year Seminar	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		16
Spring		
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	4
CHEM 1035	Chemistry for Engineers	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I or Honors Chemical Science Laboratory I	1
ENGR 1102	Introduction to Engineering Problem Solving	3
Credit Hours		15
Year 2		
Fall		
ENGR 2011	Engineering Analysis & Applications	3
ENGR 2013	Engineering Analysis and Applications Lab	1
ECE 1111	Engineering Computation I	4
ECE 2342	Circuits and Electronics I	5
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		16
Spring		
MATH 2041 or MATH 2941	Differential Equations I or Honors Differential Equations I	3
ECE 2612	Digital Circuit Design	3
ECE 2613	Digital Circuit Design Laboratory	1
ECE 2352	Circuits and Electronics II	5
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		15
Year 3		
Fall		
ECE 3612 or ECE 3914	Processor Systems or Honors Microprocessor Systems	3

ECE 3613 or ECE 3915	Processor Systems Laboratory or Honors Microprocessor Systems Lab	1
ECE 3516 or ECE 3916	Signals and Systems or Honors Signals and Systems	5
ENGR 2196 or ENGR 2996	Technical Communication or Honors Technical Communication	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		18
Spring		
ECE 3522	Stochastic Processes in Signals and Systems	3
ECE 3712	Introduction to Electromagnetic Fields and Waves	3
ECE 3822	Engineering Computation II	3
BIOL 1012	General Biology II	4
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
ECE 4176	Senior Design Project I: ECE	3
ECE 4522	Digital Signal Processing	3
KINS 1223	Human Anatomy and Physiology I	4
ECE Technical Elective		4
GenEd Breadth Course		3
Credit Hours		17
Spring		
ENGR 4296 or ENGR 4996	Capstone Senior Design Project or Honors Capstone Senior Design Project	3
KINS 1224	Human Anatomy and Physiology II	4
Math, Science, or Engineering Elective		3
GenEd Breadth Course		3
Free Elective		2
Credit Hours		15
Total Credit Hours		128

ECE Technical Electives

Code	Title	Credit Hours
ECE 3412	Classical Control Systems	3
ECE 3413	Classical Control Laboratory	1
ECE 3432	Robotic Control using Robotic Operating System (ROS)	3
ECE 3614	Printed Circuit Board Design	3
ECE 3622	Embedded System Design	3
ECE 3623	Embedded System Design Laboratory	1
ECE 3732	Electromechanical Energy Systems	3
ECE 3733	Electromechanical Energy Systems Laboratory	1
ECE 3824	Engineering Computation III	3
ECE 4110	Special Topics	1 to 4
ECE 4312	Microelectronics II	3
ECE 4322	VLSI Systems Design	3
ECE 4412	Modern Control Theory	3
ECE 4422	Digital Control Systems	3
ECE 4512	Digital Communication Systems	3
ECE 4513	Digital Communication Systems Laboratory	1

ECE 4527	Introduction to Machine Learning and Pattern Recognition	3
ECE 4532	Data and Computer Communication	3
ECE 4542	Telecommunications Engineering	3
ECE 4612	Advanced Processor Systems	3
ECE 4712	Power System Analysis	3
ECE 4722	Power Electronics	3
ECE 4822	Engineering Computation IV	3

Math, Science, or Engineering Electives

Code	Title	Credit Hours
Any course 2000-level or above from the College of Science and Technology (CST), excluding MATH 2101, MATH 2103, CIS 3715, CIS 4526.		3
Any course 2000-level or above from the College of Engineering.		3

Electrical Engineering BSEE with Computer Engineering and Cooperative Education Program

Overview

The **Bachelor of Science in Electrical Engineering** is offered by the Department of Electrical and Computer Engineering. The program prepares students for careers as practicing engineers in areas such as digital systems, embedded processor applications, digital communications, control systems, sensor networks, biomedical signal processing, microelectronics, computer security and power networks. These careers are in applications, development, research, and design of electric and electronic systems and devices. Electrical Engineers are involved in the design and development of telecommunications networks, cellular telephones, computer and other microprocessor-based devices, consumer electronics, control systems for space vehicles and robots, and in many aspects of the power and automotive industries.

Electrical Engineering students may complete one or more **optional concentrations** in

- Bioelectrical Engineering,
- Computer Engineering, and/or
- Cooperative Education Program.

Computer Engineering Concentration

The **concentration in Computer Engineering** prepares students for a career in the area of Computer Engineering as it relates to the design of integrated software/hardware systems with both high- and low-level computer systems programming and applications to electrical systems. Computer engineers are responsible for the design, implementation, and application of computers and digital systems. The field covers hardware, software, and the interaction between them.

Cooperative Education Program

A **Cooperative Education** (Co-Op) is an optional program available at the College of Engineering where you have the opportunity to gain professional work experience before graduation. It is designed to give you the chance to apply the knowledge learned in the classroom to real life problems. You will be exposed to the latest technology and new ideas at a worksite helping you understand your field of work more extensively. During the Co-Op, you will make valuable connections with professionals in your field. A cooperative education can enhance and strengthen you academically, professionally and personally.

Campus Location: Main

Program Code: EN-ECE-BSEE

Accreditation

The Electrical Engineering (BS) program is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and Program Criteria for Electrical, Computer, Communications, Telecommunication(s) and Similarly Named Engineering Programs. ABET is a non-profit and non-governmental accrediting agency for academic programs in the disciplines of applied science, computing, engineering, and engineering technology recognized by the Council for Higher Education Accreditation (CHEA).

+1 Bachelor to Master's Accelerated Degree Program

High-achieving undergraduates can earn both a bachelor's degree and a master's degree within five years. Students apply for this program in sophomore year, and four graduate-level courses are taken in place of undergraduate requirements during junior and senior years. After the bachelor's

degree is earned, one graduate-level course is taken in the summer followed by full-time study in the subsequent Fall and Spring semesters to complete the master's degree study. The following accelerated program is available:

- Bachelor of Science in Electrical Engineering with Computer Engineering Concentration and Master of Science in Electrical Engineering

Contact Information

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Learn more about the Bachelor of Science in Electrical Engineering.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

Code	Title	Credit Hours
ENGR 2196 or ENGR 2996	Technical Communication Honors Technical Communication	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project Honors Capstone Senior Design Project	3

College Requirements

The degree of Bachelor of Science in Electrical Engineering with a concentration in Computer Engineering and the optional Cooperative Education Program may be conferred upon satisfactory completion of a minimum of 134 semester hours of credit with a minimum GPA of 2.0 overall and in the major. Students must also score a minimum grade of C- in each of the following courses before they can take other junior and senior level courses:

Code	Title	Credit Hours
ECE 2342	Circuits and Electronics I	5
ECE 2612	Digital Circuit Design	3
ECE 3516 or ECE 3916	Signals and Systems Honors Signals and Systems	5

Program Requirements

Code	Title	Credit Hours
Required Math & Basic Science Courses		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2041 or MATH 2941	Differential Equations I Honors Differential Equations I	3

ECE 3522	Stochastic Processes in Signals and Systems	3
ENGR 2011	Engineering Analysis & Applications	3
ENGR 2013	Engineering Analysis and Applications Lab	1
PHYS 1061	Elementary Classical Physics I	4
or PHYS 1961	Honors Elementary Classical Physics I	
PHYS 1062	Elementary Classical Physics II	4
or PHYS 1962	Honors Elementary Classical Physics II	
CHEM 1035	Chemistry for Engineers	3
CHEM 1033	General Chemistry Laboratory I	1
or CHEM 1953	Honors Chemical Science Laboratory I	
Required General Education Courses		
Select one of the following:		4
ENG 0802	Analytical Reading and Writing	
ENG 0812	Analytical Reading and Writing: ESL	
ENG 0902	Honors Writing About Literature	
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	Honors Intellectual Heritage I: The Good Life	
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	Honors Intellectual Heritage II: The Common Good	
GenEd 08xx or 09xx (U.S. Society)		3
GenEd 08xx or 09xx (Global/World Society)		3
GenEd 08xx or 09xx (Human Behavior)		3
GenEd 08xx or 09xx (The Arts)		3
GenEd 08xx or 09xx (Race and Diversity)		3
Required Electrical & Computer Engineering Courses		
ECE 1111	Engineering Computation I	4
ECE 2342	Circuits and Electronics I	5
ECE 2352	Circuits and Electronics II	5
ECE 2612	Digital Circuit Design	3
ECE 2613	Digital Circuit Design Laboratory	1
ECE 3516	Signals and Systems	5
or ECE 3916	Honors Signals and Systems	
ECE 3612	Processor Systems	3
or ECE 3914	Honors Microprocessor Systems	
ECE 3613	Processor Systems Laboratory	1
or ECE 3915	Honors Microprocessor Systems Lab	
ECE 3622	Embedded System Design	3
ECE 3623	Embedded System Design Laboratory	1
ECE 3712	Introduction to Electromagnetic Fields and Waves	3
ECE 3822	Engineering Computation II	3
ECE 3824	Engineering Computation III	3
ECE 4532	Data and Computer Communication	3
ECE 4612	Advanced Processor Systems	3
Required Engineering Courses		
ENGR 1001	College of Engineering First Year Seminar	1
ENGR 1101	Introduction to Engineering & Engineering Technology	3
or ENGR 1901	Honors Introduction to Engineering	
ENGR 1102	Introduction to Engineering Problem Solving	3
ENGR 2196	Technical Communication (WI)	3
or ENGR 2996	Honors Technical Communication	
ECE 4176	Senior Design Project I: ECE	3
ENGR 4296	Capstone Senior Design Project (WI)	3

or ENGR 4996	Honors Capstone Senior Design Project	
Required Elective Courses		
ECE Technical Elective		3
Math, Science, or Engineering Electives		6
Free Elective		2
Required Cooperative Education Courses		
ENGR 2181	Co-Op Work Experience I	3
ENGR 3181	Co-Op Work Experience II	3
Total Credit Hours		134

Suggested Academic Plan

Below is a suggested five-year plan for the Co-Op program leading to the Bachelor of Science in Electrical Engineering with a concentration in Computer Engineering. The minimum requirement for graduation is 134 semester hours.

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Electrical Engineering with Concentrations in Computer Engineering and Cooperative Education Program

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	4
ENGR 1001	College of Engineering First Year Seminar	1
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology or Honors Introduction to Engineering	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		16
Spring		
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	4
CHEM 1035	Chemistry for Engineers	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I or Honors Chemical Science Laboratory I	1
ENGR 1102	Introduction to Engineering Problem Solving	3
Credit Hours		15
Year 2		
Fall		
ENGR 2011	Engineering Analysis & Applications	3
ENGR 2013	Engineering Analysis and Applications Lab	1
ECE 1111	Engineering Computation I	4
ECE 2342	Circuits and Electronics I	5
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		16
Spring		
MATH 2041 or MATH 2941	Differential Equations I or Honors Differential Equations I	3

ECE 2612	Digital Circuit Design	3
ECE 2613	Digital Circuit Design Laboratory	1
ECE 2352	Circuits and Electronics II	5
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		15
Year 3		
Fall		
ECE 3516 or ECE 3916	Signals and Systems or Honors Signals and Systems	5
ECE 3612 or ECE 3914	Processor Systems or Honors Microprocessor Systems	3
ECE 3613 or ECE 3915	Processor Systems Laboratory or Honors Microprocessor Systems Lab	1
ENGR 2196 or ENGR 2996	Technical Communication or Honors Technical Communication	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		18
Spring		
ECE 3522	Stochastic Processes in Signals and Systems	3
ECE 3622	Embedded System Design	3
ECE 3623	Embedded System Design Laboratory	1
ECE 3822	Engineering Computation II	3
ECE 4612	Advanced Processor Systems	3
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
ENGR 2181	Co-Op Work Experience I	3
Credit Hours		3
Spring		
ENGR 3181	Co-Op Work Experience II	3
Credit Hours		3
Year 5		
Fall		
ECE 3712	Introduction to Electromagnetic Fields and Waves	3
ECE 3824	Engineering Computation III	3
ECE 4176	Senior Design Project I: ECE	3
Math, Science, or Engineering Elective #1		3
GenEd Breadth Course		3
Free Elective		2
Credit Hours		17
Spring		
ECE 4532	Data and Computer Communication	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project or Honors Capstone Senior Design Project	3
ECE Technical Elective		3
Math, Science, or Engineering Elective #2		3
GenEd Breadth Course		3
Credit Hours		15
Total Credit Hours		134

ECE Technical Electives

Code	Title	Credit Hours
ECE 3412	Classical Control Systems	3
ECE 3413	Classical Control Laboratory	1
ECE 3432	Robotic Control using Robotic Operating System (ROS)	3
ECE 3614	Printed Circuit Board Design	3
ECE 3732	Electromechanical Energy Systems	3
ECE 3733	Electromechanical Energy Systems Laboratory	1
ECE 4110	Special Topics	1 to 4
ECE 4312	Microelectronics II	3
ECE 4322	VLSI Systems Design	3
ECE 4412	Modern Control Theory	3
ECE 4422	Digital Control Systems	3
ECE 4512	Digital Communication Systems	3
ECE 4513	Digital Communication Systems Laboratory	1
ECE 4522	Digital Signal Processing	3
ECE 4527	Introduction to Machine Learning and Pattern Recognition	3
ECE 4542	Telecommunications Engineering	3
ECE 4712	Power System Analysis	3
ECE 4722	Power Electronics	3
ECE 4822	Engineering Computation IV	3

Math, Science, and Engineering Electives

Code	Title	Credit Hours
	Any course 2000-level or above from the College of Science and Technology (CST), excluding MATH 2101, MATH 2103, CIS 3715, CIS 4526.	3
	Any course 2000-level or above from the College of Engineering.	

Electrical Engineering BSEE with Computer Engineering Concentration

Overview

The **Bachelor of Science in Electrical Engineering** is offered by the Department of Electrical and Computer Engineering. The program prepares students for careers as practicing engineers in areas such as digital systems, embedded processor applications, digital communications, control systems, sensor networks, biomedical signal processing, microelectronics, computer security and power networks. These careers are in applications, development, research, and design of electric and electronic systems and devices. Electrical Engineers are involved in the design and development of telecommunications networks, cellular telephones, computer and other microprocessor-based devices, consumer electronics, control systems for space vehicles and robots, and in many aspects of the power and automotive industries.

Electrical Engineering students may complete one or more **optional concentrations** in

- Bioelectrical Engineering,
- Computer Engineering, and/or
- Cooperative Education Program.

Computer Engineering Concentration

The **concentration in Computer Engineering** prepares students for a career in the area of Computer Engineering as it relates to the design of integrated software/hardware systems with both high- and low-level computer systems programming and applications to electrical systems. Computer engineers are responsible for the design, implementation, and application of computers and digital systems. The field covers hardware, software, and the interaction between them.

Campus Location: Main

Program Code: EN-ECE-BSEE

Accreditation

The Electrical Engineering (BS) program is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and Program Criteria for Electrical, Computer, Communications, Telecommunication(s) and Similarly Named Engineering Programs. ABET is a non-profit and non-governmental accrediting agency for academic programs in the disciplines of applied science, computing, engineering, and engineering technology recognized by the Council for Higher Education Accreditation (CHEA).

+1 Bachelor to Master's Accelerated Degree Program

High-achieving undergraduates can earn both a bachelor's degree and a master's degree within five years. Students apply for this program in sophomore year, and four graduate-level courses are taken in place of undergraduate requirements during junior and senior years. After the bachelor's degree is earned, one graduate-level course is taken in the summer followed by full-time study in the subsequent Fall and Spring semesters to complete the master's degree study. The following accelerated program is available:

- Bachelor of Science in Electrical Engineering with Computer Engineering Concentration and Master of Science in Electrical Engineering

Contact Information

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Brian Thomson, PhD, Undergraduate Coordinator
Engineering Building, Room 727A
215-204-8737
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Learn more about the Bachelor of Science in Electrical Engineering.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

Code	Title	Credit Hours
ENGR 2196 or ENGR 2996	Technical Communication Honors Technical Communication	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project Honors Capstone Senior Design Project	3

College Requirements

The degree of Bachelor of Science in Electrical Engineering with a concentration in Computer Engineering may be conferred upon satisfactory completion of a minimum of 128 semester hours of credit with a minimum GPA of 2.0 overall and in the major. Students must also score a minimum grade of C- in each of the following courses before they can take other junior and senior level courses:

Code	Title	Credit Hours
ECE 2342	Circuits and Electronics I	5
ECE 2612	Digital Circuit Design	3
ECE 3516 or ECE 3916	Signals and Systems Honors Signals and Systems	5

Program Requirements

Code	Title	Credit Hours
Required Math & Basic Science Courses		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2041 or MATH 2941	Differential Equations I Honors Differential Equations I	3
ECE 3522	Stochastic Processes in Signals and Systems	3
ENGR 2011	Engineering Analysis & Applications	3
ENGR 2013	Engineering Analysis and Applications Lab	1
PHYS 1061 or PHYS 1961	Elementary Classical Physics I Honors Elementary Classical Physics I	4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II Honors Elementary Classical Physics II	4
CHEM 1035	Chemistry for Engineers	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I Honors Chemical Science Laboratory I	1
Required General Education Courses		
Select one of the following:		4
ENG 0802	Analytical Reading and Writing	
ENG 0812	Analytical Reading and Writing: ESL	
ENG 0902	Honors Writing About Literature	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life Honors Intellectual Heritage I: The Good Life	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good Honors Intellectual Heritage II: The Common Good	3
GenEd 08xx or 09xx (U.S. Society)		3
GenEd 08xx or 09xx (Global/World Society)		3
GenEd 08xx or 09xx (Human Behavior)		3
GenEd 08xx or 09xx (The Arts)		3
GenEd 08xx or 09xx (Race and Diversity)		3
Required Electrical & Computer Engineering Courses		
ECE 1111	Engineering Computation I	4
ECE 2342	Circuits and Electronics I	5
ECE 2352	Circuits and Electronics II	5
ECE 2612	Digital Circuit Design	3
ECE 2613	Digital Circuit Design Laboratory	1
ECE 3516 or ECE 3916	Signals and Systems Honors Signals and Systems	5
ECE 3612 or ECE 3914	Processor Systems Honors Microprocessor Systems	3
ECE 3613 or ECE 3915	Processor Systems Laboratory Honors Microprocessor Systems Lab	1
ECE 3622	Embedded System Design	3
ECE 3623	Embedded System Design Laboratory	1
ECE 3712	Introduction to Electromagnetic Fields and Waves	3
ECE 3822	Engineering Computation II	3
ECE 3824	Engineering Computation III	3
ECE 4532	Data and Computer Communication	3

ECE 4612	Advanced Processor Systems	3
Required Engineering Courses		
ENGR 1001	College of Engineering First Year Seminar	1
ENGR 1101	Introduction to Engineering & Engineering Technology	3
or ENGR 1901	Honors Introduction to Engineering	
ENGR 1102	Introduction to Engineering Problem Solving	3
ENGR 2196	Technical Communication (WI)	3
or ENGR 2996	Honors Technical Communication	
ECE 4176	Senior Design Project I: ECE	3
ENGR 4296	Capstone Senior Design Project (WI)	3
or ENGR 4996	Honors Capstone Senior Design Project	
Required Elective Courses		
ECE Technical Elective		3
Math, Science, or Engineering Electives		6
Free Elective		2
Total Credit Hours		128

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Electrical Engineering with Concentration in Computer Engineering Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MATH 1041	Calculus I	4
or MATH 1941	or Honors Calculus I	
PHYS 1061	Elementary Classical Physics I	4
or PHYS 1961	or Honors Elementary Classical Physics I	
ENGR 1101	Introduction to Engineering & Engineering Technology	3
or ENGR 1901	or Honors Introduction to Engineering	
ENGR 1001	College of Engineering First Year Seminar	1
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
Credit Hours		16
Spring		
MATH 1042	Calculus II	4
or MATH 1942	or Honors Calculus II	
PHYS 1062	Elementary Classical Physics II	4
or PHYS 1962	or Honors Elementary Classical Physics II	
CHEM 1035	Chemistry for Engineers	3
CHEM 1033	General Chemistry Laboratory I	1
or CHEM 1953	or Honors Chemical Science Laboratory I	
ENGR 1102	Introduction to Engineering Problem Solving	3
Credit Hours		15
Year 2		
Fall		
ENGR 2011	Engineering Analysis & Applications	3
ENGR 2013	Engineering Analysis and Applications Lab	1
ECE 1111	Engineering Computation I	4
ECE 2342	Circuits and Electronics I	5

IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		16
Spring		
MATH 2041 or MATH 2941	Differential Equations I or Honors Differential Equations I	3
ECE 2612	Digital Circuit Design	3
ECE 2613	Digital Circuit Design Laboratory	1
ECE 2352	Circuits and Electronics II	5
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		15
Year 3		
Fall		
ECE 3516 or ECE 3916	Signals and Systems or Honors Signals and Systems	5
ECE 3612 or ECE 3914	Processor Systems or Honors Microprocessor Systems	3
ECE 3613 or ECE 3915	Processor Systems Laboratory or Honors Microprocessor Systems Lab	1
ENGR 2196 or ENGR 2996	Technical Communication or Honors Technical Communication	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		18
Spring		
ECE 3522	Stochastic Processes in Signals and Systems	3
ECE 3622	Embedded System Design	3
ECE 3623	Embedded System Design Laboratory	1
ECE 3822	Engineering Computation II	3
ECE 4612	Advanced Processor Systems	3
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
ECE 3712	Introduction to Electromagnetic Fields and Waves	3
ECE 3824	Engineering Computation III	3
ECE 4176	Senior Design Project I: ECE	3
Math, Science, or Engineering Elective #1		3
GenEd Breadth Course		3
Free Elective		2
Credit Hours		17
Spring		
ECE 4532	Data and Computer Communication	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project or Honors Capstone Senior Design Project	3
ECE Technical Elective		3
Math, Science, or Engineering Elective #2		3
GenEd Breadth Course		3
Credit Hours		15
Total Credit Hours		128

ECE Technical Electives

Code	Title	Credit Hours
ECE 3412	Classical Control Systems	3
ECE 3413	Classical Control Laboratory	1
ECE 3432	Robotic Control using Robotic Operating System (ROS)	3
ECE 3614	Printed Circuit Board Design	3
ECE 3732	Electromechanical Energy Systems	3
ECE 3733	Electromechanical Energy Systems Laboratory	1
ECE 4110	Special Topics	1 to 4
ECE 4312	Microelectronics II	3
ECE 4322	VLSI Systems Design	3
ECE 4412	Modern Control Theory	3
ECE 4422	Digital Control Systems	3
ECE 4512	Digital Communication Systems	3
ECE 4513	Digital Communication Systems Laboratory	1
ECE 4522	Digital Signal Processing	3
ECE 4527	Introduction to Machine Learning and Pattern Recognition	3
ECE 4542	Telecommunications Engineering	3
ECE 4712	Power System Analysis	3
ECE 4722	Power Electronics	3
ECE 4822	Engineering Computation IV	3

Math, Science, and Engineering Electives

Code	Title	Credit Hours
	Any course 2000-level or above from the College of Science and Technology (CST), excluding MATH 2101, MATH 2103, CIS 3715, CIS 4526.	3
	Any course 2000-level or above from the College of Engineering.	3

Electrical Engineering BSEE with Cooperative Education Program Concentration

Overview

The **Bachelor of Science in Electrical Engineering** is offered by the Department of Electrical and Computer Engineering. The program prepares students for careers as practicing engineers in areas such as digital systems, embedded processor applications, digital communications, control systems, sensor networks, biomedical signal processing, microelectronics, computer security and power networks. These careers are in applications, development, research, and design of electric and electronic systems and devices. Electrical Engineers are involved in the design and development of telecommunications networks, cellular telephones, computer and other microprocessor-based devices, consumer electronics, control systems for space vehicles and robots, and in many aspects of the power and automotive industries.

Electrical Engineering students may complete one or more **optional concentrations** in

- Bioelectrical Engineering,
- Computer Engineering, and/or
- Cooperative Education Program.

Cooperative Education Program

A **Cooperative Education** (Co-Op) is an optional program available at the College of Engineering where you have the opportunity to gain professional work experience before graduation. It is designed to give you the chance to apply the knowledge learned in the classroom to real life problems. You will be exposed to the latest technology and new ideas at a worksite helping you understand your field of work more extensively. During the Co-Op, you will make valuable connections with professionals in your field. A cooperative education can enhance and strengthen you academically, professionally and personally.

Campus Location: Main

Program Code: EN-ECE-BSEE

Accreditation

The Electrical Engineering (BS) program is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and Program Criteria for Electrical, Computer, Communications, Telecommunication(s) and Similarly Named Engineering Programs. ABET is a non-profit and non-governmental accrediting agency for academic programs in the disciplines of applied science, computing, engineering, and engineering technology recognized by the Council for Higher Education Accreditation (CHEA).

+1 Bachelor to Master's Accelerated Degree Program

High-achieving undergraduates can earn both a bachelor's degree and a master's degree within five years. Students apply for this program in sophomore year, and four graduate-level courses are taken in place of undergraduate requirements during junior and senior years. After the bachelor's degree is earned, one graduate-level course is taken in the summer followed by full-time study in the subsequent Fall and Spring semesters to complete the master's degree study. The following accelerated program is available:

- Bachelor of Science in Electrical Engineering and Master of Science in Electrical Engineering

Contact Information

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brian.thomson@temple.edu

Learn more about the Bachelor of Science in Electrical Engineering.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

Code	Title	Credit Hours
ENGR 2196 or ENGR 2996	Technical Communication Honors Technical Communication	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project Honors Capstone Senior Design Project	3

College Requirements

The degree of Bachelor of Science in Electrical Engineering with the optional Cooperative Education Program may be conferred upon satisfactory completion of a minimum of 134 semester hours of credit with a minimum GPA of 2.0 overall and in the major. Students must also score a minimum grade of C- in each of the following courses before they can take other junior and senior level courses:

Code	Title	Credit Hours
ECE 2342	Circuits and Electronics I	5
ECE 2612	Digital Circuit Design	3
ECE 3516 or ECE 3916	Signals and Systems Honors Signals and Systems	5

Program Requirements

Code	Title	Credit Hours
Required Math & Basic Science Courses		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2041 or MATH 2941	Differential Equations I Honors Differential Equations I	3
ECE 3522	Stochastic Processes in Signals and Systems	3
ENGR 2011	Engineering Analysis & Applications	3
ENGR 2013	Engineering Analysis and Applications Lab	1
PHYS 1061 or PHYS 1961	Elementary Classical Physics I Honors Elementary Classical Physics I	4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II Honors Elementary Classical Physics II	4
CHEM 1035	Chemistry for Engineers	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I Honors Chemical Science Laboratory I	1
Required General Education Courses		
Select one of the following:		4
ENG 0802	Analytical Reading and Writing	
ENG 0812	Analytical Reading and Writing: ESL	
ENG 0902	Honors Writing About Literature	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life Honors Intellectual Heritage I: The Good Life	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good Honors Intellectual Heritage II: The Common Good	3
GenEd 08xx or 09xx (U.S. Society)		3
GenEd 08xx or 09xx (Global/World Society)		3
GenEd 08xx or 09xx (Human Behavior)		3
GenEd 08xx or 09xx (The Arts)		3
GenEd 08xx or 09xx (Race and Diversity)		3
Required Electrical Engineering Courses		
ECE 1111	Engineering Computation I	4
ECE 2342	Circuits and Electronics I	5
ECE 2352	Circuits and Electronics II	5
ECE 2612	Digital Circuit Design	3
ECE 2613	Digital Circuit Design Laboratory	1
ECE 3516 or ECE 3916	Signals and Systems Honors Signals and Systems	5
ECE 3612 or ECE 3914	Processor Systems Honors Microprocessor Systems	3
ECE 3613 or ECE 3915	Processor Systems Laboratory Honors Microprocessor Systems Lab	1
ECE 3712	Introduction to Electromagnetic Fields and Waves	3
ECE 3822	Engineering Computation II	3
Required Engineering Courses		
ENGR 1001	College of Engineering First Year Seminar	1
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology Honors Introduction to Engineering	3

ENGR 1102	Introduction to Engineering Problem Solving	3
ENGR 2196	Technical Communication (WI)	3
or ENGR 2996	Honors Technical Communication	
ECE 4176	Senior Design Project I: ECE	3
ENGR 4296	Capstone Senior Design Project (WI)	3
or ENGR 4996	Honors Capstone Senior Design Project	
Required Elective Courses		
ECE Technical Electives - may use a combination of 3 credit and/or 4 credit courses		16
Math, Science, or Engineering Electives		6
Free Elective		2
Required Cooperative Education Courses		
ENGR 2181	Co-Op Work Experience I	3
ENGR 3181	Co-Op Work Experience II	3
Total Credit Hours		134

Suggested Academic Plan

Below is a suggested five-year plan for the Co-Op program leading to the Bachelor of Science in Electrical Engineering. The minimum requirement for graduation is 134 semester hours.

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Electrical Engineering with Concentration in Cooperative Experience Program

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MATH 1041	Calculus I	4
or MATH 1941	or Honors Calculus I	
PHYS 1061	Elementary Classical Physics I	4
or PHYS 1961	or Honors Elementary Classical Physics I	
ENGR 1101	Introduction to Engineering & Engineering Technology (prerequisite: Engineering admission)	3
or ENGR 1901	or Honors Introduction to Engineering	
ENGR 1001	College of Engineering First Year Seminar	1
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
Credit Hours		16
Spring		
MATH 1042	Calculus II	4
or MATH 1942	or Honors Calculus II	
PHYS 1062	Elementary Classical Physics II	4
or PHYS 1962	or Honors Elementary Classical Physics II	
CHEM 1035	Chemistry for Engineers	3
CHEM 1033	General Chemistry Laboratory I	1
or CHEM 1953	or Honors Chemical Science Laboratory I	
ENGR 1102	Introduction to Engineering Problem Solving	3
Credit Hours		15
Year 2		
Fall		
ENGR 2011	Engineering Analysis & Applications	3
ENGR 2013	Engineering Analysis and Applications Lab	1
ECE 1111	Engineering Computation I	4
ECE 2342	Circuits and Electronics I	5

IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		16
Spring		
MATH 2041 or MATH 2941	Differential Equations I or Honors Differential Equations I	3
ECE 2352	Circuits and Electronics II	5
ECE 2612	Digital Circuit Design	3
ECE 2613	Digital Circuit Design Laboratory	1
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		15
Year 3		
Fall		
ECE 3516 or ECE 3916	Signals and Systems or Honors Signals and Systems	5
ECE 3612 or ECE 3914	Processor Systems or Honors Microprocessor Systems	3
ECE 3613 or ECE 3915	Processor Systems Laboratory or Honors Microprocessor Systems Lab	1
ENGR 2196 or ENGR 2996	Technical Communication or Honors Technical Communication	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		18
Spring		
ECE 3522	Stochastic Processes in Signals and Systems	3
ECE 3822	Engineering Computation II	3
ECE Technical Elective #1		3
ECE Technical Elective #2		4
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
ENGR 2181	Co-Op Work Experience I	3
Credit Hours		3
Spring		
ENGR 3181	Co-Op Work Experience II	3
Credit Hours		3
Year 5		
Fall		
ECE 3712	Introduction to Electromagnetic Fields and Waves	3
ECE 4176	Senior Design Project I: ECE	3
ECE Technical Elective #3		3
Math, Science, or Engineering Elective #1		3
GenEd Breadth Course		3
Free Elective		2
Credit Hours		17
Spring		
ENGR 4296 or ENGR 4996	Capstone Senior Design Project or Honors Capstone Senior Design Project	3
ECE Technical Elective #4		3
ECE Technical Elective #5		3

Math, Science, or Engineering Elective #2	3
GenEd Breadth Course	3
Credit Hours	15
Total Credit Hours	134

ECE Technical Electives

Code	Title	Credit Hours
ECE 3412	Classical Control Systems	3
ECE 3413	Classical Control Laboratory	1
ECE 3432	Robotic Control using Robotic Operating System (ROS)	3
ECE 3614	Printed Circuit Board Design	3
ECE 3622	Embedded System Design	3
ECE 3623	Embedded System Design Laboratory	1
ECE 3732	Electromechanical Energy Systems	3
ECE 3733	Electromechanical Energy Systems Laboratory	1
ECE 3824	Engineering Computation III	3
ECE 4110	Special Topics	1 to 4
ECE 4312	Microelectronics II	3
ECE 4322	VLSI Systems Design	3
ECE 4412	Modern Control Theory	3
ECE 4422	Digital Control Systems	3
ECE 4512	Digital Communication Systems	3
ECE 4513	Digital Communication Systems Laboratory	1
ECE 4522	Digital Signal Processing	3
ECE 4527	Introduction to Machine Learning and Pattern Recognition	3
ECE 4532	Data and Computer Communication	3
ECE 4542	Telecommunications Engineering	3
ECE 4612	Advanced Processor Systems	3
ECE 4712	Power System Analysis	3
ECE 4722	Power Electronics	3
ECE 4822	Engineering Computation IV	3

Math, Science, or Engineering Electives

Code	Title	Credit Hours
	Any course 2000-level or above from the College of Science and Technology (CST), excluding MATH 2101, MATH 2103, CIS 3715, CIS 4526.	3
	Any course 2000-level or above from the College of Engineering.	3

Engineering (Undeclared)

Overview

The College of Engineering admits students in the **undeclared** engineering program when they are interested in engineering but undecided on a particular field of study. Courses in this program have been determined for the first year only, since it is assumed that students will choose a curriculum following their first year of study.

Program Code: EN-UNEN-BS

Contact Information

Center for Academic Advising and Student Affairs
 Engineering Building, Room 349
 engradv@temple.edu

Shawn Fagan, EdD, Assistant Dean

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215-204-7800

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

Suggested First-Year Courses for the Undeclared Engineering Program

Code	Title	Credit Hours
Foundation for Undeclared Engineering Majors		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
PHYS 1061 or PHYS 1961	Elementary Classical Physics I Honors Elementary Classical Physics I	4
CHEM 1035 or CHEM 1031	Chemistry for Engineers General Chemistry I	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I Honors Chemical Science Laboratory I	1
Select one of the following:		4
ENG 0802	Analytical Reading and Writing	
ENG 0812	Analytical Reading and Writing: ESL	
ENG 0902	Honors Writing About Literature	
GenEd Requirements		6

Required First Year Engineering Courses

Code	Title	Credit Hours
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology Honors Introduction to Engineering	3
Select one of the following:		2-4
ENGR 1117	Engineering Graphics (Mechanical)	
CEE 1105	Surveying (Civil)	
CIS 1057	Computer Programming in C (Electrical)	

Engineering BSE

Note: This program is not accepting applications for the 2023-2024 academic year.

The following information is for students who matriculated into this program in the 2022-2023 academic year.

Overview

The cross-disciplinary 128-credit **Bachelor of Science in Engineering**, offered by the Department of Engineering, Technology and Management, combines learning from several areas to create unique skill sets that are highly marketable. The curriculum not only takes courses from several departments and offers concentrations or study plans in engineering but also provides a basis for further study in business, law, medicine or further study in an engineering graduate program. The optional interdisciplinary concentrations and study plans include:

- Computer Hardware and Software Engineering (study plan)
- Electromechanical Engineering (concentration)
- Energy and Power Engineering (concentration)
- Engineering Fundamentals (study plan)

To give students the opportunity to understand these specialties, the College provides a strong foundation in the basic sciences and mathematics in a common first year. The Department of Engineering, Technology, and Management then aims to bring together the in-demand cross-functional skill sets desired in many industries, including the analysis, design and development of systems for diverse applications. The curriculum emphasizes a rigorous treatment of the mathematical and scientific approach to the solution of engineering problems. The program has design across the curriculum and is capped with an integrated design experience in the form of a senior project.

The Bachelor of Science in Engineering program shall produce graduates who:

1. will be employed in industries, academia and state or federal government agencies;
2. will advance their professional standing through graduate and/or professional degrees or lifelong learning; and
3. will contribute to their profession and to society.

Campus Location: Main

Program Code: EN-ENGR-BSEN

Learn more about the Bachelor of Science in Engineering.

Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

Code	Title	Credit Hours
ENGR 2196 or ENGR 2996	Technical Communication Honors Technical Communication	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project Honors Capstone Senior Design Project	3

Department and Major Requirements

Code	Title	Credit Hours
Required Math & Basic Science Courses		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2041 or MATH 2941	Differential Equations I Honors Differential Equations I	3
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
Select one of the following:		3
ENGR 2011	Engineering Analysis & Applications	
MEE 3011	Analysis and Computation of Linear Systems in Mechanical Engineering	
Select one of the following:		3
CEE 3048	Probability, Statistics & Stochastic Methods	
ISE 2101	Applied Statistical Methods for Industrial and System Engineers	
PHYS 1061 or PHYS 1961	Elementary Classical Physics I Honors Elementary Classical Physics I	4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II Honors Elementary Classical Physics II	4

CHEM 1035	Chemistry for Engineers	3
CHEM 1033	General Chemistry Laboratory I	1
or CHEM 1953	Honors Chemical Science Laboratory I	

Required General Education Courses

Select one of the following: 4

ENG 0802	Analytical Reading and Writing	
ENG 0812	Analytical Reading and Writing: ESL	
ENG 0902	Honors Writing About Literature	
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	Honors Intellectual Heritage I: The Good Life	
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	Honors Intellectual Heritage II: The Common Good	
GenEd 08xx or 09xx (U.S. Society)		3
GenEd 08xx or 09xx (Global/World Society)		3
GenEd 08xx or 09xx (Human Behavior)		3
GenEd 08xx or 09xx (The Arts)		3
GenEd 08xx or 09xx (Race and Diversity)		3

Required Engineering Courses

ENGR 1101	Introduction to Engineering & Engineering Technology	3
or ENGR 1901	Honors Introduction to Engineering	
ENGR 1102	Introduction to Engineering Problem Solving	3
ENGR 1117	Engineering Graphics	2
or MEE 1117	Fundamentals of Mechanical Engineering Design	
ENGR 2196	Technical Communication (WI)	3
or ENGR 2996	Honors Technical Communication	
ENGR 2331	Engineering Statics	3
or ENGR 2931	Honors Engineering Statics	
ENGR 2332	Engineering Dynamics	3
ENGR 2333	Mechanics of Solids	3
or ENGR 2933	Honors Mechanics of Solids	
ENGR 3001	Engineering Economics	3
ENGR 3201	Material Science for Engineers	3
ENGR 3553	Mechanics of Fluids	3
or ENGR 3953	Honors Mechanics of Fluids	
ENGR 3571	Classical and Statistical Thermodynamics	3
ENGR 4169	Engineering Seminar	1
ENGR 4172	Senior Design Project I for Engineering	2
ENGR 4296	Capstone Senior Design Project (WI) ¹	3
or ENGR 4996	Honors Capstone Senior Design Project	
ECE 2332	Principles of Electric Circuits	4
ECE 2333	Principles of Electric Circuits Lab	1
MEE 2305	Instrumentation and Data Acquisition Lab	1
MEE 3305	Materials Laboratory	1
MEE 3506	Fluid Mechanics Laboratory	1
CIS 1057	Computer Programming in C	4
or ECE 1111	Engineering Computation I	
Technical Elective #1		3
Technical Elective #2		3
Technical Elective #3		3
Technical Elective #4		3

Required Business Elective Courses

Select two of the following: 6

ACCT 2101 or ACCT 2901	Financial Accounting Honors Financial Accounting
ACCT 2102 or ACCT 2902	Managerial Accounting Honors Managerial Accounting
ECON 1101 or ECON 1901	Macroeconomic Principles Honors Macroeconomic Principles
ECON 1102 or ECON 1902	Microeconomic Principles Honors Microeconomic Principles
HRM 1101 or HRM 1901	Leadership and Organizational Management Honors Leadership and Organizational Management
HRM 2501	Introduction to Human Resource Management
MKTG 2101 or MKTG 2901	Marketing Management Honors Marketing Management
MSOM 3101	Operations Management
RMI 2101 or RMI 2901	Introduction to Risk Management Honors Introduction to Risk Management

Required Additional Electives

Free Elective	2
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Total Credit Hours**128**

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your study plan, your academic plan may look different.

Bachelor of Science in Engineering

Year 1		Credit Hours
Fall		
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology or Honors Introduction to Engineering	3
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
CHEM 1035	Chemistry for Engineers	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I or Honors Chemical Science Laboratory I	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		15
Spring		
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	4
ENGR 1102	Introduction to Engineering Problem Solving	3
Select one of the following:		2
ENGR 1117	Engineering Graphics	
MEE 1117	Fundamentals of Mechanical Engineering Design	
Select one of the following:		4
CIS 1057	Computer Programming in C	
ECE 1111	Engineering Computation I	
Credit Hours		17

Year 2		
Fall		
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	4
ENGR 2331 or ENGR 2931	Engineering Statics or Honors Engineering Statics	3
ECE 2332	Principles of Electric Circuits	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		18
Spring		
MATH 2041 or MATH 2941	Differential Equations I or Honors Differential Equations I	3
ECE 2333	Principles of Electric Circuits Lab	1
ENGR 2332	Engineering Dynamics	3
ENGR 2333 or ENGR 2933	Mechanics of Solids or Honors Mechanics of Solids	3
GenEd Breadth Course		3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		16
Year 3		
Fall		
ENGR 3201	Material Science for Engineers	3
ENGR 3571	Classical and Statistical Thermodynamics	3
ENGR 2196 or ENGR 2996	Technical Communication or Honors Technical Communication	3
MEE 2305	Instrumentation and Data Acquisition Lab	1
Business Elective #1		3
Select one of the following:		3
ENGR 2011	Engineering Analysis & Applications	
MEE 3011	Analysis and Computation of Linear Systems in Mechanical Engineering	
Credit Hours		16
Spring		
ENGR 3553 or ENGR 3953	Mechanics of Fluids or Honors Mechanics of Fluids	3
MEE 3506	Fluid Mechanics Laboratory	1
Technical Elective #1		3
MEE 3305	Materials Laboratory	1
GenEd Breadth Course		3
ENGR 4169	Engineering Seminar	1
Select one of the following:		3
CEE 3048	Probability, Statistics & Stochastic Methods	
ISE 2101	Applied Statistical Methods for Industrial and System Engineers	
Credit Hours		15
Year 4		
Fall		
ENGR 4172	Senior Design Project I for Engineering	2
ENGR 3001	Engineering Economics	3
Technical Elective #2		3
Technical Elective #3		3

GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		17
Spring		
ENGR 4296 or ENGR 4996	Capstone Senior Design Project or Honors Capstone Senior Design Project	3
Business Elective #2		3
Technical Elective #4		3
GenEd Breadth Course		3
Free Elective		2
Credit Hours		14
Total Credit Hours		128

Approved Technical Electives

Code	Title	Credit Hours
ECE 2612	Digital Circuit Design	3
ECE 2613	Digital Circuit Design Laboratory	1
ENGR 2181	Co-Op Work Experience I	3
Any Civil Engineering Course 3000 or above ¹		
Any Electrical Engineering Course 3000 or above ¹		
Any Engineering Course 3000 or above ¹		
Any Mechanical Engineering Course 3000 or above ¹		
Any Computer & Information Sciences Course 1068 or above ¹		

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Students should consult with the Director of the BSE Program when selecting courses from these subject areas.

Engineering BSE with Electromechanical Engineering Concentration

Note: This program is not accepting applications for the 2023-2024 academic year.

The following information is for students who matriculated into this program in the 2022-2023 academic year.

Overview

The cross-disciplinary 128-credit **Bachelor of Science in Engineering**, offered by the Department of Engineering, Technology and Management, combines learning from several areas to create unique skill sets that are highly marketable. The curriculum not only takes courses from several departments and offers concentrations or study plans in engineering but also provides a basis for further study in business, law, medicine or further study in an engineering graduate program. The optional interdisciplinary concentrations and study plans include:

- Computer Hardware and Software Engineering (study plan)
- Electromechanical Engineering (concentration)
- Energy and Power Engineering (concentration)
- Engineering Fundamentals (study plan)

To give students the opportunity to understand these specialties, the College provides a strong foundation in the basic sciences and mathematics in a common first year. The Department of Engineering, Technology, and Management then aims to bring together the in-demand cross-functional skill sets desired in many industries, including the analysis, design and development of systems for diverse applications. The curriculum emphasizes a rigorous treatment of the mathematical and scientific approach to the solution of engineering problems. The program has design across the curriculum and is capped with an integrated design experience in the form of a senior project.

The Bachelor of Science in Engineering program shall produce graduates who:

1. will be employed in industries, academia and state or federal government agencies;
2. will advance their professional standing through graduate and/or professional degrees or lifelong learning; and
3. will contribute to their profession and to society.

Electromechanical Engineering Concentration

The Bachelor of Science in Engineering with the **optional concentration in Electromechanical Engineering (BSE-EME)** integrates the tenets of Electrical Engineering and Mechanical Engineering to provide an interdisciplinary professional career in this burgeoning area. The program offers a relevant, stimulating and effective course of undergraduate study to produce electromechanical engineers to meet the needs of the new century in robotics, process control and automation. The program emphasizes all aspects of electromagnetics, transducers, sensors, electronics, digital processing and mechanical principles to integrate these components into electromechanical devices and systems for automated manufacturing processes. Professional employment includes the analysis, design and installation of robotics and automation for diverse industries. The intent of the BSE-EME program is to provide better and more efficient electromechanical systems which will have a profound impact on the global society.

Campus Location: Main

Program Code: EN-ENGR-BSEN

Learn more about the Bachelor of Science in Engineering.

Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

Code	Title	Credit Hours
ENGR 2196 or ENGR 2996	Technical Communication Honors Technical Communication	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project Honors Capstone Senior Design Project	3

Department and Major Requirements

Code	Title	Credit Hours
Required Math & Basic Science Courses		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2041 or MATH 2941	Differential Equations I Honors Differential Equations I	3
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
Select one of the following:		3
ENGR 2011	Engineering Analysis & Applications	
MEE 3011	Analysis and Computation of Linear Systems in Mechanical Engineering	
Select one of the following:		3
CEE 3048	Probability, Statistics & Stochastic Methods	
ISE 2101	Applied Statistical Methods for Industrial and System Engineers	
PHYS 1061 or PHYS 1961	Elementary Classical Physics I Honors Elementary Classical Physics I	4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II Honors Elementary Classical Physics II	4
CHEM 1035	Chemistry for Engineers	3
CHEM 1033	General Chemistry Laboratory I	1

or CHEM 1953 Honors Chemical Science Laboratory I

Required General Education Courses

Select one of the following: 4

ENG 0802	Analytical Reading and Writing	
ENG 0812	Analytical Reading and Writing: ESL	
ENG 0902	Honors Writing About Literature	
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	Honors Intellectual Heritage I: The Good Life	
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	Honors Intellectual Heritage II: The Common Good	
GenEd 08xx or 09xx (U.S. Society)		3
GenEd 08xx or 09xx (Global/World Society)		3
GenEd 08xx or 09xx (Human Behavior)		3
GenEd 08xx or 09xx (The Arts)		3
GenEd 08xx or 09xx (Race and Diversity)		3

Required Engineering Courses

ENGR 1101	Introduction to Engineering & Engineering Technology	3
or ENGR 1901	Honors Introduction to Engineering	
ENGR 1102	Introduction to Engineering Problem Solving	3
ENGR 1117	Engineering Graphics	2
or MEE 1117	Fundamentals of Mechanical Engineering Design	
ENGR 2196	Technical Communication	3
or ENGR 2996	Honors Technical Communication	
ENGR 2331	Engineering Statics	3
or ENGR 2931	Honors Engineering Statics	
ENGR 2332	Engineering Dynamics	3
ENGR 2333	Mechanics of Solids	3
or ENGR 2933	Honors Mechanics of Solids	
ENGR 3001	Engineering Economics	3
ENGR 4169	Engineering Seminar	1
ENGR 4172	Senior Design Project I for Engineering	2
ENGR 4296	Capstone Senior Design Project	3
or ENGR 4996	Honors Capstone Senior Design Project	
ECE 2332	Principles of Electric Circuits	4
ECE 2333	Principles of Electric Circuits Lab	1
ECE 2612	Digital Circuit Design	3
ECE 2613	Digital Circuit Design Laboratory	1
ECE 3612	Processor Systems	3
or ECE 3914	Honors Microprocessor Systems	
ECE 3613	Processor Systems Laboratory	1
or ECE 3915	Honors Microprocessor Systems Lab	
ECE 3732	Electromechanical Energy Systems	3
ECE 3733	Electromechanical Energy Systems Laboratory	1
MEE 3301	Machine Theory and Design	3
ECE 1111	Engineering Computation I	4
or CIS 1057	Computer Programming in C	

Technical Elective #1 3

Technical Elective #2 3

Technical Elective #3 3

Required Business Elective Courses

Select two of the following 6

ACCT 2101 Financial Accounting

or ACCT 2901	Honors Financial Accounting
ACCT 2102	Managerial Accounting
or ACCT 2902	Honors Managerial Accounting
ECON 1101	Macroeconomic Principles
or ECON 1901	Honors Macroeconomic Principles
ECON 1102	Microeconomic Principles
or ECON 1902	Honors Microeconomic Principles
HRM 1101	Leadership and Organizational Management
or HRM 1901	Honors Leadership and Organizational Management
HRM 2501	Introduction to Human Resource Management
MKTG 2101	Marketing Management
or MKTG 2901	Honors Marketing Management
MSOM 3101	Operations Management
RMI 2101	Introduction to Risk Management
or RMI 2901	Honors Introduction to Risk Management

Required Additional Electives

Free Elective	2
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Total Credit Hours	128
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Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your study plan, your academic plan may look different.

Bachelor of Science in Engineering with Concentration in Electromechanical Engineering

Year 1		Credit Hours
Fall		
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology or Honors Introduction to Engineering	3
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
CHEM 1035	Chemistry for Engineers	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I or Honors Chemical Science Laboratory I	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		15
Spring		
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	4
ENGR 1102	Introduction to Engineering Problem Solving	3
Select one of the following:		2
ENGR 1117	Engineering Graphics	
MEE 1117	Fundamentals of Mechanical Engineering Design	
Select one of the following:		4
CIS 1057	Computer Programming in C	
ECE 1111	Engineering Computation I	
Credit Hours		17

Year 2		Credit Hours
Fall		
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4

PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	4
ECE 2332	Principles of Electric Circuits	4
ENGR 2331 or ENGR 2931	Engineering Statics or Honors Engineering Statics	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		18
Spring		
MATH 2041 or MATH 2941	Differential Equations I or Honors Differential Equations I	3
ENGR 2332	Engineering Dynamics	3
ENGR 2333 or ENGR 2933	Mechanics of Solids or Honors Mechanics of Solids	3
Business Elective #1		3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
ECE 2333	Principles of Electric Circuits Lab	1
Credit Hours		16
Year 3		
Fall		
ECE 2612	Digital Circuit Design	3
ECE 2613	Digital Circuit Design Laboratory	1
ECE 3732	Electromechanical Energy Systems	3
ECE 3733	Electromechanical Energy Systems Laboratory	1
ENGR 2196 or ENGR 2996	Technical Communication or Honors Technical Communication	3
GenEd Breadth Course		3
Select one of the following:		3
ENGR 2011	Engineering Analysis & Applications	
MEE 3011	Analysis and Computation of Linear Systems in Mechanical Engineering	
Credit Hours		17
Spring		
Technical Elective #1		3
ECE 3612 or ECE 3914	Processor Systems or Honors Microprocessor Systems	3
ECE 3613 or ECE 3915	Processor Systems Laboratory or Honors Microprocessor Systems Lab	1
ENGR 4169	Engineering Seminar	1
GenEd Breadth Course		3
GenEd Breadth Course		3
Select one of the following:		3
CEE 3048	Probability, Statistics & Stochastic Methods	
ISE 2101	Applied Statistical Methods for Industrial and System Engineers	
Credit Hours		17
Year 4		
Fall		
ENGR 4172	Senior Design Project I for Engineering	2
MEE 3301	Machine Theory and Design	3
Technical Elective #2		3
ENGR 3001	Engineering Economics	3
GenEd Breadth Course		3
Credit Hours		14

Spring

ENGR 4296 or ENGR 4996	Capstone Senior Design Project or Honors Capstone Senior Design Project	3
Technical Elective #3		3
Business Elective #2		3
GenEd Breadth Course		3
Free Elective		2
Credit Hours		14
Total Credit Hours		128

Approved Technical Electives

Code	Title	Credit Hours
ECE 3432	Robotic Control using Robotic Operating System (ROS)	3
ECE 3512	Signals: Continuous and Discrete	4
ECE 3622	Embedded System Design	3
ECE 3623	Embedded System Design Laboratory	1
ECE 3712	Introduction to Electromagnetic Fields and Waves	3
ENGR 2181	Co-Op Work Experience I	3
ENGR 3117	Computer-Aided Design (CAD)	3
ENGR 3571	Classical and Statistical Thermodynamics	3
MEE 3302	Kinematics of Mechanisms	3
MEE 3422	Modeling and Control of Electromechanical Systems	3
MEE 4411	Introduction to Mobile Robotics	3
MEE 4412	Modern Dynamics for Robotics	3
MEE 4413	Robotic Manipulation	3

Engineering BSE with Energy and Power Engineering Concentration

Note: This program is not accepting applications for the 2023-2024 academic year.

The following information is for students who matriculated into this program in the 2022-2023 academic year.

Overview

The cross-disciplinary 128-credit **Bachelor of Science in Engineering**, offered by the Department of Engineering, Technology and Management, combines learning from several areas to create unique skill sets that are highly marketable. The curriculum not only takes courses from several departments and offers concentrations or study plans in engineering but also provides a basis for further study in business, law, medicine or further study in an engineering graduate program. The optional interdisciplinary concentrations and study plans include:

- Computer Hardware and Software Engineering (study plan)
- Electromechanical Engineering (concentration)
- Energy and Power Engineering (concentration)
- Engineering Fundamentals (study plan)

To give students the opportunity to understand these specialties, the College provides a strong foundation in the basic sciences and mathematics in a common first year. The Department of Engineering, Technology, and Management then aims to bring together the in-demand cross-functional skill sets desired in many industries, including the analysis, design and development of systems for diverse applications. The curriculum emphasizes a rigorous treatment of the mathematical and scientific approach to the solution of engineering problems. The program has design across the curriculum and is capped with an integrated design experience in the form of a senior project.

The Bachelor of Science in Engineering program shall produce graduates who:

1. will be employed in industries, academia and state or federal government agencies;
2. will advance their professional standing through graduate and/or professional degrees or lifelong learning; and
3. will contribute to their profession and to society.

Energy and Power Engineering Concentration

The Bachelor of Science in Engineering with the **optional concentration in Energy and Power Engineering** integrates the tenets of Electrical Engineering and Mechanical Engineering to provide a cross-disciplinary professional career in this burgeoning area. The program offers a relevant, stimulating, and effective course of undergraduate study to produce practicing power and energy engineers to meet the needs of the new century. The program emphasizes all aspects of electrical power and mechanical energy innovation in energy generation and delivery, alternative resources, and efficient devices. The program uses existing courses and laboratories in Electrical Engineering and Mechanical Engineering to provides cross-disciplinary requisite courses for graduate education. Professional employment includes the control of large utility systems to energy harvesting devices for microsensors. Electrical energy continues to be the foundation of the modern economy. The growth of solar energy, wind energy, and other resources, combined with trends such as electric and hybrid vehicles, will have a profound impact on the global society.

Campus Location: Main

Program Code: EN-ENGR-BSEN

Learn more about the Bachelor of Science in Engineering.

Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

Code	Title	Credit Hours
ENGR 2196 or ENGR 2996	Technical Communication Honors Technical Communication	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project Honors Capstone Senior Design Project	3

Department and Major Requirements

Code	Title	Credit Hours
Required Math & Basic Science Courses		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2041 or MATH 2941	Differential Equations I Honors Differential Equations I	3
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
Select one of the following:		3
ENGR 2011	Engineering Analysis & Applications	
MEE 3011	Analysis and Computation of Linear Systems in Mechanical Engineering	
Select one of the following:		3
CEE 3048	Probability, Statistics & Stochastic Methods	
ISE 2101	Applied Statistical Methods for Industrial and System Engineers	
PHYS 1061 or PHYS 1961	Elementary Classical Physics I Honors Elementary Classical Physics I	4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II Honors Elementary Classical Physics II	4
CHEM 1035	Chemistry for Engineers	3

CHEM 1033	General Chemistry Laboratory I	1
or CHEM 1953	Honors Chemical Science Laboratory I	

Required General Education Courses

Select one of the following: 4

ENG 0802	Analytical Reading and Writing	
ENG 0812	Analytical Reading and Writing: ESL	
ENG 0902	Honors Writing About Literature	
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	Honors Intellectual Heritage I: The Good Life	
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	Honors Intellectual Heritage II: The Common Good	
GenEd 08xx or 09xx (U.S. Society)		3
GenEd 08xx or 09xx (Global/World Society)		3
GenEd 08xx or 09xx (Human Behavior)		3
GenEd 08xx or 09xx (The Arts)		3
GenEd 08xx or 09xx (Race and Diversity)		3

Required Engineering Courses

ENGR 1101	Introduction to Engineering & Engineering Technology	3
or ENGR 1901	Honors Introduction to Engineering	
ENGR 1102	Introduction to Engineering Problem Solving	3
ENGR 1117	Engineering Graphics	2
or MEE 1117	Fundamentals of Mechanical Engineering Design	
ENGR 2196	Technical Communication	3
or ENGR 2996	Honors Technical Communication	
ENGR 2331	Engineering Statics	3
or ENGR 2931	Honors Engineering Statics	
ENGR 2332	Engineering Dynamics	3
ENGR 3001	Engineering Economics	3
ENGR 3553	Mechanics of Fluids	3
or ENGR 3953	Honors Mechanics of Fluids	
ENGR 3571	Classical and Statistical Thermodynamics	3
ENGR 4169	Engineering Seminar	1
ENGR 4172	Senior Design Project I for Engineering	2
ENGR 4296	Capstone Senior Design Project	3
or ENGR 4996	Honors Capstone Senior Design Project	
ECE 2332	Principles of Electric Circuits	4
ECE 2333	Principles of Electric Circuits Lab	1
ECE 3712	Introduction to Electromagnetic Fields and Waves	3
ECE 3732	Electromechanical Energy Systems	3
ECE 3733	Electromechanical Energy Systems Laboratory	1
ECE 4712	Power System Analysis	3
MEE 4572	Heat and Mass Transfer	3
ECE 1111	Engineering Computation I	4
or CIS 1057	Computer Programming in C	
Technical Elective #1		3
Technical Elective #2		3
Technical Elective #3		4

Required Business Elective Courses

Select two from the following: 6

ACCT 2101	Financial Accounting	
or ACCT 2901	Honors Financial Accounting	
ACCT 2102	Managerial Accounting	

or ACCT 2902	Honors Managerial Accounting
ECON 1101	Macroeconomic Principles
or ECON 1901	Honors Macroeconomic Principles
ECON 1102	Microeconomic Principles
or ECON 1902	Honors Microeconomic Principles
HRM 1101	Leadership and Organizational Management
or HRM 1901	Honors Leadership and Organizational Management
HRM 2501	Introduction to Human Resource Management
MKTG 2101	Marketing Management
or MKTG 2901	Honors Marketing Management
MSOM 3101	Operations Management
RMI 2101	Introduction to Risk Management
or RMI 2901	Honors Introduction to Risk Management

Total Credit Hours**128**

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your study plan, your academic plan may look different.

Bachelor of Science in Engineering with Concentration in Energy and Power Engineering

Year 1		Credit Hours
Fall		
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology or Honors Introduction to Engineering	3
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
CHEM 1035	Chemistry for Engineers	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I or Honors Chemical Science Laboratory I	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		15
Spring		
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	4
ENGR 1102	Introduction to Engineering Problem Solving	3
Select one of the following:		2
ENGR 1117	Engineering Graphics	
MEE 1117	Fundamentals of Mechanical Engineering Design	
Select one of the following:		4
ECE 1111	Engineering Computation I	
CIS 1057	Computer Programming in C	
Credit Hours		17
Year 2		
Fall		
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	4
ENGR 2331 or ENGR 2931	Engineering Statics or Honors Engineering Statics	3

ECE 2332	Principles of Electric Circuits	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		18
Spring		
MATH 2041 or MATH 2941	Differential Equations I or Honors Differential Equations I	3
ENGR 2332	Engineering Dynamics	3
ENGR 3571	Classical and Statistical Thermodynamics	3
Business Elective #1		3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
ECE 2333	Principles of Electric Circuits Lab	1
Credit Hours		16
Year 3		
Fall		
ECE 3732	Electromechanical Energy Systems	3
ECE 3733	Electromechanical Energy Systems Laboratory	1
ENGR 3553 or ENGR 3953	Mechanics of Fluids or Honors Mechanics of Fluids	3
ENGR 2196 or ENGR 2996	Technical Communication or Honors Technical Communication	3
GenEd Breadth Course		3
Select one of the following:		3
ENGR 2011	Engineering Analysis & Applications	
MEE 3011	Analysis and Computation of Linear Systems in Mechanical Engineering	
Credit Hours		16
Spring		
ECE 3712	Introduction to Electromagnetic Fields and Waves	3
MEE 4572	Heat and Mass Transfer	3
ENGR 4169	Engineering Seminar	1
GenEd Breadth Course		3
GenEd Breadth Course		3
Select one of the following:		3
CEE 3048	Probability, Statistics & Stochastic Methods	
ISE 2101	Applied Statistical Methods for Industrial and System Engineers	
Credit Hours		16
Year 4		
Fall		
ENGR 4172	Senior Design Project I for Engineering	2
ECE 4712	Power System Analysis	3
Technical Elective #1		3
ENGR 3001	Engineering Economics	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		17
Spring		
ENGR 4296 or ENGR 4996	Capstone Senior Design Project or Honors Capstone Senior Design Project	3
Business Elective #2		3
Technical Elective #2		3

Technical Elective #3	4
Credit Hours	13
Total Credit Hours	128

Approved Technical Electives

Code	Title	Credit Hours
CEE 3711	Environmental Engineering	3
ECE 2612	Digital Circuit Design	3
ECE 2613	Digital Circuit Design Laboratory	1
ECE 3612	Processor Systems	3
ECE 3613	Processor Systems Laboratory	1
ECE 3622	Embedded System Design	3
ECE 3623	Embedded System Design Laboratory	1
ECE 4532	Data and Computer Communication	3
ECE 4722	Power Electronics	3
ENGR 2181	Co-Op Work Experience I	3
MEE 4571	Advanced Thermodynamics and Combustion	3
MEE 4574	Heating, Ventilating, and Air Conditioning	3
MEE 4575	Renewable and Alternative Energy	3
MEE 4578	Fundamentals of Combustion	3

Engineering Technology BSET

Overview

The **Bachelor of Science in Engineering Technology** is offered by the Department of Engineering, Technology and Management. This program provides a broad base of technological skills extending across the traditional fields of engineering technology with a concentration designed by the student and program coordinator to meet personal and career objectives. A plan of study can be developed with a focus in areas such as construction engineering technology, computer engineering technology, mechanical engineering technology or general engineering technology.

Engineering Technology students may complete an **optional concentration** in Cooperative Education Program (Co-Op).

Campus Location: Main

Program Code: EN-ENGT-BSET

Accreditation

The Engineering Technology (BS) program is accredited by the Engineering Technology Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria. ABET is a non-profit and non-governmental accrediting agency for academic programs in the disciplines of applied science, computing, engineering, and engineering technology recognized by the Council for Higher Education Accreditation (CHEA).

Contact Information

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Learn more about the Bachelor of Science in Engineering Technology.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

Code	Title	Credit Hours
ENG 2696	Technical Writing	3
ENGT 4196	Capstone Project	3

College and Major Requirements

Code	Title	Credit Hours
Required Math & Basic Science Courses		
MATH 1022	Precalculus	4
MATH 1031	Differential and Integral Calculus	4
STAT 2103	Statistical Business Analytics	4
or STAT 2903	Honors Statistical Business Analytics	
PHYS 1021	Introduction to General Physics I	4
PHYS 1022	Introduction to General Physics II	4
CHEM 1031	General Chemistry I	3
or CHEM 1951	Honors General Chemical Science I	
CHEM 1033	General Chemistry Laboratory I	1
or CHEM 1953	Honors Chemical Science Laboratory I	
Required General Education Courses		
Select one of the following:		4
ENG 0802	Analytical Reading and Writing	
ENG 0812	Analytical Reading and Writing: ESL	
ENG 0902	Honors Writing About Literature	
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	Honors Intellectual Heritage I: The Good Life	
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	Honors Intellectual Heritage II: The Common Good	
GenEd 08xx or 09xx (U.S. Society)		3
GenEd 08xx or 09xx (Global/World Society)		3
GenEd 08xx or 09xx (Human Behavior)		3
GenEd 08xx or 09xx (Arts)		3
GenEd 08xx or 09xx (Race and Diversity)		3
Required Economics, Technical Writing, and Communication Courses		
ECON 1101	Macroeconomic Principles	3
or ECON 1901	Honors Macroeconomic Principles	
or ECON 1102	Microeconomic Principles	
or ECON 1902	Honors Microeconomic Principles	
ENG 2696	Technical Writing	3
CSI 1111	Introduction to Public Speaking	3
or CSI 1911	Honors Introduction to Public Speaking	
Required Innovation & Business Elective Courses		
Select two courses from the following list:		6
ECON 1102	Microeconomic Principles	
or ECON 1101	Macroeconomic Principles	
or ECON 1902	Honors Microeconomic Principles	
or ECON 1901	Honors Macroeconomic Principles	
ENGR 3033	Entrepreneurial Engineering	
HRM 1101	Leadership and Organizational Management	

or HRM 1901	Honors Leadership and Organizational Management	
MKTG 2101	Marketing Management	
or MKTG 2901	Honors Marketing Management	
RMI 2101	Introduction to Risk Management	
or RMI 2901	Honors Introduction to Risk Management	
RMI 2501	Fundamentals of Personal Financial Planning	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	

Required Engineering Technology Courses

Select one of the following:		4
ECE 2112 & ECE 2113	Electrical Devices & Systems I and Electrical Devices & Systems I Lab	
EET 2104	Introduction to Electrical Circuits	
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology Honors Introduction to Engineering	3
ENGR 1117	Engineering Graphics	2
ENGR 3001	Engineering Economics	3
ENGT 2521 or ENGT 3532	Applied Fluid Mechanics Thermodynamics	3
ENGT 2322	Applied Strength of Materials	3
ENGT 2331	Applied Engineering Statics	3
ENGT 3201	Applied Materials Technology	3
ENGT 4119	Professional Seminar	1
ENGT 4196	Capstone Project	3
Select one of the following Approved Science Electives:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II	
ENST 2002	Physical Geography	
Technical Electives (must include 3 labs)		24
Free Electives		4
Total Credit Hours		124

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Engineering Technology**Suggested Plan for New Students Starting in the 2023-2024 Academic Year**

Year 1		Credit Hours
Fall		
MATH 1022	Precalculus	4
CHEM 1031 or CHEM 1951	General Chemistry I or Honors General Chemical Science I	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I or Honors Chemical Science Laboratory I	1
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology or Honors Introduction to Engineering	3

ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
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Credit Hours	15
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Spring

MATH 1031	Differential and Integral Calculus	4
ENGR 1117	Engineering Graphics	2
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Approved Free Elective		3

Credit Hours	15
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Year 2**Fall**

Innovation & Business Elective		3
PHYS 1021	Introduction to General Physics I	4
CSI 1111 or CSI 1911	Introduction to Public Speaking or Honors Introduction to Public Speaking	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3

Credit Hours	16
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Spring

PHYS 1022	Introduction to General Physics II	4
ENGT 2331	Applied Engineering Statics	3
Approved Technical Elective		3
Select one of the following:		3
ECON 1101	Macroeconomic Principles	
ECON 1901	Honors Macroeconomic Principles	
ECON 1102	Microeconomic Principles	
ECON 1902	Honors Microeconomic Principles	
Select one of the following Approved Science Electives:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II	
ENST 2002	Physical Geography	

Credit Hours	17
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Year 3**Fall**

Innovation & Business Elective		3
ENGT 2322	Applied Strength of Materials	3
STAT 2103 or STAT 2903	Statistical Business Analytics or Honors Statistical Business Analytics	4
Approved Technical Elective		3
GenEd Breadth Course		3

Credit Hours	16
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Spring

ENGT 3201	Applied Materials Technology	3
Select one of the following:		3
ENGT 2521	Applied Fluid Mechanics	
ENGT 3532	Thermodynamics	
ENGT 4119	Professional Seminar	1

Approved Technical Elective		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
Select one of the following:		4
ECE 2112 & ECE 2113	Electrical Devices & Systems I and Electrical Devices & Systems I Lab	
EET 2104	Introduction to Electrical Circuits	
ENG 2696	Technical Writing	3
Approved Lab Elective		1
Approved Lab Elective		1
Approved Technical Elective		3
ENGR 3001	Engineering Economics	3
Credit Hours		15
Spring		
ENGT 4196	Capstone Project	3
Approved Technical Elective		3
Approved Technical Elective		3
Approved Technical Elective		3
Approved Lab Elective		1
Free Elective		1
Credit Hours		14
Total Credit Hours		124

Approved Technical Electives

Code	Title	Credit Hours
CEE 1105	Surveying	2
CEE 2011	Civil Engineering Materials	2
CIS 1053	Programming in Matlab	4
CIS 1057	Computer Programming in C	4
CIS 1068	Program Design and Abstraction	4
or CIS 1968	Honors Program Design and Abstraction	
CIS 1166	Mathematical Concepts in Computing I	4
or CIS 1966	Honors Mathematical Concepts in Computing I	
CIS 2168	Data Structures	4
CMT 2124	Construction Methods and Materials	3
CMT 2125	Construction Contracts and Specifications	3
CMT 2271	Building Systems	3
CMT 3121	Construction Estimating	3
CMT 3123	Construction Estimating Laboratory	1
CMT 3145	Structural Analysis	3
CMT 3322	Construction Planning and Scheduling	3
CMT 4336	Concrete and Masonry Design	3
ECE 3822	Engineering Computation II	3
EET 3276	Digital Logic Circuits	4
EET 3277	Microcomputer Systems	4
ENGR 2011	Engineering Analysis & Applications	3
ENGT 3323	Applied Dynamics	3
ENGT 3532	Thermodynamics	3

ENGT 3651	Manufacturing Control Systems	3
ENGT 3652	CAD/CAM/CNC	3
ENGT 4278	Cardiac Devices	3
ENGT 4342	Machine Elements	3
ENGT 4532	Heating, Ventilating, and Air Conditioning	3
ENGT 4641	Production Tooling	3
ENGT 4642	Quality Control	3
ENGT 4643	Fundamentals of Manufacturing	3
MEE 2305	Instrumentation and Data Acquisition Lab	1
MEE 3305	Materials Laboratory	1
MEE 3506	Fluid Mechanics Laboratory	1

Engineering Technology BSET with Cooperative Education Program Concentration

Overview

The **Bachelor of Science in Engineering Technology** is offered by the Department of Engineering, Technology and Management. This program provides a broad base of technological skills extending across the traditional fields of engineering technology with a concentration designed by the student and program coordinator to meet personal and career objectives. A plan of study can be developed with a focus in areas such as construction engineering technology, computer engineering technology, mechanical engineering technology or general engineering technology.

Engineering Technology students may complete an **optional concentration** in Cooperative Education Program (Co-Op).

Cooperative Education Program

A **Cooperative Education** (Co-Op) is an optional experiential program available at the College of Engineering where you have the opportunity to gain professional work experience before graduation. It is designed to give you the chance to apply the knowledge learned in the classroom to real life problems. You will be exposed to the latest technology and new ideas at a worksite helping you understand your field of work more extensively. During the Co-Op, you will make valuable connections with professionals in your field. A cooperative education can enhance and strengthen you academically, professionally and personally.

Campus Location: Main

Program Code: EN-ENGT-BSET

Accreditation

The Engineering Technology (BS) program is accredited by the Engineering Technology Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria. ABET is a non-profit and non-governmental accrediting agency for academic programs in the disciplines of applied science, computing, engineering, and engineering technology recognized by the Council for Higher Education Accreditation (CHEA).

Contact Information

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Learn more about the Bachelor of Science in Engineering Technology.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

Code	Title	Credit Hours
ENG 2696	Technical Writing	3
ENGT 4196	Capstone Project	3

College and Major Requirements

Code	Title	Credit Hours
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Required Math & Basic Science Courses

MATH 1022	Precalculus	4
MATH 1031	Differential and Integral Calculus	4
STAT 2103	Statistical Business Analytics	4
or STAT 2903	Honors Statistical Business Analytics	
PHYS 1021	Introduction to General Physics I	4
PHYS 1022	Introduction to General Physics II	4
CHEM 1031	General Chemistry I	3
or CHEM 1951	Honors General Chemical Science I	
CHEM 1033	General Chemistry Laboratory I	1
or CHEM 1953	Honors Chemical Science Laboratory I	

Required General Education Courses

Select one of the following:		4
ENG 0802	Analytical Reading and Writing	
ENG 0812	Analytical Reading and Writing: ESL	
ENG 0902	Honors Writing About Literature	
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	Honors Intellectual Heritage I: The Good Life	
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	Honors Intellectual Heritage II: The Common Good	
GenEd 08xx or 09xx (U.S. Society)		3
GenEd 08xx or 09xx (Global/World Society)		3
GenEd 08xx or 09xx (Human Behavior)		3
GenEd 08xx or 09xx (Arts)		3
GenEd 08xx or 09xx (Race and Diversity)		3

Required Economics, Technical Writing, and Communication Courses

ECON 1101	Macroeconomic Principles	3
or ECON 1901	Honors Macroeconomic Principles	
or ECON 1102	Microeconomic Principles	
or ECON 1902	Honors Microeconomic Principles	
ENG 2696	Technical Writing (WI)	3
CSI 1111	Introduction to Public Speaking	3
or CSI 1911	Honors Introduction to Public Speaking	

Required Innovation & Business Elective Courses

Select two courses from the following list:		6
ECON 1102	Microeconomic Principles	
or ECON 1902	Honors Microeconomic Principles	
or ECON 1101	Macroeconomic Principles	
or ECON 1901	Honors Macroeconomic Principles	
ENGR 3033	Entrepreneurial Engineering	
HRM 1101	Leadership and Organizational Management	
or HRM 1901	Honors Leadership and Organizational Management	
MKTG 2101	Marketing Management	
or MKTG 2901	Honors Marketing Management	

RMI 2101 or RMI 2901	Introduction to Risk Management Honors Introduction to Risk Management	
RMI 2501	Fundamentals of Personal Financial Planning	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	

Required Engineering Technology Courses

Select one of the following: 4

ECE 2112 & ECE 2113	Electrical Devices & Systems I and Electrical Devices & Systems I Lab	
EET 2104	Introduction to Electrical Circuits	
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology Honors Introduction to Engineering	3
ENGR 1117	Engineering Graphics	2
ENGR 3001	Engineering Economics	3
ENGT 2322	Applied Strength of Materials	3
ENGT 2331	Applied Engineering Statics	3
ENGT 2521 or ENGT 3532	Applied Fluid Mechanics Thermodynamics	3
ENGT 3201	Applied Materials Technology	3
ENGT 4119	Professional Seminar	1
ENGT 4196	Capstone Project	3

Select one of the following Approved Science Electives: 4

CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II	
ENST 2002	Physical Geography	

Technical Electives (must include 3 labs) 24

Free Electives 4

Required Cooperative Education Courses

ENGR 2181	Co-Op Work Experience I	3
ENGR 3181	Co-Op Work Experience II	3

Total Credit Hours 130

Suggested Academic Plan

Below is a suggested five-year plan for the Co-Op program leading to the Bachelor of Science in Engineering Technology. The minimum requirement for graduation is 130 semester hours.

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Engineering Technology with Concentration in Cooperative Education Program**Suggested Plan for New Students Starting in the 2023-2024 Academic Year**

Year 1		Credit Hours
Fall		
MATH 1022	Precalculus	4
CHEM 1031 or CHEM 1951	General Chemistry I or Honors General Chemical Science I	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I or Honors Chemical Science Laboratory I	1

ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology or Honors Introduction to Engineering	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4

Credit Hours	15
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Spring

MATH 1031	Differential and Integral Calculus	4
ENGR 1117	Engineering Graphics	2
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Approved Free Elective		3

Credit Hours	15
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Year 2**Fall**

Innovation & Business Elective		3
PHYS 1021	Introduction to General Physics I	4
CSI 1111 or CSI 1911	Introduction to Public Speaking or Honors Introduction to Public Speaking	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3

Credit Hours	16
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Spring

PHYS 1022	Introduction to General Physics II	4
ENGT 2331	Applied Engineering Statics	3
Approved Technical Elective		3
Select one of the following:		3
ECON 1101	Macroeconomic Principles	
ECON 1901	Honors Macroeconomic Principles	
ECON 1102	Microeconomic Principles	
ECON 1902	Honors Microeconomic Principles	
Select one of the following Approved Science Electives:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II	
ENST 2002	Physical Geography	

Credit Hours	17
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Year 3**Fall**

Innovation & Business Elective		3
STAT 2103 or STAT 2903	Statistical Business Analytics or Honors Statistical Business Analytics	4
ENGT 2322	Applied Strength of Materials	3
Approved Technical Elective		3
GenEd Breadth Course		3

Credit Hours	16
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Spring

ENGT 3201	Applied Materials Technology	3
Select one of the following:		3
ENGT 2521	Applied Fluid Mechanics	

ENGT 3532	Thermodynamics	
ENGT 4119	Professional Seminar	1
Approved Technical Elective		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
ENGR 2181	Co-Op Work Experience I	3
Credit Hours		3
Spring		
ENGR 3181	Co-Op Work Experience II	3
Credit Hours		3
Year 5		
Fall		
Select one of the following:		4
ECE 2112 & ECE 2113	Electrical Devices & Systems I and Electrical Devices & Systems I Lab	
EET 2104	Introduction to Electrical Circuits	
ENG 2696	Technical Writing	3
Approved Lab Elective		1
Approved Lab Elective		1
Approved Technical Elective		3
ENGR 3001	Engineering Economics	3
Credit Hours		15
Spring		
ENGT 4196	Capstone Project	3
Approved Technical Elective		3
Approved Technical Elective		3
Approved Technical Elective		3
Approved Lab Elective		1
Free Elective		1
Credit Hours		14
Total Credit Hours		130

Approved Technical Electives

Code	Title	Credit Hours
CEE 1105	Surveying	2
CEE 2011	Civil Engineering Materials	2
CIS 1053	Programming in Matlab	4
CIS 1057	Computer Programming in C	4
CIS 1068	Program Design and Abstraction	4
or CIS 1968	Honors Program Design and Abstraction	
CIS 1166	Mathematical Concepts in Computing I	4
or CIS 1966	Honors Mathematical Concepts in Computing I	
CIS 2168	Data Structures	4
CMT 2124	Construction Methods and Materials	3
CMT 2125	Construction Contracts and Specifications	3
CMT 2271	Building Systems	3
CMT 3121	Construction Estimating	3
CMT 3123	Construction Estimating Laboratory	1

CMT 3145	Structural Analysis	3
CMT 3322	Construction Planning and Scheduling	3
CMT 4336	Concrete and Masonry Design	3
ECE 3822	Engineering Computation II	3
EET 3276	Digital Logic Circuits	4
EET 3277	Microcomputer Systems	4
ENGR 2011	Engineering Analysis & Applications	3
ENGT 3323	Applied Dynamics	3
ENGT 3532	Thermodynamics	3
ENGT 3651	Manufacturing Control Systems	3
ENGT 3652	CAD/CAM/CNC	3
ENGT 4278	Cardiac Devices	3
ENGT 4342	Machine Elements	3
ENGT 4532	Heating, Ventilating, and Air Conditioning	3
ENGT 4641	Production Tooling	3
ENGT 4642	Quality Control	3
ENGT 4643	Fundamentals of Manufacturing	3
MEE 2305	Instrumentation and Data Acquisition Lab	1
MEE 3305	Materials Laboratory	1
MEE 3506	Fluid Mechanics Laboratory	1

Environmental Engineering BSEnVE

Note: This program is not accepting applications after fall 2023.

Overview

The **Bachelor of Science in Environmental Engineering** is offered by the Department of Civil and Environmental Engineering. The program prepares students for careers at the interface of human society and the natural environment, aiming to find solutions to the world's challenges of air, land, and water pollution and sustainability. The environmental engineering curriculum at Temple University provides a fully-integrated design experience within a multidisciplinary learning environment. Students begin their undergraduate studies with courses in advanced mathematics, chemistry and physics, as well as engineering. As they progress, the coursework becomes more discipline-specific and includes topics such as water and wastewater treatment, air pollution control, environmental hydrology, stormwater management and others.

Through laboratory courses, students will gain hands-on experience in environmental chemistry and microbiology, as well as with the physical-chemical processes utilized in water and wastewater treatment. The program culminates with a year-long senior design project where students work in interdisciplinary teams to tackle an engineering design project. The goals of the environmental engineering program are to prepare students to pursue an environmental engineering career in design, project planning or research, to go on to graduate education in their specific areas of interest, and to pass the required exams to obtain professional licensure.

Campus Location: Main

Program Code: EN-ENVE-BSEN

Accreditation

The Environmental Engineering (BS) program is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and Program Criteria for Environmental Engineering and Similarly Named Engineering Programs. ABET is a non-profit and non-governmental accrediting agency for academic programs in the disciplines of applied science, computing, engineering, and engineering technology recognized by the Council for Higher Education Accreditation (CHEA).

+1 Bachelor to Master's Accelerated Degree Program

High-achieving undergraduates can earn both a bachelor's degree and a master's degree within five years. Students apply for this program in sophomore year, and four graduate-level courses are taken in place of undergraduate requirements during junior and senior years. After the bachelor's degree is earned, one graduate-level course is taken in the summer followed by full-time study in the subsequent Fall and Spring semesters to complete the master's degree study. The following accelerated program is available:

- Bachelor of Science in Environmental Engineering and Master of Science in Environmental Engineering

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Learn more about the Bachelor of Science in Environmental Engineering.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

Code	Title	Credit Hours
ENGR 2196 or ENGR 2996	Technical Communication Honors Technical Communication	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project Honors Capstone Senior Design Project	3

Department Requirements

Code	Title	Credit Hours
Required Math & Basic Science Courses		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
MATH 2041 or MATH 2941 or MATH 3041 or MATH 3941	Differential Equations I Honors Differential Equations I Differential Equations I Honors Differential Equations I	3
CEE 3048	Probability, Statistics & Stochastic Methods	3
PHYS 1061 or PHYS 1961	Elementary Classical Physics I Honors Elementary Classical Physics I	4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II Honors Elementary Classical Physics II	4
CHEM 1031 or CHEM 1951	General Chemistry I Honors General Chemical Science I	3

CHEM 1032	General Chemistry II	3
or CHEM 1952	Honors General Chemical Science II	
CHEM 1033	General Chemistry Laboratory I	1
or CHEM 1953	Honors Chemical Science Laboratory I	
CHEM 1034	General Chemistry Laboratory II	1
or CHEM 1954	Honors Chemical Science Laboratory II	
Required General Education Courses		
Select one of the following:		4
ENG 0802	Analytical Reading and Writing	
ENG 0812	Analytical Reading and Writing: ESL	
ENG 0902	Honors Writing About Literature	
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	Honors Intellectual Heritage I: The Good Life	
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	Honors Intellectual Heritage II: The Common Good	
GenEd 08xx or 09xx (U.S. Society)		3
GenEd 08xx or 09xx (Global/World Society)		3
GenEd 08xx or 09xx (Human Behavior)		3
GenEd 08xx or 09xx (The Arts)		3
GenEd 08xx or 09xx (Race and Diversity)		3
Required Environmental Engineering Courses		
CEE 2712	Introduction to Environmental Engineering	3
CEE 2715	Principles of Sustainable Engineering	3
CEE 3712	Environmental Fluids and Contaminant Dynamics	3
or ENGR 3553	Mechanics of Fluids	
or ENGR 3953	Honors Mechanics of Fluids	
CEE 3715	Microbiological Principles of Environmental Engineering	3
CEE 3717	Chemical Principles of Environmental Engineering	3
CEE 3725	Water Quality and Analysis Lab	1
CEE 3727	Environmental Hydrology and Stormwater Management	3
or CEE 4631	Environmental Hydrology	
CEE 4711	Air Pollution Control System	3
CEE 4721	Water and Wastewater Systems Design	3
CEE 4722	Water/Wastewater Lab	1
CEE 4725	Environmental Systems Design	3
CEE 4741	Professional Issues I	1
CEE 4742	Professional Issues II	1
CEE/ENGR Technical Elective		3
CEE 4000+ Technical Elective		3
Free Elective		6
Required Engineering Courses		
ENGR 1101	Introduction to Engineering & Engineering Technology	3
or ENGR 1901	Honors Introduction to Engineering	
ENGR 1102	Introduction to Engineering Problem Solving	3
ENGR 1117	Engineering Graphics	2
ENGR 2196	Technical Communication	3
or ENGR 2996	Honors Technical Communication	
ENGR 2334	Engineering Statics/Dynamics	3
ENGR 3001	Engineering Economics	3
ENGR 3033	Entrepreneurial Engineering	3
ENGR 4169	Engineering Seminar	1
ENGR 4173	Senior Design Project I for Environmental Engineering	2

ENGR 4296 or ENGR 4996	Capstone Senior Design Project Honors Capstone Senior Design Project	3
Total Credit Hours		128

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Environmental Engineering

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology or Honors Introduction to Engineering	3
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
CHEM 1031 or CHEM 1951	General Chemistry I or Honors General Chemical Science I	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I or Honors Chemical Science Laboratory I	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		15
Spring		
ENGR 1117	Engineering Graphics	2
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
CHEM 1032 or CHEM 1952	General Chemistry II or Honors General Chemical Science II	3
CHEM 1034 or CHEM 1954	General Chemistry Laboratory II or Honors Chemical Science Laboratory II	1
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	4
ENGR 1102	Introduction to Engineering Problem Solving	3
Credit Hours		17
Year 2		
Fall		
ENGR 2334	Engineering Statics/Dynamics	3
PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	4
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
CEE 2712	Introduction to Environmental Engineering	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		17
Spring		
ENGR 2196 or ENGR 2996	Technical Communication or Honors Technical Communication	3
CEE 2715	Principles of Sustainable Engineering	3
MATH 2041 or MATH 2941 or MATH 3041 or MATH 3941	Differential Equations I or Honors Differential Equations I or Differential Equations I or Honors Differential Equations I	3

IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Free Elective		3
Credit Hours		15
Year 3		
Fall		
Select one of the following:		3
CEE 3712	Environmental Fluids and Contaminant Dynamics	
ENGR 3553	Mechanics of Fluids	
ENGR 3953	Honors Mechanics of Fluids	
CEE 3715	Microbiological Principles of Environmental Engineering	3
CEE 3725	Water Quality and Analysis Lab	1
CEE 3717	Chemical Principles of Environmental Engineering	3
CEE/ENGR Technical Elective		3
GenEd Breadth Course		3
Credit Hours		16
Spring		
ENGR 3001	Engineering Economics	3
ENGR 4169	Engineering Seminar	1
CEE 3048	Probability, Statistics & Stochastic Methods	3
CEE 4721	Water and Wastewater Systems Design	3
CEE 4722	Water/Wastewater Lab	1
Select one of the following:		3
CEE 3727	Environmental Hydrology and Stormwater Management	
CEE 4631	Environmental Hydrology	
GenEd Breadth Course		3
Credit Hours		17
Year 4		
Fall		
CEE 4725	Environmental Systems Design	3
CEE 4741	Professional Issues I	1
CEE 4711	Air Pollution Control System	3
ENGR 4173	Senior Design Project I for Environmental Engineering	2
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
ENGR 3033	Entrepreneurial Engineering	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project or Honors Capstone Senior Design Project	3
CEE 4742	Professional Issues II	1
CEE 4000+ Technical Elective		3
GenEd Breadth Course		3
Free Elective		3
Credit Hours		16
Total Credit Hours		128

Environmental Engineering Minor

Overview

The Department of Civil and Environmental Engineering (CEE) offers a five-course (15 s.h.) **minor in Environmental Engineering**. Undergraduates from the physical sciences, mathematics and engineering are eligible to participate in this program.

The purpose of the minor is to allow students from a wide range of undergraduate majors to obtain an introductory background in sustainability, pollution prevention, environmental modeling and pollution control technologies most appropriate to their interests and major field. The Environmental Engineering minor will add considerably to students' major program skills and make them more valuable to employers. Mathematics and science majors will gain an understanding of engineering problem-solving processes and standard pollution control technologies. Engineering majors will understand the environmental effects of technologies in their major field and how to manage those effects. After the student completes the requirements for the minor, the minor will be recorded on the student's official university transcript upon graduation.

Declaration of Environmental Engineering Minor

Students who are interested in pursuing an Environmental Engineering minor should speak to their advisor in the school or college in which they are pursuing their degree. Students should formally declare the Environmental Engineering minor upon completing no more than 6 credits toward the minor. There is no penalty if the minor is not completed. For more information and to declare the minor, please contact the Center for Academic Advising and Student Affairs.

Campus Location: Main

Contact Information

Center for Academic Advising and Student Affairs
Engineering Building, Room 349
engradv@temple.edu

Engineering Building, Room 514
1947 North 12th Street
Philadelphia, PA 19122
215-204-7814

Requirements

Students pursuing the minor in Environmental Engineering must meet the following requirements:

- A minimum of C- in each course
- An overall GPA of 2.0 for courses in the Environmental Engineering minor

Code	Title	Credit Hours
Required Courses		
CEE 2711	Environmental Chemistry & Microbiology	3
CEE 3711	Environmental Engineering	3
Electives		
Select a minimum of three electives from the following:		9
CEE 4631	Environmental Hydrology	
CEE 4711	Air Pollution Control System	
CEE 4721	Water and Wastewater Systems Design	
CEE 4622	Fate Pollutants in Subsurface Environments	
CEE 4641	Urban Streams and Stormwater Management	
CEE 4623	Contaminant Dynamics in Urban Streams	
Total Credit Hours		15

Students pursuing the minor are responsible for knowing and completing all published prerequisite requirements for courses within the minor. Any prerequisite courses not outlined in the required or elective course listing will not be counted toward the 15 credit hour minimum required for the minor.

Industrial and Systems Engineering BSISE

Overview

The **Bachelor of Science in Industrial and Systems Engineering** is offered by the Department of Engineering, Technology and Management. This program prepares students to become leaders in quality and productivity management. This 128-credit undergraduate program is a blend of engineering and business, preparing students to design, develop, implement and improve the integrated systems that help a wide variety of companies save money and increase operating efficiency.

Industrial and systems engineering applies to more than manufacturing—the work of industrial and systems engineers encompasses nearly every industry and sector. The versatile, interdisciplinary curriculum positions students to graduate with the tools and skills that meet a growing demand for industrial and systems engineers. Compared to other engineering disciplines, Industrial and Systems Engineering students take courses in business and across engineering fields of study, making learning versatile for many types of applications for companies as they continuously seek to increase productivity and efficiency and improve quality. Students will gain the knowledge base to provide these companies with innovative and creative solutions. The curriculum will prepare graduates to design, develop, implement, and improve integrated systems that include people, materials, information and equipment. The curriculum includes in-depth instruction to accomplish the integration of systems using appropriate analytical, computational, and experimental practices.

Campus Location: Main

Program Code: EN-ISE-BSIS

Contact Information

Thomas V. Edwards, DPS, Chair of Engineering, Technology and Management
Engineering Building, Room 907
215-204-7794
tve@temple.edu

Julie Drzymalski, PhD, Program Director
Engineering Building, Room 907
215-204-2970
julie.drzymalski@temple.edu

Learn more about the Bachelor of Science in Industrial and Systems Engineering.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

Code	Title	Credit Hours
ENGR 2196 or ENGR 2996	Technical Communication Honors Technical Communication	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project Honors Capstone Senior Design Project	3

Department Requirements

Code	Title	Credit Hours
Required Math & Basic Science Courses		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2041 or MATH 2941	Differential Equations I Honors Differential Equations I	3
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
CEE 3048	Probability, Statistics & Stochastic Methods	3
Select one of the following:		3

ENGR 2011	Engineering Analysis & Applications	
MATH 2101	Linear Algebra	
PHYS 1061	Elementary Classical Physics I	4
or PHYS 1961	Honors Elementary Classical Physics I	
PHYS 1062	Elementary Classical Physics II	4
or PHYS 1962	Honors Elementary Classical Physics II	
CHEM 1035	Chemistry for Engineers	3
CHEM 1033	General Chemistry Laboratory I	1
or CHEM 1953	Honors Chemical Science Laboratory I	
Required General Education Courses		
Select one of the following:		4
ENG 0802	Analytical Reading and Writing	
ENG 0812	Analytical Reading and Writing: ESL	
ENG 0902	Honors Writing About Literature	
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	Honors Intellectual Heritage I: The Good Life	
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	Honors Intellectual Heritage II: The Common Good	
GenEd 08xx or 09xx (Human Behavior)		3
GenEd 08xx or 09xx (Race and Diversity)		3
GenEd 08xx or 09xx (Global/World Society)		3
GenEd 08xx or 09xx (U.S. Society)		3
GenEd 08xx or 09xx (Arts)		3
Required Industrial and Systems Engineering Courses		
ISE 2101	Applied Statistical Methods for Industrial and System Engineers	3
ISE 2102	Production Process Design and Laboratory	4
ISE 2103	Deterministic Models in Operations Research	3
ISE 3101	Product Quality Assurance	3
ISE 3102	Stochastic Models in Operations Research	3
ISE 3103	Systems Thinking and Modeling	3
ISE 4102	Industrial Simulation	3
ISE 4104	Production Planning and Control	3
ISE 4105	Facility Planning	3
ISE 4107	Systems Engineering Fundamentals	3
Required Engineering Courses		
ENGR 1101	Introduction to Engineering & Engineering Technology	3
or ENGR 1901	Honors Introduction to Engineering	
ENGR 1102	Introduction to Engineering Problem Solving	3
ENGR 1117	Engineering Graphics	2
ENGR 2196	Technical Communication	3
or ENGR 2996	Honors Technical Communication	
ENGR 3001	Engineering Economics	3
ISE 4176	Industrial and Systems Engineering Senior Design Project I	3
ENGR 4296	Capstone Senior Design Project	3
or ENGR 4996	Honors Capstone Senior Design Project	
Select one of the following:		4
CIS 1051	Introduction to Problem Solving and Programming in Python	
CIS 1057	Computer Programming in C	
ECE 1111	Engineering Computation I	
Industrial & Systems Technical Electives		6
Select two of the following:		
CEE 3711	Environmental Engineering	

CEE 4201	Transportation Systems Management	
CEE 4221	Intelligent Transportation Systems	
ECE 3822	Engineering Computation II	
ENGR 2181	Co-Op Work Experience I	
ENGR 3181	Co-Op Work Experience II	
ENGR 3033	Entrepreneurial Engineering	
ISE 4101	Human Factors (Ergonomics)	
ISE 4103	Engineering Cost Analysis	
ISE 4106	Service Systems Engineering	
Required Business Courses		
ACCT 2501	Survey of Accounting	3
MSOM 3101	Operations Management	3
SCM 3515	Principles of Supply Chain Management	3
Total Credit Hours		128

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Industrial and Systems Engineering

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology or Honors Introduction to Engineering	3
ENGR 1117	Engineering Graphics	2
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	4
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		17
Spring		
PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	4
CHEM 1035	Chemistry for Engineers	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I or Honors Chemical Science Laboratory I	1
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
ENGR 1102	Introduction to Engineering Problem Solving	3
Credit Hours		15
Year 2		
Fall		
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
ACCT 2501	Survey of Accounting	3
ISE 2101	Applied Statistical Methods for Industrial and System Engineers	3
ISE 2102	Production Process Design and Laboratory	4
Credit Hours		17

Spring		
MATH 2041 or MATH 2941	Differential Equations I or Honors Differential Equations I	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
MSOM 3101	Operations Management	3
ISE 2103	Deterministic Models in Operations Research	3
Select one of the following:		3
ENGR 2011	Engineering Analysis & Applications	
MATH 2101	Linear Algebra	
Credit Hours		15
Year 3		
Fall		
CEE 3048	Probability, Statistics & Stochastic Methods	3
ENGR 2196 or ENGR 2996	Technical Communication or Honors Technical Communication	3
ENGR 3001	Engineering Economics	3
SCM 3515	Principles of Supply Chain Management	3
ISE 3103	Systems Thinking and Modeling	3
GenEd Breadth Course		3
Credit Hours		18
Spring		
ISE 3101	Product Quality Assurance	3
ISE 3102	Stochastic Models in Operations Research	3
ISE 4104	Production Planning and Control	3
Select one of the following:		4
CIS 1051	Introduction to Problem Solving and Programming in Python	
CIS 1057	Computer Programming in C	
ECE 1111	Engineering Computation I	
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
ISE 4102	Industrial Simulation	3
ISE 4105	Facility Planning	3
ISE 4176	Industrial and Systems Engineering Senior Design Project I	3
Industrial & Systems Technical Elective #1		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
ENGR 4296 or ENGR 4996	Capstone Senior Design Project or Honors Capstone Senior Design Project	3
ISE 4107	Systems Engineering Fundamentals	3
Industrial & Systems Technical Elective #2		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Total Credit Hours		128
Code	Title	Credit Hours
Approved Industrial & Systems Technical Electives		
CEE 3711	Environmental Engineering	3

CEE 4201	Transportation Systems Management	3
CEE 4221	Intelligent Transportation Systems	3
ECE 3822	Engineering Computation II	3
ENGR 2181	Co-Op Work Experience I	3
ENGR 3181	Co-Op Work Experience II	3
ENGR 3033	Entrepreneurial Engineering	3
ISE 4101	Human Factors (Ergonomics)	3
ISE 4103	Engineering Cost Analysis	3
ISE 4106	Service Systems Engineering	3

Mechanical Engineering BSME

Overview

The **Bachelor of Science in Mechanical Engineering** is offered by the Department of Mechanical Engineering. This program provides an excellent educational experience for the students. This experience includes an emphasis on the technical, communication and teamwork skills that graduate engineers need to succeed in both the workplace and society in general. In order to achieve these goals, the department places great importance on teaching, research, scholarship, engineering practice and service to the university community and the Engineering profession. The mechanical engineering program is structured to prepare the graduate for the professional practice of engineering and/or graduate school. The curriculum emphasizes a rigorous treatment of the mathematical and scientific approach to the solution of engineering problems. It provides a coherent set of courses in energy conversion and structures/motion in mechanical systems. The program has design across the curriculum and is capped with an integrated design experience in the form of a senior project.

Mechanical Engineering students may complete an **optional concentration** in Cooperative Education Program (Co-Op).

Campus Location: Main

Program Code: EN-ME-BSME

Accreditation

The Mechanical Engineering (BS) program is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and Program Criteria for Mechanical and Similarly Named Engineering Programs. ABET is a non-profit and non-governmental accrediting agency for academic programs in the disciplines of applied science, computing, engineering, and engineering technology recognized by the Council for Higher Education Accreditation (CHEA).

+1 Bachelor to Master's Accelerated Degree Program

High-achieving undergraduates can earn both a bachelor's degree and a master's degree within five years. Students apply for this program in sophomore year, and four graduate-level courses are taken in place of undergraduate requirements during junior and senior years. After the bachelor's degree is earned, one graduate-level course is taken in the summer followed by full-time study in the subsequent Fall and Spring semesters to complete the master's degree study. The following accelerated program is available:

- Bachelor of Science in Mechanical Engineering and Master of Science in Mechanical Engineering

Contact Information

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Engineering Building, Room 612
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kurosh.darvish@temple.edu

Vallorie Peridier, PhD, Undergraduate Coordinator
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215-204-7143
peridier@temple.edu

Learn more about the Bachelor of Science in Mechanical Engineering.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

Code	Title	Credit Hours
ENGR 2196 or ENGR 2996	Technical Communication Honors Technical Communication	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project Honors Capstone Senior Design Project	3

Department Requirements

Code	Title	Credit Hours
Required Math & Basic Science Courses		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
MATH 2041 or MATH 2941	Differential Equations I Honors Differential Equations I	3
MEE 3011	Analysis and Computation of Linear Systems in Mechanical Engineering	3
PHYS 1061 or PHYS 1961	Elementary Classical Physics I Honors Elementary Classical Physics I	4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II Honors Elementary Classical Physics II	4
CHEM 1035 or CHEM 1031	Chemistry for Engineers General Chemistry I	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I Honors Chemical Science Laboratory I	1
Required General Education Courses		
Select one of the following:		4
ENG 0802	Analytical Reading and Writing	
ENG 0812	Analytical Reading and Writing: ESL	
ENG 0902	Honors Writing About Literature	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life Honors Intellectual Heritage I: The Good Life	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good Honors Intellectual Heritage II: The Common Good	3
GenEd 08xx or 09xx (U.S. Society)		3
GenEd 08xx or 09xx (Global/World Society)		3
GenEd 08xx or 09xx (Human Behavior)		3
GenEd 08xx or 09xx (The Arts)		3
GenEd 08xx or 09xx (Race and Diversity)		3
Required Mechanical Engineering Courses		
MEE 1117	Fundamentals of Mechanical Engineering Design	2
MEE 1305	Machine Shop Laboratory	1

MEE 2305	Instrumentation and Data Acquisition Lab	1
MEE 3117	Computer-Aided Mechanical Design	3
MEE 3301	Machine Theory and Design	3
MEE 3305	Materials Laboratory	1
MEE 3506	Fluid Mechanics Laboratory	1
MEE 4177	Design and Realization of a Mechanical System	2
MEE 4572	Heat and Mass Transfer	3
Select one of the following:		4
MEE 4422 & MEE 4405	Mechanical Vibrations and Vibrations Laboratory ¹	
MEE 4571 & MEE 4506	Advanced Thermodynamics and Combustion and Energy Conversion Laboratory ¹	
Mechanical Engineering Technical Electives		9
Required Engineering Courses		
ECE 2112	Electrical Devices & Systems I	3
ECE 2113	Electrical Devices & Systems I Lab	1
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology Honors Introduction to Engineering	3
ENGR 1102	Introduction to Engineering Problem Solving	3
ENGR 2196 or ENGR 2996	Technical Communication Honors Technical Communication	3
ENGR 2331 or ENGR 2931	Engineering Statics Honors Engineering Statics	3
ENGR 2332	Engineering Dynamics	3
ENGR 2333 or ENGR 2933	Mechanics of Solids Honors Mechanics of Solids	3
ENGR 3001	Engineering Economics	3
ENGR 3201	Material Science for Engineers	3
ENGR 3553 or ENGR 3953	Mechanics of Fluids Honors Mechanics of Fluids	3
ENGR 3571	Classical and Statistical Thermodynamics	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project (WI) Honors Capstone Senior Design Project	3
Free Elective		6
Total Credit Hours		128

1

Students in the **Bachelor of Science in Mechanical Engineering Program** must take either of the following sequences of courses:

- MEE 4422 and MEE 4405
- OR**
- MEE 4571 and MEE 4506.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Mechanical Engineering

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology or Honors Introduction to Engineering	3
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4

MEE 1117	Fundamentals of Mechanical Engineering Design	2
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	4
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		17
Spring		
Select one of the following:		3
CHEM 1035	Chemistry for Engineers	
CHEM 1031	General Chemistry I	
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I or Honors Chemical Science Laboratory I	1
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	4
ENGR 1102	Introduction to Engineering Problem Solving	3
MEE 1305	Machine Shop Laboratory	1
Credit Hours		16
Year 2		
Fall		
ECE 2112	Electrical Devices & Systems I	3
ECE 2113	Electrical Devices & Systems I Lab	1
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
ENGR 2331 or ENGR 2931	Engineering Statics or Honors Engineering Statics	3
ENGR 2196 or ENGR 2996	Technical Communication or Honors Technical Communication	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		17
Spring		
ENGR 2332	Engineering Dynamics	3
MEE 2305	Instrumentation and Data Acquisition Lab	1
ENGR 3571	Classical and Statistical Thermodynamics	3
MATH 2041 or MATH 2941	Differential Equations I or Honors Differential Equations I	3
ENGR 2333 or ENGR 2933	Mechanics of Solids or Honors Mechanics of Solids	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		16
Year 3		
Fall		
MEE 3011	Analysis and Computation of Linear Systems in Mechanical Engineering	3
MEE 3301	Machine Theory and Design	3
MEE 3305	Materials Laboratory	1
ENGR 3201	Material Science for Engineers	3
ENGR 3001	Engineering Economics	3
GenEd Breadth Course		3
Credit Hours		16

Spring		
MEE 3117	Computer-Aided Mechanical Design	3
MEE 3506	Fluid Mechanics Laboratory	1
ENGR 3553 or ENGR 3953	Mechanics of Fluids or Honors Mechanics of Fluids	3
Mechanical Engineering Technical Elective #1		3
Mechanical Engineering Technical Elective #2		3
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
MEE 4177	Design and Realization of a Mechanical System	2
MEE 4572	Heat and Mass Transfer	3
Select one of the following:		4
MEE 4422 & MEE 4405	Mechanical Vibrations and Vibrations Laboratory	
MEE 4571 & MEE 4506	Advanced Thermodynamics and Combustion and Energy Conversion Laboratory	
GenEd Breadth Course		3
Free Elective		3
Credit Hours		15
Spring		
ENGR 4296 or ENGR 4996	Capstone Senior Design Project or Honors Capstone Senior Design Project	3
Mechanical Engineering Technical Elective #3		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Free Elective		3
Credit Hours		15
Total Credit Hours		128

Bachelor of Science in Mechanical Engineering - Temple Rome Semester Abroad Option

Year 1		
Fall		Credit Hours
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology or Honors Introduction to Engineering	3
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
MEE 1117	Fundamentals of Mechanical Engineering Design	2
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	4
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		17
Spring		
Select one of the following:		3
CHEM 1035 CHEM 1031	Chemistry for Engineers General Chemistry I	
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I or Honors Chemical Science Laboratory I	1
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4

PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	4
ENGR 1102	Introduction to Engineering Problem Solving	3
MEE 1305	Machine Shop Laboratory	1
Credit Hours		16
Year 2		
Fall		
ECE 2112	Electrical Devices & Systems I	3
ECE 2113	Electrical Devices & Systems I Lab	1
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
ENGR 2331 or ENGR 2931	Engineering Statics or Honors Engineering Statics	3
ENGR 2196 or ENGR 2996	Technical Communication or Honors Technical Communication	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		17
Spring		
Semester Abroad at Temple Rome		
ENGR 2332	Engineering Dynamics	3
ENGR 2333	Mechanics of Solids	3
ENGR 3571	Classical and Statistical Thermodynamics	3
MATH 2041	Differential Equations I	3
ITAL 1001	Italian Language I	4
Credit Hours		16
Year 3		
Fall		
ENGR 3553	Mechanics of Fluids	3
MEE 3506	Fluid Mechanics Laboratory	1
MEE 3011	Analysis and Computation of Linear Systems in Mechanical Engineering	3
ENGR 3201	Material Science for Engineers	3
MEE 2305	Instrumentation and Data Acquisition Lab	1
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Free Elective		2
Credit Hours		16
Spring		
MEE 3301	Machine Theory and Design	3
MEE 3305	Materials Laboratory	1
Mechanical Engineering Technical Elective #1		3
Mechanical Engineering Technical Elective #2		3
ENGR 3001	Engineering Economics	3
GenEd Breadth Course ¹		3
Credit Hours		16
Year 4		
Fall		
MEE 3117	Computer-Aided Mechanical Design	3
MEE 4177	Design and Realization of a Mechanical System	2
MEE 4572	Heat and Mass Transfer	3
Select one of the following:		4
MEE 4422 & MEE 4405	Mechanical Vibrations and Vibrations Laboratory	

MEE 4571 & MEE 4506	Advanced Thermodynamics and Combustion and Energy Conversion Laboratory	3
GenEd Breadth Course ¹		3
Credit Hours		15
Spring		
ENGR 4296 or ENGR 4996	Capstone Senior Design Project or Honors Capstone Senior Design Project	3
Mechanical Engineering Technical Elective #3		3
GenEd Breadth Course ¹		3
GenEd Breadth Course ¹		3
Free Elective		3
Credit Hours		15
Total Credit Hours		128

1

Students participating in the College of Engineering Temple Rome semester abroad program will not be required to complete the Global/World Society General Education requirement as the abroad experience will waive the Global/World Society requirement.

Approved Technical Electives

Code	Title	Credit Hours
BIOE 3719	Introduction to Bioengineering	3
BIOE 3725	Cell Biology for Engineers	3
BIOE 4741	Biomaterials for Engineers	3
CEE 3048	Probability, Statistics & Stochastic Methods	3
CEE 3711	Environmental Engineering	3
ECE 3822	Engineering Computation II (Note: permission of instructor required)	3
ENGR 4116	Spacecraft Systems Engineering	3
ENGR 4121	Design of Experiments	3
ENGR 4201	Micro- to Nano-sized Machines	3
ENGR 4314	Continuum Mechanics	3
ENGR 4576	Computational Fluid Dynamics	3
MEE 3185	Mechanical Engineering Summer Work Experience	3
MEE 3302	Kinematics of Mechanisms	3
MEE 3421	Dynamic Systems	3
MEE 3422	Modeling and Control of Electromechanical Systems	3
MEE 4040	Special Topics	1 to 4
MEE 4172	High-Speed Imaging and Analysis for Engineering Applications	3
MEE 4173	Data Acquisition and Analysis for Engineers	3
MEE 4212	Tribology and Surface Engineering	3
MEE 4311	Mechanics of Composite Materials	3
MEE 4314	Impact and Crashworthiness	3
MEE 4411	Introduction to Mobile Robotics (Note: MEE 4412 is prerequisite)	3
MEE 4412	Modern Dynamics for Robotics	3
MEE 4413	Robotic Manipulation (Note: MEE 4412 is prerequisite)	3
MEE 4414	Optimization and Control of Mechanical Systems (Note: MEE 3422 is prerequisite)	3
MEE 4422 & MEE 4405	Mechanical Vibrations and Vibrations Laboratory	4
MEE 4512	Compressible Fluid Dynamics	3
MEE 4513	Aerodynamics	3
MEE 4571 & MEE 4506	Advanced Thermodynamics and Combustion and Energy Conversion Laboratory	4
MEE 4574	Heating, Ventilating, and Air Conditioning	3
MEE 4575	Renewable and Alternative Energy	3

MEE 4577	Power Generation and Storage Technologies	3
MEE 4578	Fundamentals of Combustion	3
MEE 4643	Manufacturing Engineering	3
MEE 4731	Cardiovascular Fluid Dynamics	3

Mechanical Engineering BSME with Cooperative Education Program Concentration

Overview

The **Bachelor of Science in Mechanical Engineering** is offered by the Department of Mechanical Engineering. This program provides an excellent educational experience for the students. This experience includes an emphasis on the technical, communication and teamwork skills that graduate engineers need to succeed in both the workplace and society in general. In order to achieve these goals, the department places great importance on teaching, research, scholarship, engineering practice and service to the university community and the Engineering profession. The mechanical engineering program is structured to prepare the graduate for the professional practice of engineering and/or graduate school. The curriculum emphasizes a rigorous treatment of the mathematical and scientific approach to the solution of engineering problems. It provides a coherent set of courses in energy conversion and structures/motion in mechanical systems. The program has design across the curriculum and is capped with an integrated design experience in the form of a senior project.

Mechanical Engineering students may complete an **optional concentration** in Cooperative Education Program (Co-Op).

Cooperative Education Program

A **Cooperative Education** (Co-Op) is an optional program available at the College of Engineering where you have the opportunity to gain professional work experience before graduation. It is designed to give you the chance to apply the knowledge learned in the classroom to real life problems. You will be exposed to the latest technology and new ideas at a worksite helping you understand your field of work more extensively. During the Co-Op, you will make valuable connections with professionals in your field. A cooperative education can enhance and strengthen you academically, professionally and personally.

Campus Location: Main

Program Code: EN-ME-BSME

Accreditation

The Mechanical Engineering (BS) program is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and Program Criteria for Mechanical and Similarly Named Engineering Programs. ABET is a non-profit and non-governmental accrediting agency for academic programs in the disciplines of applied science, computing, engineering, and engineering technology recognized by the Council for Higher Education Accreditation (CHEA).

+1 Bachelor to Master's Accelerated Degree Program

High-achieving undergraduates can earn both a bachelor's degree and a master's degree within five years. Students apply for this program in sophomore year, and four graduate-level courses are taken in place of undergraduate requirements during junior and senior years. After the bachelor's degree is earned, one graduate-level course is taken in the summer followed by full-time study in the subsequent Fall and Spring semesters to complete the master's degree study. The following accelerated program is available:

- Bachelor of Science in Mechanical Engineering and Master of Science in Mechanical Engineering

Contact Information

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Learn more about the Bachelor of Science in Mechanical Engineering.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

Code	Title	Credit Hours
ENGR 2196 or ENGR 2996	Technical Communication Honors Technical Communication	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project Honors Capstone Senior Design Project	3

Department Requirements

Code	Title	Credit Hours
Required Math & Basic Science Courses		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
MATH 2041 or MATH 2941	Differential Equations I Honors Differential Equations I	3
MEE 3011	Analysis and Computation of Linear Systems in Mechanical Engineering	3
PHYS 1061 or PHYS 1961	Elementary Classical Physics I Honors Elementary Classical Physics I	4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II Honors Elementary Classical Physics II	4
CHEM 1035 or CHEM 1031	Chemistry for Engineers General Chemistry I	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I Honors Chemical Science Laboratory I	1
Required General Education Courses		
Select one of the following:		4
ENG 0802	Analytical Reading and Writing	
ENG 0812	Analytical Reading and Writing: ESL	
ENG 0902	Honors Writing About Literature	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life Honors Intellectual Heritage I: The Good Life	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good Honors Intellectual Heritage II: The Common Good	3
GenEd 08xx or 09xx (U.S. Society)		3
GenEd 08xx or 09xx (Global/World Society)		3
GenEd 08xx or 09xx (Human Behavior)		3
GenEd 08xx or 09xx (The Arts)		3
GenEd 08xx or 09xx (Race and Diversity)		3
Required Mechanical Engineering Courses		

MEE 1117	Fundamentals of Mechanical Engineering Design	2
MEE 1305	Machine Shop Laboratory	1
MEE 2305	Instrumentation and Data Acquisition Lab	1
MEE 3117	Computer-Aided Mechanical Design	3
MEE 3301	Machine Theory and Design	3
MEE 3305	Materials Laboratory	1
MEE 3506	Fluid Mechanics Laboratory	1
MEE 4177	Design and Realization of a Mechanical System	2
MEE 4572	Heat and Mass Transfer	3
Select one of the following:		4
MEE 4422 & MEE 4405	Mechanical Vibrations and Vibrations Laboratory ¹	
MEE 4571 & MEE 4506	Advanced Thermodynamics and Combustion and Energy Conversion Laboratory ¹	
Mechanical Engineering Technical Electives		9
Required Engineering Courses		
ECE 2112	Electrical Devices & Systems I	3
ECE 2113	Electrical Devices & Systems I Lab	1
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology Honors Introduction to Engineering	3
ENGR 1102	Introduction to Engineering Problem Solving	3
ENGR 2196 or ENGR 2996	Technical Communication Honors Technical Communication	3
ENGR 2331 or ENGR 2931	Engineering Statics Honors Engineering Statics	3
ENGR 2332	Engineering Dynamics	3
ENGR 2333 or ENGR 2933	Mechanics of Solids Honors Mechanics of Solids	3
ENGR 3001	Engineering Economics	3
ENGR 3201	Material Science for Engineers	3
ENGR 3553 or ENGR 3953	Mechanics of Fluids Honors Mechanics of Fluids	3
ENGR 3571	Classical and Statistical Thermodynamics	3
ENGR 4296 or ENGR 4996	Capstone Senior Design Project (WI) Honors Capstone Senior Design Project	3
Free Elective		6
Required Cooperative Education Courses		
ENGR 2181	Co-Op Work Experience I	3
ENGR 3181	Co-Op Work Experience II	3
Total Credit Hours		134

1

Students in the **Bachelor of Science in Mechanical Engineering Program** must take either of the following sequences of courses:

- MEE 4422 and MEE 4405
- OR**
- MEE 4571 and MEE 4506.

Suggested Academic Plan

Below is the five-year academic plan for the Co-Op program leading to the Bachelor of Science in Mechanical Engineering. The minimum requirement for graduation is 134 semester hours.

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Mechanical Engineering with Concentration in Cooperative Education Program

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology or Honors Introduction to Engineering	3
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
MEE 1117	Fundamentals of Mechanical Engineering Design	2
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	4
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		17
Spring		
Select one of the following:		3
CHEM 1035 or CHEM 1031	Chemistry for Engineers General Chemistry I	
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I or Honors Chemical Science Laboratory I	1
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	4
ENGR 1102	Introduction to Engineering Problem Solving	3
MEE 1305	Machine Shop Laboratory	1
Credit Hours		16
Year 2		
Fall		
ECE 2112	Electrical Devices & Systems I	3
ECE 2113	Electrical Devices & Systems I Lab	1
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
ENGR 2331 or ENGR 2931	Engineering Statics or Honors Engineering Statics	3
ENGR 2196 or ENGR 2996	Technical Communication or Honors Technical Communication	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		17
Spring		
ENGR 2332	Engineering Dynamics	3
MEE 2305	Instrumentation and Data Acquisition Lab	1
MATH 2041 or MATH 2941	Differential Equations I or Honors Differential Equations I	3
ENGR 3571	Classical and Statistical Thermodynamics	3
ENGR 2333 or ENGR 2933	Mechanics of Solids or Honors Mechanics of Solids	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		16

Year 3**Fall**

MEE 3011	Analysis and Computation of Linear Systems in Mechanical Engineering	3
MEE 3301	Machine Theory and Design	3
MEE 3305	Materials Laboratory	1
ENGR 3001	Engineering Economics	3
ENGR 3201	Material Science for Engineers	3
GenEd Breadth Course		3

Credit Hours**16****Spring**

ENGR 3553 or ENGR 3953	Mechanics of Fluids or Honors Mechanics of Fluids	3
MEE 3117	Computer-Aided Mechanical Design	3
MEE 3506	Fluid Mechanics Laboratory	1
Mechanical Engineering Technical Elective #1		3
Mechanical Engineering Technical Elective #2		3
GenEd Breadth Course		3

Credit Hours**16****Year 4****Fall**

ENGR 2181	Co-Op Work Experience I	3
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Credit Hours**3****Spring**

ENGR 3181	Co-Op Work Experience II	3
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Credit Hours**3****Year 5****Fall**

MEE 4177	Design and Realization of a Mechanical System	2
MEE 4572	Heat and Mass Transfer	3
Select one of the following: ¹		4
MEE 4422 & MEE 4405	Mechanical Vibrations and Vibrations Laboratory	
MEE 4571 & MEE 4506	Advanced Thermodynamics and Combustion and Energy Conversion Laboratory	

GenEd Breadth Course		3
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Free Elective		3
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Credit Hours**15****Spring**

ENGR 4296 or ENGR 4996	Capstone Senior Design Project or Honors Capstone Senior Design Project	3
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Mechanical Engineering Technical Elective #3		3
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GenEd Breadth Course		3
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GenEd Breadth Course		3
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Free Elective		3
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Credit Hours**15****Total Credit Hours****134****Approved Technical Electives**

Code	Title	Credit Hours
BIOE 3719	Introduction to Bioengineering	3
BIOE 3725	Cell Biology for Engineers	3
BIOE 4741	Biomaterials for Engineers	3

CEE 3048	Probability, Statistics & Stochastic Methods	3
CEE 3711	Environmental Engineering	3
ECE 3822	Engineering Computation II (Note: permission of instructor required)	3
ENGR 4116	Spacecraft Systems Engineering	3
ENGR 4121	Design of Experiments	3
ENGR 4201	Micro- to Nano-sized Machines	3
ENGR 4314	Continuum Mechanics	3
ENGR 4576	Computational Fluid Dynamics	3
MEE 3185	Mechanical Engineering Summer Work Experience	3
MEE 3302	Kinematics of Mechanisms	3
MEE 3421	Dynamic Systems	3
MEE 3422	Modeling and Control of Electromechanical Systems	3
MEE 4040	Special Topics	1-4
MEE 4172	High-Speed Imaging and Analysis for Engineering Applications	3
MEE 4173	Data Acquisition and Analysis for Engineers	3
MEE 4212	Tribology and Surface Engineering	3
MEE 4311	Mechanics of Composite Materials	3
MEE 4314	Impact and Crashworthiness	3
MEE 4411	Introduction to Mobile Robotics (Note: MEE 4412 is prerequisite)	3
MEE 4412	Modern Dynamics for Robotics	3
MEE 4413	Robotic Manipulation (Note: MEE 4412 is prerequisite)	3
MEE 4414	Optimization and Control of Mechanical Systems (Note: MEE 3422 is prerequisite)	3
MEE 4422 & MEE 4405	Mechanical Vibrations and Vibrations Laboratory	4
MEE 4512	Compressible Fluid Dynamics	3
MEE 4513	Aerodynamics	3
MEE 4571 & MEE 4506	Advanced Thermodynamics and Combustion and Energy Conversion Laboratory	4
MEE 4574	Heating, Ventilating, and Air Conditioning	3
MEE 4575	Renewable and Alternative Energy	3
MEE 4577	Power Generation and Storage Technologies	3
MEE 4578	Fundamentals of Combustion	3
MEE 4643	Manufacturing Engineering	3
MEE 4731	Cardiovascular Fluid Dynamics	3

Mechanical Engineering Technology BSMET

Overview

The **Bachelor of Science in Mechanical Engineering Technology** is offered by the Department of Engineering, Technology and Management. This program provides trained applied mechanical engineering practitioners for small and medium manufacturing and service firms. This market aligns well with the traditional history of Mechanical Engineering Technology education that suggests a greater emphasis on hands-on laboratory experiences and less emphasis on advanced engineering theory. Small to medium firms often require engineering talent that can span the boundary between engineering design and the actual production operations. There are over 1,000 manufacturing firms in the 11-county Greater Philadelphia region which are large enough to employ these versatile mechanical engineering technology graduates.

This diverse set of manufacturing and service firms are expected to prosper in the immediate to near future. Economic advantages in North America such as low energy costs and high productivity resulting from technology-based automation combined with rising wages in traditionally low-cost countries have combined to not only stem the loss of North American manufacturing jobs to Asia but to reverse the trend in a process referred to as re-shoring.

It should be noted that the future career prospects of Bachelor of Science in Mechanical Engineering Technology graduates are not significantly different from the prospects of more traditional engineering disciplines.

Campus Location: Main

Program Code: EN-MENT-BSME

Contact Information

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 liliana.schwartz@temple.edu

Learn more about the Mechanical Engineering Technology program.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

Code	Title	Credit Hours
ENGR 2196 or ENGR 2996	Technical Communication Honors Technical Communication	3
ENGT 4196	Capstone Project	3

College and Major Requirements

Code	Title	Credit Hours
Required Math & Basic Science Courses		
MATH 1022	Precalculus	4
MATH 1031	Differential and Integral Calculus	4
ISE 2101	Applied Statistical Methods for Industrial and System Engineers	3
PHYS 1021	Introduction to General Physics I	4
PHYS 1022	Introduction to General Physics II	4
CHEM 1031 or CHEM 1951	General Chemistry I Honors General Chemical Science I	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I Honors Chemical Science Laboratory I	1
Required General Education Courses		
Select one of the following:		4
ENG 0802	Analytical Reading and Writing	
ENG 0812	Analytical Reading and Writing: ESL	
ENG 0902	Honors Writing About Literature	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life Honors Intellectual Heritage I: The Good Life	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good Honors Intellectual Heritage II: The Common Good	3
GenEd 08xx or 09xx (U.S. Society)		3
GenEd 08xx or 09xx (Global/World Society)		3
GenEd 08xx or 09xx (Human Behavior)		3
GenEd 08xx or 09xx (Arts)		3
GenEd 08xx or 09xx (Race and Diversity)		3
Required Economics and Communication Courses		

ECON 1101 or ECON 1901 or ECON 1102 or ECON 1902	Macroeconomic Principles Honors Macroeconomic Principles Microeconomic Principles Honors Microeconomic Principles	3
CSI 1111 or CSI 1911	Introduction to Public Speaking Honors Introduction to Public Speaking	3
Required Engineering Technology Courses		
ECE 2112	Electrical Devices & Systems I	3
ECE 2113	Electrical Devices & Systems I Lab	1
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology Honors Introduction to Engineering	3
ENGR 1117	Engineering Graphics	2
ENGR 2196 or ENGR 2996	Technical Communication Honors Technical Communication	3
ENGR 3001	Engineering Economics	3
ENGR 3033	Entrepreneurial Engineering	3
ENGT 2322	Applied Strength of Materials	3
ENGT 2331	Applied Engineering Statics	3
ENGT 2521	Applied Fluid Mechanics	3
ENGT 3201	Applied Materials Technology	3
ENGT 3323	Applied Dynamics	3
ENGT 3532	Thermodynamics	3
ENGT 3651	Manufacturing Control Systems	3
ENGT 3652	CAD/CAM/CNC	3
ENGT 3661		3
ENGT 4119	Professional Seminar	1
ENGT 4196	Capstone Project	3
ENGT 4342	Machine Elements	3
ENGT 4532	Heating, Ventilating, and Air Conditioning	3
ISE 2102	Production Process Design and Laboratory	4
ISE 3101	Product Quality Assurance	3
MEE 2305	Instrumentation and Data Acquisition Lab	1
Technical Elective #1		3
Technical Elective #2		3
Free Elective		3
Total Credit Hours		126

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Mechanical Engineering Technology

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MATH 1022	Precalculus	4
CHEM 1031 or CHEM 1951	General Chemistry I or Honors General Chemical Science I	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I or Honors Chemical Science Laboratory I	1
ENGR 1101 or ENGR 1901	Introduction to Engineering & Engineering Technology or Honors Introduction to Engineering	3

ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		15
Spring		
MATH 1031	Differential and Integral Calculus	4
ENGR 1117	Engineering Graphics	2
PHYS 1021	Introduction to General Physics I	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
ENGT 2331	Applied Engineering Statics	3
CSI 1111 or CSI 1911	Introduction to Public Speaking or Honors Introduction to Public Speaking	3
PHYS 1022	Introduction to General Physics II	4
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Free Elective		3
Credit Hours		16
Spring		
ENGT 2322	Applied Strength of Materials	3
ENGT 2521	Applied Fluid Mechanics	3
ECE 2112	Electrical Devices & Systems I	3
ECE 2113	Electrical Devices & Systems I Lab	1
Select one of the following:		3
ECON 1101	Macroeconomic Principles	
ECON 1901	Honors Macroeconomic Principles	
ECON 1102	Microeconomic Principles	
ECON 1902	Honors Microeconomic Principles	
GenEd Breadth Course		3
Credit Hours		16
Year 3		
Fall		
ENGR 3033	Entrepreneurial Engineering	3
ENGT 3661		3
ISE 2101	Applied Statistical Methods for Industrial and System Engineers	3
ISE 2102	Production Process Design and Laboratory	4
GenEd Breadth Course		3
Credit Hours		16
Spring		
ENGT 3201	Applied Materials Technology	3
ENGT 3532	Thermodynamics	3
ENGT 3652	CAD/CAM/CNC	3
ENGT 4119	Professional Seminar	1
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16

Year 4**Fall**

ENGR 2196 or ENGR 2996	Technical Communication or Honors Technical Communication	3
ENGR 3001	Engineering Economics	3
ENGT 3323	Applied Dynamics	3
ENGT 3651	Manufacturing Control Systems	3
MEE 2305	Instrumentation and Data Acquisition Lab	1
Technical Elective #1		3

Credit Hours	16
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Spring

ENGT 4196	Capstone Project	3
ENGT 4342	Machine Elements	3
ENGT 4532	Heating, Ventilating, and Air Conditioning	3
ISE 3101	Product Quality Assurance	3
Technical Elective #2		3

Credit Hours	15
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Total Credit Hours	126
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Approved Technical Electives

Code	Title	Credit Hours
EET 3276	Digital Logic Circuits	4
EET 3277	Microcomputer Systems	4
EET 3278	Digital Logic Circuits & Microprocessors	4
ENGT 4040	Special Topics	1 to 5
ENGT 4641	Production Tooling	3
ENGT 4642	Quality Control	3
ENGT 4643	Fundamentals of Manufacturing	3
ISE 3101	Product Quality Assurance	3
ISE 4101	Human Factors (Ergonomics)	3
MET 4671	Computer Integrated Manufacturing Systems	3
ART 1401	Introduction to Jewelry for Non-Tyler BFA Students	3

Fox School of Business and Management

Overview

Established in 1918, Temple University's Fox School of Business and Management has a distinguished tradition of preparing business leaders, professionals and entrepreneurs for successful careers.

Accreditation

Accredited by AACSB International—Association to Advance Collegiate Schools of Business—in 1934, the Fox School offers BBA, BS, MBA, Executive MBA, International MBA, Online MBA, MBA/MS, MS, PhD and DBA programs on campuses throughout the region and around the world.

Mission Statement

The Fox School of Business and Management transforms our students into responsible professionals and leaders through engagement with Fox communities committed to lifelong learning, service and the advancement of management practice.

Vision

To transform student lives, develop leaders and impact our local and global communities through excellence and innovation in education and research.

Values

Our shared values guide our actions and describe how we behave in the world. These values are the underpinning of our culture and the essence of our mission. Within the Fox School, we declare the following to be our guiding values.

- **Collaboration:** We work together to achieve common objectives, and we recognize, reward and encourage cross-disciplinary and multi-stakeholder efforts.
- **Diversity and Inclusion:** We encourage and respect diversity in all forms and perspectives, and we create an inclusive, welcoming environment where everyone is emboldened to reach their full potential.
- **Empowerment:** We support, recognize and reward people by providing them with the tools and resources they need to learn, develop and succeed. In so doing, we challenge and encourage one another to persevere and excel in these pursuits.
- **Ethics and Integrity:** We create an atmosphere where trust, honesty and transparency are expected, valued and practiced.
- **Innovation:** We embrace innovative thinking, unique action and challenge norms while seeking solutions that solve problems and have a positive impact on our community.

Culture Statement

The Fox School is home to a community focused on excellence in the creation, application and dissemination of knowledge. The Fox School thrives on collegiality, collaboration and competition, guided by a strong sense of ethics and trust. We foster transparency, open communication and inclusion. Grounded in the power of our values, we combine thought leadership with an entrepreneurial spirit to develop future leaders. We reward innovation and encourage everyone to be forward-thinking, entrepreneurial, action-oriented and empowered. Our community is strong, diverse, connected and proud.

Learning Goals and Assurance of Learning

The four main learning goals for the Bachelor of Business Administration Program seek to assure students will:

- **Demonstrate business knowledge needed to make business decisions.**
 - Apply a core body of discipline-specific knowledge to business situations and problems.
- **Apply critical thinking skills to business decisions.**
 - Use integrated business knowledge to identify problems, generate solutions, and develop reasoned conclusions.
 - Understand the ethical, legal, and social responsibilities of individuals and organizations.
- **Apply quantitative reasoning skills to make recommendations and business decisions.**
 - Apply quantitative analysis and interpretation to business problems.
 - Use data to analyze business decisions.
 - Use software to analyze and implement business decisions.
- **Communicate Professionally.**
 - Demonstrate professional business writing skills.
 - Demonstrate professional business presentation skills.

Academic Departments

- The Department of Accounting provides intensive study of all areas of accounting—financial accounting, management, accounting, auditing, taxation and data analytics—to provide students a competitive edge in a variety of career opportunities.

- The Department of Finance offers various programs in finance, financial planning, and real estate, which combine fundamental knowledge and practical skills and prepare students for successful careers in asset management, commercial and investment banking, wealth management, corporate sector, consulting, and real estate.
- The Department of Management supports four undergraduate majors in Business Management, Entrepreneurship and Innovation Management, Human Resource Management, and International Business as well as graduate programs.
- The Department of Management Information Systems strives to be a worldwide leader in transformative research and teaching on the design, use and effects of information technology in a digital world.
- The Department of Marketing offers a wide range of undergraduate and graduate programs in marketing designed to equip students with the ability to solve problems, think critically and communicate clearly.
- The Department of Risk, Actuarial Science, and Legal Studies transforms student lives, develops leaders in risk management, actuarial science, healthcare management, and the legal professions, and has a positive impact on our local, national and global communities through excellence and innovation in education and research.
- The Department of Statistics, Operations, and Data Science strives to be an internationally recognized leader in the transformation of students and faculty into leaders in statistics, operations and data science, and to develop tools, methods and theory that support principled, data-driven decisions benefiting society, government and business.

Special Facilities and Programs

Center for Student Professional Development

The Center for Student Professional Development (CSPD) is an active partner in your collegiate experience at the Fox School of Business and Management. Besides academic preparation, professional development is important to your preparation for life after graduation. Consequently, the Fox School has integrated a unique professional development component into both the undergraduate and graduate curricula.

Rather than simply focus on the traditional career elements such as résumé development and interview strategies, etc., CSPD strives to differentiate you by taking a multi-faceted approach with a focus on personal development, career/industry awareness and impression management. This strategy in combination with job search coaching will truly make a difference in terms of your marketability.

CSPD services/resources (in-person and virtual) include:

- BA 2101 Professional Development Strategies course (BBA);
- One-on-one career/professional development coaching sessions;
- Group workshops on career/professional development topics;
- On-line career resources/tools including interview preparation, resume feedback, industry research, etc.;
- Web-based career management system – Handshake;
- Industry (Mock) interviews;
- Career Connections (job fairs);
- Networking events with employers/alumni; and
- Executive speaker series.

You have already invested in your future by pursuing a business degree from the Fox School; however, a degree alone will not land you that ideal job. Take the next step and make your investment pay off by taking advantage of the resources CSPD has to offer and start creating your "dream job" strategy from day one!

Business Communication Center

The mission of the Business Communication Center is to help Fox School of Business and Management and School of Sport, Tourism and Hospitality Management students become better communicators. Clear, concise, compelling communication is essential for success in business. The center provides one-on-one tutoring (in person or online) to help all Fox and STHM students with course assignments, presentations, scholarship essays and cover letters.

Internship Programs

The Center for Student Professional Development and Student Professional Organizations work in partnership with employers to connect students with a wide variety of internship positions, both full and part-time. For more information on internship opportunities, please contact the Center for Student Professional Development at 215-204-2371 or foxcspd@temple.edu.

Honors Program

The Fox School of Business and Management offers a stimulating Honors Program for students who demonstrate exceptional ability and achievement in their studies. Honors students receive personalized attention from dedicated honors staff. They are able to register early for select classes that are smaller in size and taught by top professors. They'll also have access to a student professional organization just for honors students that will help hone their professional development, give them opportunities to get involved with community service, and form close bonds that will last beyond graduation.

High school students are automatically reviewed for admission at the time of application to the university. Continuing/transfer students with at least a 3.70 grade point average are encouraged to apply. All students must first apply and be accepted to the University Honors Program. The program consists of a minimum number of academic classes. Students earn an Honors transcript designation upon completion of the program.

For more information about the Fox Honors Program, please contact Lori Roseman, Director, 215-204-4101, Alter Hall LL30 or visit the Fox Honors web site.

Honorary Societies, Awards and Student Associations

Beta Gamma Sigma

The Gamma Chapter of Beta Gamma Sigma, the international honorary business society, was installed in the Fox School of Business and Management in March 1935. Membership is limited to standing-year juniors and seniors who are in the upper 10 percent of their class. Eligible students will be notified by the Dean in March and invited to attend a special induction ceremony in May. Please contact Lori Roseman at 215-204-4101 for more information.

Alpha Mu Alpha

This national marketing honorary society was established by the American Marketing Association in 1981 to recognize and reward the scholastic achievement of marketing students as well as academic excellence in the discipline and science of marketing. To be invited to join Alpha Mu Alpha, marketing majors must maintain a minimum GPA of 3.25. Inductions are made during the final semester for graduating students in Spring and Fall. For more information, please contact the AMA Faculty Advisor, Sheri Lambert at sheri.lambert@temple.edu.

Beta Alpha Psi

This national honorary fraternity was established for students of accountancy, finance and information systems. For more information, please contact the officers of Beta Alpha Psi at 215-204-8889 or view their Beta Alpha Psi web site.

Gamma Iota Sigma

This is an international Risk Management, Insurance, and Actuarial Science fraternity. The purpose of the Sigma Chapter of Gamma Iota Sigma is to encourage, establish and enhance the professionalism of students in the Risk Management, Healthcare Risk Management and Actuarial Science programs. Contact R.B. Drennan in the Risk, Actuarial Science, and Legal Studies Department at 215-204-8894 or contact the GIS Officers at 215-204-9368.

CAFSBM Awards

<https://www.fox.temple.edu/academics/advising/awards-scholarships>

Each Spring, the Fox School of Business and Management opens its scholarship applications for matriculated Fox students; the application cycle opens on February 1 and ends on February 28. Students are notified of awarded scholarships before the end of the Spring term.

Fox departmental scholarships run on different cycles depending upon the department. Please check with the department chair for additional information.

Student Organizations

<https://www.fox.temple.edu/student-professional-organizations/>

As part of the student's overall professional development, all Fox students are strongly encouraged to participate in student organizations, professional associations, and academic fraternities. All major areas of concentration in the undergraduate curriculum have an associated organization. Freshmen and sophomores can utilize the organizations to find out more about the major fields of study available to them. The student organizations provide an opportunity for students to meet one another outside the classroom as well as to meet practicing professionals from industry and government. Many organizations have an array of social activities that range from fund raising and community service projects to evening gatherings.

The Fox School of Business and Management has the following student professional organizations:

- American Marketing Association (AMA)
- Ascend
- Association for Information Systems (AIS)
- Association of Latino Professionals for America (ALPFA)
- Beta Alpha Psi (BAP)
- Business Honors Student Association (BHSA)
- Business Management Organization (BMO)
- Chutzpah
- Entrepreneurial Students Association (ESA)
- Fashion & Business
- Financial Planning Association (FPA)

- Fox Accounting Association (FAA)
- Fox African American Business Association (FAABA)
- Fox for Balance (FFB)
- Fox Professional Speakers (FPS)
- Gamma Iota Sigma (GIS)
- Institute of Management Accountants (IMA-T)
- International Business Association (IBA)
- National Association of Black Accountants (NABA)
- Net Impact
- Phi Alpha Delta (PAD)
- Phi Beta Lambda (PBL)
- Professional Sales Organization (PSO)
- TU Supply Chain Association (TUSCA)
- TU Blockchain Club (TUBC)
- Temple Consulting Club (TCC)
- Temple Economics Society (TES)
- Temple Finance Association (TFA)
- Temple Real Estate Organization (TREO)
- TU Society for Human Resource Management (TUSHRM)
- TU American Statistical Organization (TUAmStat)
- Women in Finance (WiFi)

Please contact the College Council Officers at 215-204-6660 for more information about student organizations on the Main Campus. At the Ambler Campus, please call 267-468-8100.

Fox School of Business College Council

The College Council is comprised of student leaders who are active members in Fox student organizations, associations, and fraternities. The council's role is to assist the individual student organizations in recruiting members, obtaining funding, sponsoring activities, identifying outside speakers, and communicating with students. The College Council sponsors volunteer opportunities, student organization fairs, and social events for all Fox students. The council also works closely with the dean's office and the Center for Student Professional Development to identify issues that are of concern to students and the student organizations. To contact the Main Campus college council, please call 215-204-6660. At the Ambler Campus, please call 267-468-8100.

Dean

Larry Hunter
Alter Hall, Room 362
1801 Liacouras Walk
215-204-7676

www.fox.temple.edu

Student Contact Information

Charles M. Allen
Associate Vice Dean, Undergraduate Programs
Alter Hall, Room 369
215-204-8122
callen@temple.edu

Undergraduate Programs

- Accounting BBA (p. 807)
- Accounting BBA with Data Analytics Concentration (p. 812)
- Accounting Minor (p. 816)
- Actuarial Science BBA (p. 817)
- Business Analytics Minor (p. 821)
- Business Basics Certificate (p. 822)
- Business Management BBA (p. 822)

- Business Minor (p. 826)
- Business Plus Certificate (p. 827)
- Corporate Compliance and Regulatory Policy Minor (p. 828)
- Digital Marketing Minor (p. 829)
- Economics BBA (p. 830)
- Economics Minor (p. 834)
- Entrepreneurship and Innovation Management BBA (p. 835)
- Entrepreneurship and Innovation Management Certificate (p. 840)
- Entrepreneurship and Innovation Management Minor (p. 842)
- Finance BBA (p. 844)
- Finance Minor (p. 849)
- Financial Planning BBA (p. 850)
- General Business Studies Minor (p. 853)
- Healthcare Management Minor (p. 855)
- Human Resource Management BBA (p. 856)
- International Business Administration Minor (p. 861)
- International Business BBA with International Economics Concentration (p. 863)
- International Business BBA with International Entrepreneurship Concentration (p. 867)
- International Business BBA with International Finance Concentration (p. 872)
- International Business BBA with International Marketing Concentration (p. 877)
- International Business BBA with International Sales and Business Development Concentration (p. 881)
- International Business BBA with International Supply Chain Management, Transportation and Logistics (p. 885)
- Legal Studies BBA (p. 890)
- Legal Studies Minor (p. 893)
- Management Information Systems BBA (p. 894)
- Management Information Systems Certificate (p. 898)
- Management Information Systems Minor (p. 899)
- Marketing BBA (p. 900)
- Marketing Minor (p. 904)
- Organizational Leadership Minor (p. 905)
- Real Estate BBA (p. 906)
- Real Estate Minor (p. 910)
- Risk Management and Insurance BBA with Healthcare Risk Management Concentration (p. 911)
- Risk Management and Insurance BBA with Managing Corporate Risk Concentration (p. 914)
- Risk Management and Insurance BBA with Managing Human Capital Risk Concentration (p. 917)
- Sales Minor (p. 921)
- Statistical Science and Data Analytics BS (p. 922)
- Statistical Science and Data Analytics Minor (p. 926)
- Supply Chain Management BBA (p. 927)
- Supply Chain Management Minor (p. 930)

Academic Policies and Regulations

The university policies (p. 1835) and regulations apply to all undergraduate students and provide a framework within which schools and colleges may specify further conditions or variations appropriate to students in their courses or programs. Policies specific to FSBM are as follows:

Transfer Credits

Business courses taken at colleges or universities which are not members of The Association to Advance Collegiate Schools of Business (AACSB) will be accepted for transfer business credits only if they are equivalent to the following:

Code	Title	Credit Hours
ACCT 2101	Financial Accounting	3
ACCT 2102	Managerial Accounting	3

ACCT 2103	Financial and Managerial Accounting for Decision Making	4
AS 1501	Actuarial Probability	3
BA 1103	Legal and Ethical Reasoning in Business	3
BA 2501	Turning Numbers into Knowledge: Visualizing Data	3
BA 2502	Business Analytics: Modern Data Science Techniques	3
ECON 1101	Macroeconomic Principles	3
ECON 1102	Microeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
HRM 2501	Introduction to Human Resource Management	3
LGLS 1101	Legal Environment of Business	3
IB 2501	Fundamentals of Asian Business	3
IB 2502	Fundamentals of Latin American Business	3
IB 2503	Fundamentals of European Business	3
IB 2504	Fundamentals of Business in Africa and the Middle East	3
LGLS 1102	Law of Contracts	3
MIS 2101	Digital Systems	3
MKTG 2101	Marketing Management	3
RMI 2101	Introduction to Risk Management	3
RMI 2501	Fundamentals of Personal Financial Planning	3
STAT 1001	Quantitative Methods for Business I	3
STAT 1102	Quantitative Methods for Business II	4
STAT 2103	Statistical Business Analytics	4

Specific articulation agreements with local colleges may expand on this list. View current articulation agreements.

Additional business credits are accepted from colleges that are members of the AACSB. It should be understood that it is possible for a student to transfer in a large number of credits which, while accepted by the university, may exceed the maximum number of elective credits applicable to the degree.

Permission to Complete Courses at Another Institution

Consistent with the university policy students will not receive transfer credit for courses taken at another institution while they are matriculated at Temple University unless prior permission has been obtained. The required **Permission to Take Courses Elsewhere workflow** is available under the University Forms channel within Student Tools tab in TUportal. For more information, refer to Permission to Complete a Course at another Institution after Matriculation (p. 1858).

Graduation Requirements

The Fox School of Business and Management requires students to complete a Graduation Review prior to registration for their final semester or, if active in Fly in 4, prior to their senior year. In addition, the University requires students to submit an application for graduation using the University online graduation application in Self Service Banner at the start of their last term in their academic program. Additional graduation information is available from the Office of the University Registrar.

Grade Point Average Requirement for Graduation

Fox students are required to attain a 2.0 (2.0 = C) average in all of their Temple coursework and in their major in order to graduate from the Fox School of Business and Management. Some courses may have specific minimum grade requirements for degree applicability. Please check current course descriptions and the section pertaining to your major for this information.

Residency Requirement

A minimum of 45 of the last 60 semester hours must be completed in the Fox School of Business and Management at Temple University in order to receive a degree. In addition, a minimum of 50% of the business courses and the majority of the requirements of a major must be completed at Temple University. For more information, see the Academic Residency Requirements (p. 1838).

Courses Inapplicable to Graduation Requirements

Credit is only awarded in academic subjects with a corresponding Temple department. Duplicate credit in the same course is not awarded in any case.

Students will not receive credits for lower-level courses after successful completion of higher-level courses in sequenced courses of study. This only applies to the First Year Writing sequence in English (ENG 0701-ENG 0802) and all courses in Mathematics and Foreign Languages. For example, after passing SPAN 1002, a student will not receive credits for SPAN 1001.

Semester hours earned in SRAP or ELECT, Preparatory Mathematics (formerly Mathematics 0001 or 0015), and lower-division (under 3000) Military Science courses do not yield academic credit toward the minimum total of 124.

Life Experience

The Fox School of Business and Management does not offer credits for life experiences. Please see Credit for Prior Learning (p. 1847) under the Academic Policies section of this *Bulletin* for information about advanced placement or CLEP examinations.

Co-Requisites and Prerequisites

Students may be de-enrolled from courses for which they do not meet prerequisites and co-requisites. (Please see the Prerequisites and Co-requisites (p. 1860) policy for more information.) Students are responsible for reviewing and abiding by all course prerequisites and co-requisites in the Course Catalog. The requirements are designed to assure that students are appropriately prepared to be successful in their courses. Prerequisites provide an efficient manner for students to register for the next course in a sequence for which they are prepared.

Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List (p. 1849) policy for specific GPA and credit-hour requirements.

Repeating Courses

University policy restricts the number of times students can enroll in the same course to three times. Permission is required to register for the third attempt of the same course and is not guaranteed for all Fox majors. Students should work closely with an academic advisor to review their options when required to repeat a course. Students who fail to complete a required major course listed in their academic program will be required to change to a different major. For more information, see Repeating a Course (p. 1860) and Policy 02.10.12.

Change of Program

Non-business students in their first semester at Temple or continuing students with 2.0 minimum cumulative GPA are eligible to request to change to a major in Fox. Information about the Fox Change of Program process is available on the Fox Advising web site.

Non-business students with a cumulative GPA below 2.0 are not eligible to change to Fox. Instead students can change to Division of University Studies until they earn the 2.0 minimum cumulative GPA. While enrolled in Division of University Studies students are eligible to take some lower-division business requirements.

Dismissal from Fox

In accordance with Temple's repeat policy, (p. 1860) students who fail to complete a "College Graduation Requirement" in three attempts will be required to change their program to one outside the Fox School of Business and Management.

Grievance Procedures

The Fox School of Business and Management Ombudsperson assists students in Fox to resolve problems and conflicts that might arise from the classroom, acting as mediator between faculty and students while promoting alternatives to more formal processes. The ombudsperson supports effective communication, cooperation, equity, and civility in all academic and scholastic settings. Students who believe they have been treated unfairly in an academic matter should first meet with the appropriate ombudsperson.

For more information, refer to grievance procedures or contact the Center for Undergraduate Advising at foxombud@temple.edu or 215-204-7672 for further information.

Non-Degree Seeking Student Policy

Students not formally admitted (p. 1857) to Temple University may take undergraduate courses numbered under 3000 in the Fox School of Business and Management. Undergraduate courses numbered above 3000 are open to visiting students who have completed a minimum of 60 credits, have met course prerequisites, and have written permission from their home institution. Students who have a baccalaureate degree and the prerequisites for the course desired may also enroll in advanced courses.

College Graduation Requirements

The Fox School of Business and Management offers two undergraduate degrees: a Bachelor of Business Administration (BBA) and a Bachelor of Science (BS). The BBA degree gives students a broad-based education, including foundation and chosen major coursework. The BS degree is for those students who wish for more specialized training in the field of Statistical Science and Data Analytics.

All Fox students must complete a minimum of two writing-intensive courses at Temple—BA 2196 and a writing-intensive course in the major. A minimum grade of C- is required in both writing-intensive requirements.

Second Majors, Minors, and Certificates

Students who choose to pursue a dual major in business can double-count a maximum of one course toward both majors. Students who choose to pursue one or more minors or certificates may not double-count courses already used to meet the requirements for a major or different minor or certificate.

Residency Requirements

A minimum of 45 of the last 60 semester hours must be completed in the Fox School of Business and Management at Temple University in order to receive a degree. In addition, a minimum of 50% of the business courses and the majority of the requirements of a major must be completed at Temple University.

Bachelor of Business Administration

The degree of Bachelor of Business Administration (B.B.A.) may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124 semester hours of credit with a minimum cumulative GPA of 2.0 overall and in the major. A minimum of 124 credit hours will be earned in the following four requirement categories:

- University General Education (GenEd) Requirements
- Fox School of Business & Management lower- and upper-division requirements
- Major requirements
- Electives

Students must follow the program requirements in effect at the time the major is declared or changed. Program requirements include both the College Graduation Requirements listed here and the courses required for the major listed in the Programs of Study. In addition, students need to complete the Fox Leadership Development Program minimum point requirement. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

University General Education Curriculum

The General Education curriculum (GenEd (p. 83)) is required for all students. Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

Bachelor of Business Administration Requirements

Lower-Division Foundation Requirements

Note: 1000-level courses are typically taken in freshman year; 2000-level courses are typically taken in sophomore year.

Code	Title	Credit Hours
ECON 1101	Macroeconomic Principles	3
ECON 1102	Microeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
BA 1103	Legal and Ethical Reasoning in Business ¹	3
STAT 1001	Quantitative Methods for Business I ²	3
STAT 1102	Quantitative Methods for Business II ²	4
STAT 2103	Statistical Business Analytics ^{3,4}	4
ACCT 2103	Financial and Managerial Accounting for Decision Making ⁵	4
BA 2501 or BA 2502	Turning Numbers into Knowledge: Visualizing Data Business Analytics: Modern Data Science Techniques	3
MIS 2101	Digital Systems	3
MKTG 2101	Marketing Management	3
BA 2101	Professional Development Strategies	1
BA 2196	Business Communications	3
RMI 2101	Introduction to Risk Management	3
Total Credit Hours		43

1

Transfer credit for LGLS 1101 will satisfy BA 1103.

2

Higher level courses may be recommended depending on the mathematics placement score or the student's intended major. Actuarial Science majors should refer to the math courses listed under the Actuarial Science major description.

3

Successful completion of this course will waive the General Education Quantitative Literacy requirement.

4

Transfer credits for STAT 2101 and STAT 2102 will satisfy STAT 2103. Students with transfer credit for STAT 2101 only should meet with an advisor to discuss options.

5

Transfer credits for ACCT 2101 and ACCT 2102 will satisfy ACCT 2103. Students with transfer credit for ACCT 2101 only should meet with an advisor to discuss options.

Note: In order to graduate, a grade of C- or better must be obtained in all FSBM lower-division requirements.

Upper-Division Foundation Requirements

Note: 3000-level courses are typically taken in the junior or senior year; 4000-level courses are taken in the senior year.

Code	Title	Credit Hours
FIN 3101	Financial Management ¹	3
MSOM 3101	Operations Management	3
BA 4102	Strategic Management	3
Select three business electives ²		9
Total Credit Hours		18

1

Actuarial Science majors must take AS 2503 instead of FIN 3101.

2

2000-3999 electives can be selected from: ACCT, AS, BA, ECON, FIN, HRM, IB, LGLS, MIS, MKTG, RE, RMI, STAT, SCM, SGM. Please see your advisor for elective suggestions that match your career objectives.

Note: In order to graduate, a grade of C- or better must be obtained in all FSBM upper-division requirements.

Major Requirements

Major requirements are determined by the effective semester of their declaration and students should declare their majors upon the completion of 60 credits in consultation with their academic advisors. Major requirements include both the College Graduation Requirements listed above and the courses required for the major listed in the Programs of Study.

Bachelor of Business Administration majors are offered in the following programs: Accounting, Actuarial Science, Business Management, Economics, Entrepreneurship & Innovation Management, Finance, Financial Planning, Human Resource Management, International Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management & Insurance, and Supply Chain Management.

Twenty business courses (61 s.h.) are required as part of the lower- and upper-division foundation requirements for the B.B.A. program. In addition, a minimum of six business courses must be completed in the major. In completing the courses in the major, students will become competent in understanding critical business concepts and the practice of ethical decision-making, and demonstrate both effective written and oral communication and the ability to apply critical thinking to business problems. Students who choose to pursue a dual major in business can double-count a maximum of one course toward both majors. All Fox students must take a minimum of two writing-intensive courses at Temple. One of these courses will be BA 2196; the second will be a writing-intensive course in the major.

NOTE: Many upper-division foundation courses and major courses have prerequisites. Some prerequisites also include minimum grade requirements. Students are required to meet all prerequisites. Prerequisites will be strictly enforced and the school reserves the right to de-enroll students from courses when prerequisites have not been met. Course descriptions, including prerequisites, are found in the Courses section of the *Bulletin*.

Electives

Free electives: Students who have satisfied all of the requirements for GenEd, the Fox School Foundation, and the major will need additional credits to achieve the 124 credit minimum required for graduation. These credits may be taken in either business or non-business courses. Students

are encouraged to explore completing a minor, a certificate, or a second major for these credits. Students who choose to pursue a dual major in business can double-count a maximum of one course toward both majors. Students who choose to pursue one or more minors may not double-count courses already used to meet the requirements for a major or different minor.

Summary of Graduation Requirements

Code	Title	Credit Hours
Credits for B.B.A. Degree		
	University General Education	31
	Lower-Division Foundation Requirements	43
	Upper-Division Foundation Requirements	18
	Major Requirements	18
	Electives	14
Total Credit Hours		124

Bachelor of Science

The degree of Bachelor of Science (BS) may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 122 semester hours of credit with a minimum cumulative GPA of 2.0 overall and in the major. A minimum of 122 credit hours will be earned in the following four requirement categories:

- University General Education (GenEd) Requirements
- Core requirements
- Major requirements
- Electives

Students must follow the program requirements in effect at the time the major is declared or changed. Program requirements include both the College Graduation Requirements listed here and the courses required for the major listed in the Programs of Study. In addition, students need to complete the Fox Leadership Development Program minimum point requirement. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

University General Education Curriculum

The General Education curriculum (GenEd (p. 83)) is required for all students. Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

Bachelor of Science Requirements

Core Requirements

Code	Title	Credit Hours
BA 2104	Excel for Business Applications	1
ECON 1101	Macroeconomic Principles	3
or ECON 1901	Honors Macroeconomic Principles	
ECON 1102	Microeconomic Principles	3
or ECON 1902	Honors Microeconomic Principles	
BA 1103	Legal and Ethical Reasoning in Business	3
or BA 1903	Honors Legal and Ethical Reasoning in Business	
ACCT 2103	Financial and Managerial Accounting for Decision Making ¹	4
or ACCT 2903	Honors Financial and Managerial Accounting	
BA 2101	Professional Development Strategies	1
BA 2196	Business Communications	3
or BA 2996	Honors Business Communications	
BA 2502	Business Analytics: Modern Data Science Techniques	3
RMI 2101	Introduction to Risk Management	3
or RMI 2901	Honors Introduction to Risk Management	
MATH 1041	Calculus I	4
or MATH 1941	Honors Calculus I	

MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
STAT 2103 or STAT 2903	Statistical Business Analytics Honors Statistical Business Analytics	4
CIS 1051	Introduction to Problem Solving and Programming in Python	4
Total Credit Hours		40

1

Transfer credits for ACCT 2101 and ACCT 2102 will satisfy ACCT 2103. Students with transfer credit for ACCT 2101 only should meet with an advisor to discuss options.

Note: In order to graduate, a grade of C- or better must be obtained in all FSBM core requirements.

Major Requirements

Major requirements are determined by the effective semester of their declaration and students should declare their majors upon the completion of 60 credits in consultation with their academic advisors. Major requirements include both the College Graduation Requirements listed above and the courses required for the major listed in the Programs of Study. The Bachelor of Science major is offered in Statistical Science & Data Analytics. Requirements for the Statistical Science & Data Analytics major are available on the program's page (p. 923).

NOTE: Many core courses and major courses have prerequisites. Some prerequisites also include minimum grade requirements. Students are required to meet all prerequisites. Prerequisites will be strictly enforced and the school reserves the right to de-enroll students from courses when prerequisites have not been met. Course descriptions, including prerequisites, are found in the Courses section of the *Bulletin*.

Electives

Free electives: Students who have satisfied all of the requirements for GenEd, the core requirements, and the major requirements will need additional credits to achieve the 122 credit minimum required for graduation. These credits may be taken in either business or non-business courses. Students are encouraged to explore completing a minor, a certificate, or a second major for these credits. Students who choose to pursue a dual major in business can double-count a maximum of one course toward both majors. Students who choose to pursue one or more minors may not double-count courses already used to meet the requirements for a major or different minor.

Summary of Graduation Requirements

Code	Title	Credit Hours
Credits for B.S. Degree		
	University General Education	31
	Core Requirements	40
	Major Requirements	45
	Electives	6
Total Credit Hours		122

Professional Development Requirement: Fox Leadership Development Program (FLDP)

In an effort to ensure our future graduates are positioned for career advancement, the Fox School of Business and Management requires all undergraduate students to participate in the Fox Leadership Development Program (FLDP). Hosted by the Suitable web site, the FLDP will strengthen competencies that companies/recruiters regularly look for in potential employees. By participating in a robust year-long schedule of activities, students will be able to show fundamental skills in these competencies: Community Engagement, Ethics, Global/Cultural Awareness, Personal/Professional Development, and Financial Literacy.

The Fox School of Business and Management will expect all undergraduate students to earn 250 FLDP points by the end of each of their academic years. There are many low point activities (attending SPO meetings, speaker events, etc.) and numerous high point activities (internships, study abroad, etc.). Students will need to earn at least 20 points in each competency, but they can decide what they want to participate in. Once minimum point levels are reached in the competency areas, students will have the ability to earn remaining needed points in any area of specialization. They will also be able to "level up" in each competency area, displaying continual growth and development skill sets to potential employers. These demonstrated skills will also be viewable through the Comprehensive Learner Record (CLR).

For more information, please visit the Fox Leadership Development Program site.

Fox Laptop Mandate

All students are required to have their own laptop while in Fox. Students with laptops can use wired and wireless connections in many classrooms and labs, as well as throughout the buildings. Learn more about Fox's laptop policy.

Academic Advising

Center for Undergraduate Advising

Speakman Hall, Room 101
215-204-7672
www.fox.temple.edu/academics/advising

The Center for Undergraduate Advising provides in-person advising at Main Campus and virtually for all Ambler, Main, and Online Campus students.

The Main Campus office is generally open every weekday from 8:30 AM to 5:00 PM.

Our purpose is to provide quality academic advising services that empower students to make informed decisions about their education, projected career, and personal/professional life at Temple University. Students work collaboratively with our academic advising team to develop individual plans for academic success, interpret university policy, fully utilize campus resources, and engage in the process of reflection and decision making that will promote their achievement.

Fox Advising is dedicated to working with students at each academic level. **Freshman/Sophomore Advising** focuses on the transition to college life, major exploration within Fox, successful completion of the lower-division foundation requirements, and retention. **Junior/Senior Advising** focuses on ensuring students are making satisfactory progress in their major, have completed their graduation audit prior to their final semester, and are prepared to graduate. Junior and senior students are assigned an advisor based on their declared major. **Online Advising**, for students intending to complete a majority of their Bachelor of Business Administration degree online, prioritizes flexible scheduling, with the same high-quality focus on developmental support and comprehensive academic planning as the on-campus services. The following majors can be completed online: Accounting, Business Management, Human Resource Management, Marketing, and Supply Chain Management.

As active participants in the advising process, students bear the ultimate responsibility for making educational and career decisions. Therefore, we rely on students to be prepared with questions, to research options before they come to their meeting, and to refer to their advising notes both before and after advising meetings. Students are expected to know University Policies (p. 1835) and their program requirements as defined in their *Bulletin* and on their DARS report.

Advisors, in turn, strive to provide knowledgeable assistance to ensure students' accurate understanding of university and school policies, utilization of campus resources, interpretation of curriculum requirements, and timely completion of degree requirements. Students in Fox have several ways to meet with an academic advisor, including *Scheduled Appointments* on-campus or online for academic planning or daily *Same-Day Advising* for urgent matters.

Peer Advising

The Center for Undergraduate Advising is pleased to provide peer advising on Main Campus, comprised of undergraduate peer advisors recruited from among the best and brightest in the Fox School of Business and Management. Peer advisors provide the perspective of an upper-class student and are trained to assist business students to be successful by sharing their knowledge and personal strategies for academic success. For more information, visit Peer Advising or contact foxpeer@temple.edu.

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Accounting BBA

Overview

Offered by the Department of Accounting, the **Bachelor of Business Administration in Accounting** provides students with practical and theoretical knowledge that opens many employment opportunities in the accounting profession and business.

Accounting majors pursue careers in public accounting, corporations, consulting, government and not-for-profit institutions. The accounting curriculum provides students with the conceptual framework and theory of accounting, while building skills to analyze, plan and make decisions with both numerical and qualitative information. Using data analytics and cutting-edge technologies, students learn to evaluate financial data, and provide organizations with information and solutions to operate efficiently, effectively and ethically. Courses such as financial accounting, cost accounting, accounting information systems, taxation and auditing provide core knowledge in accounting. Elective courses offer the flexibility to pursue in-depth areas such as business analysis, information systems, advanced taxation or management accounting.

Accounting majors may complete an optional concentration in Data Analytics (p. 812).

Campus Locations: Main and Online

Program Code: BU-ACCT-BBA

Student Professional Organizations

Accounting majors are encouraged to join a professional student organization, such as:

- Ascend
- Association of Latino Professionals for America (ALPFA)
- Beta Alpha Psi (BAP--National Honorary Society)
- Fox Accounting Association
- Institute of Management Accountants - Temple Chapter (IMA-T)
- National Association of Black Accountants (NABA)

These student professional organizations offer numerous opportunities to Accounting majors to attend career development seminars, connect with Fox alumni, and network with prominent business leaders and industry practitioners.

Licensure/Certification

Certified Public Accountant (CPA)

Certification as a Certified Public Accountant (CPA) is very helpful but not always necessarily required for finding work in the accounting profession. To become a CPA in Pennsylvania, individuals must complete certain academic requirements, sit for and pass the Uniform CPA Exam (administered by the National Association of State Boards of Accountancy (NASBA)), and complete certain work requirements. To be eligible to sit for the Uniform CPA Exam, individuals must: (i) receive a bachelor's degree or higher from an accredited college or university; and (ii) complete at least 120 semester credits with at least 24 semester credits in accounting subjects, including accounting and auditing, business law, finance, macroeconomics, microeconomics, or tax subjects sanctioned by the State Board of Accountancy. The education requirements to sit for the Uniform CPA Exam in Pennsylvania are met by successfully completing the Fox BBA in Accounting degree (124 credit hours). However, before applying for certification as a CPA, individuals must also complete an additional 12 semester credits in accounting, auditing, and tax subjects (36 total) and complete a total of at least 150 credit hours.

PA candidates who graduate with at least 150 credits must complete one year (1,600 hours) of work experience through employment in government, industry, academia, or public practice within five years of the date of application for CPA certification.

Students pursuing CPA certification are encouraged to take ACCT 3531 and ACCT 3532 (if interested in tax specialization), ACCT 3533 (if interested in business analysis and reporting specialization), and ACCT 3534 (if interested in information and controls specialization).

<https://www.picpa.org/future-cpas/become-a-cpa>

Certified Management Accountant (CMA)

Certification as a Certified Management Accountant (CMA) is very helpful but not always necessarily required for finding work in the accounting profession. The CMA certification and eligibility requirements are administered by the Institute of Management Accountants (IMA). To become a CMA in all states, including Pennsylvania, individuals must fulfill all of the following requirements: (i) active membership in IMA; (ii) active CMA entrance fee; (iii) satisfy certain education requirements; (iv) satisfy certain experiential requirements; (v) successfully complete all required CMA examination parts; and (vi) comply with the IMA Statement of Ethical Professional Practice.

The educational requirements to become a CMA are met upon obtaining a bachelor's degree from Temple University (or any accredited college or university). Candidates must submit verification of education to ICMA within seven years of completing the CMA examination. The experiential requirements to become a CMA include the completion of two continuous years of professional experience in management accounting and/or financial management. This requirement may be completed prior to or within seven years of passing the examination. Teaching qualifies as related professional experience when it is full-time and at least 60% of the course load taught is accounting or finance above the principles level over a two-year period. Professional experience is expected to be gained in full-time employment. However, continuous part-time positions of 20 hours per week meeting the definition of qualified experience will count toward this requirement at a rate of one year of experience for every two years of part-time employment.

Students pursuing CMA certification are encouraged to take ACCT 4502 (management accounting specialization).

<https://www.imanet.org/en/IMA-Certifications/CMA-Certification>

Institute of Internal Auditors' Global Certifications

The Institute of Internal Auditors (IIA) offers two core global certifications: the Certified Internal Auditor® (CIA®) and the Certification in Risk Management Assurance® (CRMA®).

The education requirement to sit for either of the CIA or CRMA certification programs is an Associate's degree or higher from an institution of higher education.

Although work experience is required to become certified, candidates may apply to the certification program and sit for exams prior to obtaining the requisite work experience. However, candidates will not be certified until all program requirements have been met. Additionally, candidates must meet

the experience requirement within the program eligibility period of three years in order to receive certification. Work experience for the IIA's certification programs is based on the maximum level of education achieved, as indicated below:

CIA Experience Requirement per Educational Level:

- Master's degree or equivalent: 12 months of internal audit experience or equivalent.
- Bachelor's degree or equivalent: 24 months of internal audit experience or equivalent.
- Associate degree, three A-level certificates with a grade of C or higher, or equivalent: 60 months of internal audit experience or equivalent.

<https://www.theiia.org/en/certifications/cia/eligibility-requirements/>

CRMA Experience Requirement per Educational Level:

- The CRMA Experience Requirements are the same as those listed above for the CIA. It also requires passing part one of the CIA exam.

<https://www.theiia.org/en/certifications/crma/eligibility-requirements/>

Contact Information

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Learn more about the Bachelor of Business Administration in Accounting.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 795) for the Bachelor of Business Administration including the requirements of the major listed below. Accounting students must attain a 2.0 GPA in the major and a 2.0 cumulative GPA in order to graduate.

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of Accounting Major

Code	Title	Credit Hours
ACCT 2521	Cost Accounting	3
ACCT 3511	Intermediate Accounting I	3
ACCT 3512	Intermediate Accounting II	3
ACCT 3526	Accounting Information Systems	3
ACCT 3531	Federal Taxes on Income	3
ACCT 3596	Auditing ¹	3
ACCT 4501 or ACCT 4502	Accounting Analytics Senior Seminar Strategic Financial Management Accounting	3
Select one of the following:		3
ACCT 3532	Topics in Taxation	
ACCT 3533	Advanced Financial Accounting	
ACCT 3534	Information Systems and Controls for Accounting Professionals	

ACCT 3580	Special Topics - Accounting
ACCT 4501	Accounting Analytics Senior Seminar ²
ACCT 4502	Strategic Financial Management Accounting ³

Total Credit Hours **24**

1

Effective Fall 2018, ACCT 3526 is a prerequisite for ACCT 3596, and ACCT 3531 is a prerequisite for ACCT 4501. These changes affect all students regardless of catalog year.

2

If ACCT 4502 Strategic Financial Management Accounting is selected as the Accounting Capstone Course, students may select ACCT 4501 to satisfy the required accounting elective.

3

If ACCT 4501 Accounting Analytics Senior Seminar is selected as the Accounting Capstone Course, students may select ACCT 4502 to satisfy the required accounting elective.

Suggested Academic Plan

Bachelor of Business Administration in Accounting

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1		Credit Hours
Fall		
STAT 1001	Quantitative Methods for Business I	3
ECON 1101	Macroeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Breadth Course		3
		Credit Hours
		16
Spring		
STAT 1102	Quantitative Methods for Business II	4
ECON 1102	Microeconomic Principles	3
BA 1103	Legal and Ethical Reasoning in Business	3
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
GenEd Breadth Course		3
		Credit Hours
		16
Year 2		
Fall		
ACCT 2103	Financial and Managerial Accounting for Decision Making	4
STAT 2103	Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)	4
MIS 2101	Digital Systems	3
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
GenEd Breadth Course		3
		Credit Hours
		17
Spring		
BA 2101	Professional Development Strategies	1
BA 2196	Business Communications	3
Select one of the following: ¹		3
BA 2501	Turning Numbers into Knowledge: Visualizing Data	
BA 2502	Business Analytics: Modern Data Science Techniques	

ACCT 2521	Cost Accounting	3
ACCT 3511	Intermediate Accounting I	3
GenEd Breadth Course		3
Credit Hours		16
Year 3		
Fall		
MKTG 2101	Marketing Management	3
RMI 2101	Introduction to Risk Management	3
FIN 3101	Financial Management	3
MSOM 3101	Operations Management	3
ACCT 3512	Intermediate Accounting II	3
Credit Hours		15
Spring		
ACCT 3526	Accounting Information Systems	3
Business Elective ²		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Free Elective ³		3
Credit Hours		15
Year 4		
Fall		
BA 4102	Strategic Management	3
ACCT 3531	Federal Taxes on Income	3
ACCT 3596	Auditing	3
GenEd Breadth Course		3
Free Elective ⁴		3
Credit Hours		15
Spring		
ACCT 4501 or ACCT 4502	Accounting Analytics Senior Seminar or Strategic Financial Management Accounting	3
Select one of the following:		3
ACCT 3532	Topics in Taxation	
ACCT 3533	Advanced Financial Accounting	
ACCT 3534	Information Systems and Controls for Accounting Professionals ⁵	
ACCT 3580	Special Topics - Accounting	
ACCT 4501	Accounting Analytics Senior Seminar ⁶	
ACCT 4502	Strategic Financial Management Accounting ⁶	
Free Elective ⁵		3
Free Elective		3
Free Elective		2
Credit Hours		14
Total Credit Hours		124

1

Please check with your departmental advisor on which course is most appropriate for the major.

2

Because this major has six additional major credits (two classes), only three credits (one class) of business electives are needed to satisfy the upper-division foundation requirement. 2000-3999 electives can be selected from: ACCT, AS, BA, ECON, FIN, HRM, IB, LGLS, MIS, MKTG, RE, RMI, STAT, SCM, SGM. Please see your advisor for elective suggestions that match your career objectives.

3

Students pursuing CPA licensure are encouraged to take ACCT 3531 (if interested in tax specialization). Students pursuing CMA certification are encouraged to take ACCT 4502 (management accounting specialization).

4

Students pursuing CPA licensure are encouraged to take ACCT 3532 (if interested in tax specialization). Students pursuing CPA licensure are encouraged to take ACCT 3533 (if interested in business analysis and reporting specialization).

5

Students pursuing CPA licensure are encouraged to take ACCT 3534 (if interested in information and controls specialization).

6

Students who complete ACCT 4501 can take ACCT 4502 as an elective. Students who complete ACCT 4502 can take ACCT 4501 as an elective.

Accounting BBA with Data Analytics Concentration

Overview

Offered by the Department of Accounting, the Bachelor of Business Administration in Accounting provides students with practical and theoretical knowledge that opens many employment opportunities in the accounting profession and business.

Accounting majors pursue careers in public accounting, corporations, consulting, government and not-for-profit institutions. The accounting curriculum provides students with the conceptual framework and theory of accounting, while building skills to analyze, plan and make decisions with both numerical and qualitative information. Using data analytics and cutting-edge technologies, students learn to evaluate financial data, and provide organizations with information and solutions to operate efficiently, effectively and ethically. Courses such as financial accounting, cost accounting, accounting information systems, taxation and auditing provide core knowledge in accounting. Elective courses offer the flexibility to pursue in-depth areas such as business analysis, information systems, advanced taxation or management accounting.

The **Bachelor of Business Administration in Accounting with an optional Concentration in Data Analytics** is open to all accounting majors and is designed to develop skills in problem-solving, data management, data analysis, creating visualizations and communicating insights. New technologies, big data, artificial intelligence, machine-driven learning and other trends are transforming business and the accounting profession. The Certified Public Accountant (CPA) exam is evolving to reflect the technology changes and increased specialization in the profession. The Certified Management Accountant (CMA) certificate includes new technology and analytics. The Data Analytics Concentration in Accounting will further develop the skills necessary to prepare you to succeed as an accountant.

Campus Locations: Main and Online

Program Code: BU-ACCT-BBA

Student Professional Organizations

Accounting majors are encouraged to join a professional student organization, such as:

- Ascend
- Association of Latino Professionals for America (ALPFA)
- Beta Alpha Psi (BAP--National Honorary Society)
- Fox Accounting Association
- Institute of Management Accountants - Temple Chapter (IMA-T)
- National Association of Black Accountants (NABA)

These student professional organizations offer numerous opportunities to Accounting majors to attend career development seminars, connect with Fox alumni, and network with prominent business leaders and industry practitioners.

Licensure/Certification

Certified Public Accountant (CPA)

Certification as a Certified Public Accountant (CPA) is very helpful but not always necessarily required for finding work in the accounting profession. To become a CPA in Pennsylvania, individuals must complete certain academic requirements, sit for and pass the Uniform CPA Exam (administered by the National Association of State Boards of Accountancy (NASBA)), and complete certain work requirements. To be eligible to sit for the Uniform CPA Exam, individuals must: (i) receive a bachelor's degree or higher from an accredited college or university; and (ii) complete at least 120 semester credits with at least 24 semester credits in accounting subjects, including accounting and auditing, business law, finance, macroeconomics, microeconomics, or tax subjects sanctioned by the State Board of Accountancy. The education requirements to sit for the Uniform CPA Exam in Pennsylvania are met by successfully completing the Fox BBA in Accounting degree (124 credit hours). However, before applying for certification as a CPA, individuals must also complete an additional 12 semester credits in accounting, auditing, and tax subjects (36 total) and complete a total of at least 150 credit hours.

PA candidates who graduate with at least 150 credits must complete one year (1,600 hours) of work experience through employment in government, industry, academia, or public practice within five years of the date of application for CPA certification.

Students pursuing CPA certification are encouraged to take ACCT 3531 and ACCT 3532 (if interested in tax specialization), ACCT 3533 (if interested in business analysis and reporting specialization), and ACCT 3534 (if interested in information and controls specialization).

<https://www.picpa.org/future-cpas/become-a-cpa>

Certified Management Accountant (CMA)

Certification as a Certified Management Accountant (CMA) is very helpful but not always necessarily required for finding work in the accounting profession. The CMA certification and eligibility requirements are administered by the Institute of Management Accountants (IMA). To become a CMA in all states, including Pennsylvania, individuals must fulfill all of the following requirements: (i) active membership in IMA; (ii) active CMA entrance fee; (iii) satisfy certain education requirements; (iv) satisfy certain experiential requirements; (v) successfully complete all required CMA examination parts; and (vi) comply with the IMA Statement of Ethical Professional Practice.

The educational requirements to become a CMA are met upon obtaining a bachelor's degree from Temple University (or any accredited college or university). Candidates must submit verification of education to ICMA within seven years of completing the CMA examination. The experiential requirements to become a CMA include the completion of two continuous years of professional experience in management accounting and/or financial management. This requirement may be completed prior to or within seven years of passing the examination. Teaching qualifies as related professional experience when it is full-time and at least 60% of the course load taught is accounting or finance above the principles level over a two-year period. Professional experience is expected to be gained in full-time employment. However, continuous part-time positions of 20 hours per week meeting the definition of qualified experience will count toward this requirement at a rate of one year of experience for every two years of part-time employment.

Students pursuing CMA certification are encouraged to take ACCT 4502 (management accounting specialization).

<https://www.imanet.org/en/IMA-Certifications/CMA-Certification>

Institute of Internal Auditors' Global Certifications

The Institute of Internal Auditors (IIA) offers two core global certifications: the Certified Internal Auditor® (CIA®) and the Certification in Risk Management Assurance® (CRMA®).

The education requirement to sit for either of the CIA or CRMA certification programs is an Associate's degree or higher from an institution of higher education.

Although work experience is required to become certified, candidates may apply to the certification program and sit for exams prior to obtaining the requisite work experience. However, candidates will not be certified until all program requirements have been met. Additionally, candidates must meet the experience requirement within the program eligibility period of three years in order to receive certification. Work experience for the IIA's certification programs is based on the maximum level of education achieved, as indicated below:

CIA Experience Requirement per Educational Level:

- Master's degree or equivalent: 12 months of internal audit experience or equivalent.
- Bachelor's degree or equivalent: 24 months of internal audit experience or equivalent.
- Associate degree, three A-level certificates with a grade of C or higher, or equivalent: 60 months of internal audit experience or equivalent.

<https://www.theiia.org/en/certifications/cia/eligibility-requirements/>

CRMA Experience Requirement per Educational Level:

- The CRMA Experience Requirements are the same as those listed above for the CIA. It also requires passing part one of the CIA exam.

<https://www.theiia.org/en/certifications/crma/eligibility-requirements/>

Contact Information

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Learn more about the Bachelor of Business Administration in Accounting.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 795) for the Bachelor of Business Administration including the requirements of the major listed below. Accounting students must attain a 2.0 GPA in the major and a 2.0 cumulative GPA in order to graduate.

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Code	Title	Credit Hours
Major Requirements		
ACCT 2521	Cost Accounting	3
ACCT 3511	Intermediate Accounting I	3
ACCT 3512	Intermediate Accounting II	3
ACCT 3526	Accounting Information Systems	3
ACCT 3531	Federal Taxes on Income	3
ACCT 3596	Auditing	3
Select one of the following:		3
ACCT 3532	Topics in Taxation	
ACCT 3533	Advanced Financial Accounting	
ACCT 3534	Information Systems and Controls for Accounting Professionals	
ACCT 3580	Special Topics - Accounting	
ACCT 4502	Strategic Financial Management Accounting	
Concentration Requirements		
ACCT 4501	Accounting Analytics Senior Seminar	3
CIS 1051	Introduction to Problem Solving and Programming in Python	4
MIS 2502	Data and Analytics	3
Total Credit Hours		31

Suggested Academic Plan

Bachelor of Business Administration in Accounting with Optional Concentration in Data Analytics

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1		Credit Hours
Fall		
STAT 1001	Quantitative Methods for Business I	3
ECON 1101	Macroeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
Credit Hours		16

Spring		
STAT 1102	Quantitative Methods for Business II	4
ECON 1102	Microeconomic Principles	3
BA 1103	Legal and Ethical Reasoning in Business	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
ACCT 2103	Financial and Managerial Accounting for Decision Making	4
STAT 2103	Statistical Business Analytics ((waives GenEd Quantitative Literacy requirement))	4
MIS 2101	Digital Systems	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Credit Hours		17
Spring		
MKTG 2101	Marketing Management	3
BA 2101	Professional Development Strategies	1
BA 2196	Business Communications	3
Select one of the following: ¹		3
BA 2501	Turning Numbers into Knowledge: Visualizing Data	
BA 2502	Business Analytics: Modern Data Science Techniques	
ACCT 2521	Cost Accounting	3
ACCT 3511	Intermediate Accounting I	3
Credit Hours		16
Year 3		
Fall		
ACCT 3512	Intermediate Accounting II	3
FIN 3101	Financial Management	3
RMI 2101	Introduction to Risk Management	3
MSOM 3101	Operations Management	3
Free Elective		3
Credit Hours		15
Spring		
ACCT 3526	Accounting Information Systems	3
CIS 1051	Introduction to Problem Solving and Programming in Python	4
Free Elective		2
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 4		
Fall		
BA 4102	Strategic Management	3
ACCT 3531	Federal Taxes on Income	3
ACCT 3596	Auditing	3
MIS 2502	Data and Analytics ²	3
GenEd Breadth Course		3
Credit Hours		15
Spring		
ACCT 4501	Accounting Analytics Senior Seminar ²	3

Select one of the following: ²		3
ACCT 3532	Topics in Taxation	
ACCT 3533	Advanced Financial Accounting	
ACCT 3534	Information Systems and Controls for Accounting Professionals	
ACCT 3580	Special Topics - Accounting	
ACCT 4502	Strategic Financial Management Accounting	
Free Elective		3
Free Elective		2
GenEd Breadth Course		3
	Credit Hours	14
	Total Credit Hours	124

1

Please check with your departmental advisor on which course is most appropriate for the major.

2

Because this major has more than 9 additional major credits, no additional business electives are needed to satisfy the upper-division foundation requirement.

Accounting Minor

Overview

Offered by the Department of Accounting, the **Minor in Accounting** is open to all students. The minor provides valuable skills in the theory and practice of financial and managerial accounting. Students will learn basic business foundations, financial statements and the accountant's role in the management of a company. The Accounting minor can expand career opportunities and increase marketability with a strong foundation in the language and basic tools of business.

Campus Location: Main and Online

Contact Information

Elizabeth A. Gordon, Accounting Department Chair
 Alter Hall, Room 453
 215-204-6422
 egordon@temple.edu

Requirements

- Open to business or non-business students.
- Understand basic business foundations, financial statements, and the accountant's role in the management of a company.
- **Prerequisite courses for the minor:**

Code	Title	Credit Hours
ECON 1101	Macroeconomic Principles	3
ECON 1102	Microeconomic Principles	3
ACCT 2103	Financial and Managerial Accounting for Decision Making	4-6
or ACCT 2101 & ACCT 2102	Financial Accounting and Managerial Accounting	
Total Credit Hours		10-12

- Minimum grades of C- are required in prerequisite courses and are not calculated in the minor GPA.
- **Four departmental courses are required** (three of these must be taken at Temple University):

Code	Title	Credit Hours
ACCT 2521	Cost Accounting	3
ACCT 3511	Intermediate Accounting I	3
Select two of the following:		6
ACCT 3512	Intermediate Accounting II	

ACCT 3526	Accounting Information Systems
ACCT 3531	Federal Taxes on Income
ACCT 3532	Topics in Taxation
ACCT 3533	Advanced Financial Accounting
ACCT 3534	Information Systems and Controls for Accounting Professionals
ACCT 3596	Auditing ¹
ACCT 4501	Accounting Analytics Senior Seminar
ACCT 4502	Strategic Financial Management Accounting
Total Credit Hours	12

1

Effective Fall 2018, ACCT 3526 is a prerequisite for ACCT 3596. This change affects all students regardless of catalog year.

- Minimum grades of C are required in accounting courses unless otherwise specified.
- A grade point average of 2.0 in courses in the minor is required.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- To declare or rescind this minor, visit the Fox School of Business and Management.
- Courses are available 100% online.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

Actuarial Science BBA

Overview

Located in the Department of Risk, Actuarial Science, and Legal Studies, the **Bachelor of Business Administration in Actuarial Science** provides students the opportunity to develop a strong foundation in mathematics and statistics while being exposed to a wide range of business disciplines. Temple's Actuarial Science major is one of only a few programs designated as a Center of Actuarial Excellence by the Society of Actuaries.

Actuaries specialize in the evaluation of insurance and financial risks. They hold positions of responsibility with insurance companies, consulting firms, investment banks, government regulatory organizations and government insurance programs. Actuaries must also pass a series of professional exams, administered by the Society of Actuaries and Casualty Actuarial Society, to receive the credential of Associate or Fellow. For more information, see the Licensure/Certification section below.

Campus Location: Main

Program Code: BU-AS-BBA

Student Professional Organization

Students should meet with the Program Director as soon as they enter the Actuarial Science program. In addition to their coursework and professional examinations, students are strongly encouraged to become active in the Sigma chapter of **Gamma Iota Sigma (GIS)**, Temple's national award-winning professional student organization in Risk Management, Insurance, and Actuarial Science. The organization hosts numerous guest speakers from the industry, sponsors a variety of career development seminars, and maintains a widely-distributed résumé book. For more information, please contact the GIS President at 215-204-9368 or visit www.sigmachapter.org.

Licensure/Certification

Being credentialed as an actuary is important for advancement in the actuarial profession and to become qualified to offer professional judgement on financial statements. These credentials of Associate and Fellow are national credentials and are recognized internationally as well. There is no state-specific actuarial credentialing or state-specific actuarial exams.

Actuaries must pass a series of professional exams administered by the Society of Actuaries and Casualty Actuarial Society which test the candidate's knowledge in probability, statistics, financial mathematics, insurance contractual design, and insurance company financial operations. Candidates completing a certain set of exams receive the designation of Associate under either society. Beyond that set, candidates completing an additional set of exams receive the designation of Fellow of either society.

Coursework in Temple's Actuarial Science program helps prepare students for several Associateship-level actuarial exams. Students can self-study for additional exams.

An additional component to becoming credentialed as an Associate is completing Validation by Educational Experience (VEE) requirements. Candidates can satisfy these requirements by completing an external course or taking college courses which have been approved by the Society of Actuaries and receiving a minimum grade of B-. Courses in Temple's Actuarial Science curriculum are approved by the Society of Actuaries as satisfying these VEE (Validation by Educational Experience) requirements.

<https://www.soa.org/education/exam-req/edu-asa-req/>

Contact Information

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Learn more about the Bachelor of Business Administration in Actuarial Science.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students are strongly encouraged to take the professional actuarial exams immediately after completing the relevant coursework. Students must meet the College Graduation Requirements (p. 795) for the Bachelor of Business Administration including the requirements of the major listed below. Students must attain a 2.0 cumulative GPA and 2.0 in the major to graduate with the Actuarial Science major.

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of Actuarial Science Major

Code	Title	Credit Hours
AS 2502	Theory of Interest	3
AS 2503	Actuarial Corporate Finance ¹	3
AS 3501	Long-Term Actuarial Modeling	3
AS 3503	Short-Term Actuarial Modeling ²	3
AS 3596 or AS 3597	Actuarial Practice: Property and Liability Actuarial Practice: Group & Health Benefits	3
Select two of the following courses:		6
AS 3502	Advanced Long-Term Actuarial Modeling	
AS 3580	Special Topics: Actuarial Science ³	
AS 4503	Advanced Short-Term Actuarial Modeling ³	
AS 4504	Advanced Actuarial Analytics ³	
RMI 3567	Managing International Risk	
Total Credit Hours		21

¹
AS 2503 replaces FIN 3101 in the upper-division foundation. This course is not calculated in the major GPA.

²
This is the major capstone, and all prerequisites must be met.

3

Course only offered in Spring term.

Non-Business Required Courses

Code	Title	Credit Hours
MATH 1041	Calculus I ¹	4
MATH 1042	Calculus II ¹	4
AS 1501	Actuarial Probability ²	3
AS 2505	Actuarial Statistics ²	3
AS 3504	Actuarial Analytics ²	3
Total Credit Hours		17

1

MATH 1041 & MATH 1042 replace the STAT 1001 & STAT 1102 requirements listed in the Fox School of Business & Management foundation course requirements. MATH 1041 also satisfies the Quantitative Literacy (GQ) General Education requirement.

2

These courses replace STAT 2103 in the Fox School of Business & Management foundation course requirements.

Suggested Academic Plan

Bachelor of Business Administration in Actuarial Science

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1		Credit Hours
Fall		
MATH 1041	Calculus I	4
ECON 1101	Macroeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
Credit Hours		17
Spring		
MATH 1042	Calculus II	4
ECON 1102	Microeconomic Principles	3
BA 1103	Legal and Ethical Reasoning in Business	3
AS 1501	Actuarial Probability	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		16
Year 2		
Fall		
ACCT 2103	Financial and Managerial Accounting for Decision Making	4
AS 2502	Theory of Interest	3
AS 2505	Actuarial Statistics	3
RMI 2101	Introduction to Risk Management	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Free Elective ¹		1
Credit Hours		17

Spring		
AS 2503	Actuarial Corporate Finance	3
AS 3504	Actuarial Analytics	3
BA 2101	Professional Development Strategies	1
BA 2196	Business Communications	3
MKTG 2101	Marketing Management	3
MIS 2101	Digital Systems	3
Credit Hours		16
Year 3		
Fall		
MSOM 3101	Operations Management	3
Select one of the following: ²		3
BA 2501	Turning Numbers into Knowledge: Visualizing Data	
BA 2502	Business Analytics: Modern Data Science Techniques	
AS 3501	Long-Term Actuarial Modeling	3
Business Elective ³		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
AS 3503	Short-Term Actuarial Modeling	3
Business Elective ³		3
Free Elective		3
Free Elective		2
Free Elective		2
Credit Hours		13
Year 4		
Fall		
BA 4102	Strategic Management	3
Select one of the following:		3
AS 3596	Actuarial Practice: Property and Liability	
AS 3597	Actuarial Practice: Group & Health Benefits	
GenEd Breadth Course		3
GenEd Breadth Course		3
AS Major Elective #1: choose among the following courses:		3
AS 3502	Advanced Long-Term Actuarial Modeling	
AS 3580	Special Topics: Actuarial Science ⁴	
AS 4503	Advanced Short-Term Actuarial Modeling ⁴	
AS 4504	Advanced Actuarial Analytics ⁴	
RMI 3567	Managing International Risk	
Credit Hours		15
Spring		
Business Elective ³		3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
AS Major Elective #2: choose among the following courses:		3
AS 3502	Advanced Long-Term Actuarial Modeling	
AS 3580	Special Topics: Actuarial Science ⁴	
AS 4503	Advanced Short-Term Actuarial Modeling ⁴	
AS 4504	Advanced Actuarial Analytics ⁴	

RMI 3567	Managing International Risk	
	Credit Hours	15
	Total Credit Hours	124

1

AS 1601 is highly recommended in this semester.

2

Please check with your departmental advisor on which course is most appropriate for the major.

3

2000-3999 electives can be selected from: ACCT, AS, BA, ECON, FIN, HRM, IB, LGLS, MIS, MKTG, RE, RMI, STAT, SCM, SGM. Please see your advisor for elective suggestions that match your career objectives.

4

Course only offered in Spring term.

Business Analytics Minor

Overview

Offered by the Department of Statistics, Operations, and Data Science the **Minor in Business Analytics** is open to Fox School of Business and Management and School of Sport, Tourism and Hospitality Management (STHM) students with a minimum GPA of 3.0. Fox and STHM students will learn how to unlock the value buried in corporate data and create new business opportunities using cutting-edge tools and techniques in predictive modeling, forecasting, association mining, cluster analysis, decision trees, unstructured "big" data, sentiment analysis, and experimental design. This minor is ideal for Marketing and Management Information Systems students seeking more experience with Data Analytics.

Campus Location: Main

Contact Information

Lauren Burns, Deputy Chair and Academic Director
lburns@temple.edu

Requirements

- **Three prerequisite courses are required for this minor:**

Code	Title	Credit Hours
MIS 2101	Digital Systems ¹	3
MKTG 2101	Marketing Management ¹	3
STAT 2103	Statistical Business Analytics ¹	4

1

Minimum grades of C are required in prerequisite courses and are not calculated in the minor GPA.

- **Five courses are required** (three must be taken at Temple University). Recommended sequence is listed below:

Code	Title	Credit Hours
MIS 2502	Data and Analytics ¹	3
STAT 2521	Data Analysis and Statistical Computing	3
MKTG 3509	Customer Data Analytics	3
STAT 2523	Design of Experiments and Quality Control (Fall only)	3
MKTG 3508	Digital Marketing	3

Total Credit Hours	15
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1

MIS majors will substitute a course chosen from: MIS 3505, MIS 3536, MIS 3538, MIS 3581, MKTG 3511, STAT 2512, or STAT 2522.

- A grade point average of 2.0 in the minor is required as well as a minimum grade of C- in each course. A minimum grade of C is required in MIS 2502.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.

- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- For more information, visit the Statistics, Operations, and Data Science department.
- To declare or rescind this minor, visit the Fox School of Business and Management.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

Business Basics Certificate

Overview

The **Business Basics Certificate**, offered by the Fox School of Business and Management, is open to non-matriculated students only.

In addition to Analytical Reading and Writing, this certificate introduces students to some fundamental business courses. Courses in accounting, human resource management, legal/ethical reasoning, and statistics will be building blocks for those looking to develop or enhance strategic thinking in the business environment.

It is strongly recommended that students take the courses in the order listed within the requirements to build on their knowledge in a practical way.

These business foundation courses will apply toward the BBA if students matriculate into the degree program.

Campus Locations: Main and Online (some courses available in Japan and Rome)

Program Code: BU-BUSB-CR2+

Contact Information

Chuck Allen, Associate Vice Dean for Undergraduate Programs
Alter Hall, Room 369
callen@temple.edu

Requirements

- **Five courses are required** (three of these courses must be taken at Temple University):

Code	Title	Credit Hours
ENG 0802	Analytical Reading and Writing ¹	4
BA 1103	Legal and Ethical Reasoning in Business	3
HRM 1101	Leadership and Organizational Management	3
STAT 1001	Quantitative Methods for Business I ¹	3
ACCT 2103	Financial and Managerial Accounting for Decision Making ¹	4
Total Credit Hours		17

1

Prior to enrolling in English, Statistics, and Accounting, students must receive placement assessment or take placement testing and may need to complete additional English or Math review courses if indicated by placement test results.

- A minimum grade of C in each course is required.
- The certificate will be awarded upon satisfactory completion of all required courses.
- Business Basics classes can be taken 100% online.

Business Management BBA

Overview

Offered by the Department of Management, the **Bachelor of Business Administration in Business Management** is ideal for both traditional undergraduates and adult students already in a professional environment. Business Management students learn how to be leaders in business and work with others effectively, efficiently and profitably, regardless of the organization's size or industry sector.

Business Management courses provide practical knowledge as well as theories that create skills in a wide range of areas, including

- Change Management,
- Intrapreneurship and Innovation,

- Applicable Technologies,
- Communication,
- Research,
- Management, and
- Supervisory Techniques.

Business Management majors also have many opportunities to

- Network,
- Meet business leaders,
- Learn through internships, and
- Understand the ever-evolving intricacies of the business world.

Campus Location: Main

Program Code: BU-BMGT-BBA

Careers and Placements

All businesses need managers. A business that is improperly managed will have difficulty succeeding.

Business Management careers include, but are not limited to

- Technology,
- Consulting,
- Retail,
- Manufacturing,
- Wholesale,
- Export/Import,
- Healthcare,
- Education,
- Entertainment, and
- Sales.

The above are just some of the industries that must have effective managers in order to function properly.

The Fox School of Business and Management's Center for Professional Development (CSPD) is one resource that helps students secure internships and employment in the industries noted above and others as well.

Minors

Students are encouraged to explore a minor or certificate program in addition to their major. Courses taken for the major will not count for a minor or certificate. Recommended minors include:

- Entrepreneurship and Innovation Management Minor
- International Business Administration Minor
- Sales Minor

Student Professional Organizations

Students are encouraged to join a Fox Student Professional Organization (SPO) that meets their interests. The following are specifically designed for the Business Management major:

- Business Management Organization (BMO)
- Professional Sales Organization (PSO)

Both chapters help you connect with business leaders, classmates who strive for success, and provide innovative and professionally stimulating events and speakers.

Internships

The Business Management major, through its Business Management Council and The Fox School's CSPD, works to provide all our students who desire internships the opportunity to acquire them.

Accelerated Program

4+1 Master of Education Degree (MEd)

The 4+1 Master of Education (MEd) program is designed for students who are interested in pursuing a Master of Education while completing the Bachelor of Business Administration (BBA) in Business Management program requirements. After completion of the programs, students earn a BBA degree and an MEd in Business, Computer and Information Technology Education (BCITE) or Marketing Education (ME), and a Commonwealth of Pennsylvania Instructional I Teaching Certificate in BCITE or ME. Learn more about the application process and deadlines for the 4+1 program in Career and Technical Education.

For more information, contact:

College of Education and Human Development

+1 Accelerated Program Contact

215-204-8011

plus1@temple.edu

Contact Information

John A. McClendon, Chair

Alter Hall, Room 354

215-204-1910

johnmac@temple.edu

Daniel E. Goldberg, Academic Director - Business Management BBA Program

Alter Hall, Room 353

215-204-4282

daniel.goldberg@temple.edu

Department of Management

Alter Hall, Room 333

215-204-5183

mgmtdept@temple.edu

Learn more about the Bachelor of Business Administration in Business Management.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum. Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 795) for the Bachelor of Business Administration including the requirements of the major listed below. Business Management students must attain a 2.0 GPA in the major and a 2.0 cumulative GPA in order to graduate.

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of Business Management

Code	Title	Credit Hours
HRM 3501	Power, Influence and Negotiation	3
HRM 3503	Communicating in Organizations	3
HRM 3507	Intrapreneurship in the 21st Century	3
HRM 4597	Critical Skills for Effective Managers ^{1,2}	3

Electives (2): Select any two Fox courses at the 2000 to 3999 level that you are eligible to take. Please see your advisor for elective suggestions that match your career objectives.³ 6

Total Credit Hours 18

1

This major capstone is taken in the final semester, and all prerequisites must be met.

2

Students cannot receive academic credit towards graduation requirements for both HRM 3502 and HRM 4597. If a student takes both, one of the courses will be deducted from the overall credits applicable towards graduation requirements.

3

2000-3999 electives can be selected from: ACCT, AS, BA, ECON, FIN, HRM, IB, LGLS, MIS, MKTG, RE, RMI, STAT, SCM, SGM.

Suggested Academic Plan

Bachelor of Business Administration in Business Management

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1		Credit Hours
Fall		
STAT 1001	Quantitative Methods for Business I	3
ECON 1101	Macroeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
Credit Hours		16
Spring		
STAT 1102	Quantitative Methods for Business II	4
ECON 1102	Microeconomic Principles	3
BA 1103	Legal and Ethical Reasoning in Business	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
ACCT 2103	Financial and Managerial Accounting for Decision Making	4
STAT 2103	Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)	4
MIS 2101	Digital Systems	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Credit Hours		17
Spring		
MKTG 2101	Marketing Management	3
BA 2101	Professional Development Strategies	1
BA 2196	Business Communications	3
Select one of the following: ¹		3
BA 2501	Turning Numbers into Knowledge: Visualizing Data	
BA 2502	Business Analytics: Modern Data Science Techniques	
RMI 2101	Introduction to Risk Management	3

GenEd Breadth Course		3
Credit Hours		16
Year 3		
Fall		
FIN 3101	Financial Management	3
MSOM 3101	Operations Management	3
HRM 3501	Power, Influence and Negotiation	3
Business Elective ²		3
Free Elective		3
Credit Hours		15
Spring		
HRM 3503	Communicating in Organizations	3
Major Elective Course numbered 2000-3999; see advisor for suggestions ¹		3
Business Elective ²		3
GenEd Breadth Course		3
Free Elective		3
Credit Hours		15
Year 4		
Fall		
BA 4102	Strategic Management	3
HRM 3507	Intrapreneurship in the 21st Century	3
Major Elective Course numbered 2000-3999; see advisor for suggestions ¹		3
Business Elective ²		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
HRM 4597	Critical Skills for Effective Managers	3
GenEd Breadth Course		3
Free Elective		3
Free Elective		3
Free Elective		2
Credit Hours		14
Total Credit Hours		124

1

Please check with your departmental advisor on which course is most appropriate for the major.

2

Business and Major Electives numbered 2000-3999 can be selected from: ACCT, AS, BA, ECON, FIN, HRM, IB, LGLS, MIS, MKTG, RE, RMI, STAT, SCM, SGM. Please see your advisor for elective suggestions that match your career objectives.

Business Minor

Overview

Offered by the Fox School of Business and Management, the **Minor in Business** is designed for undergraduate degree-seeking students outside the Fox School of Business and Management. The minor provides non-business students with an overview of specific, critical business areas and is designed to enhance students' readiness for work in business or other organizations after graduation and increase their professional marketability. In addition, this quantitatively-oriented minor provides a good foundation for non-business students to facilitate the transition into an MBA program.

Students interested in a less quantitatively-oriented business minor may consider the General Business Studies minor (p. 853).

Campus Locations: Main and Online

Contact Information

Chuck Allen, Associate Vice Dean for Undergraduate Programs

Alter Hall, Room 369
callen@temple.edu

Requirements

- Completion of MATH 1022, STAT 1001, or calculus with a minimum grade of C- is a prerequisite for some courses in this minor.
- **Eight courses required** (five of these must be taken at Temple University):

Code	Title	Credit Hours
ECON 1101	Macroeconomic Principles	3
ECON 1102	Microeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
ACCT 2101	Financial Accounting	3-4
or ACCT 2103	Financial and Managerial Accounting for Decision Making	
MKTG 2101	Marketing Management	3
RMI 2101	Introduction to Risk Management	3
STAT 2103	Statistical Business Analytics	3-4
or MATH 1013	Elements of Statistics	
One of the following courses can be substituted for STAT 2103 if required for the student's program:		
CEE 3048	Probability, Statistics & Stochastic Methods	
PSY 1003	Statistics for Psychology	
SOC 1167	Social Statistics	
SOC 3201	Statistical Methods in Sociology	
Total Credit Hours		21-23

- A grade point average of 2.0 in the minor is required as well as a minimum grade of C- in each course.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- To declare or rescind this minor, visit the Fox School of Business and Management.
- Courses are available 100% online.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

Business Plus Certificate

Overview

The **Business Plus Certificate**, offered by the Fox School of Business and Management, is open to non-matriculated students only.

Building on the skills students gained through the Business Basics certificate, the Business Plus certificate will introduce students to additional fundamental business courses. Courses in accounting, economics, marketing, and risk management and insurance will continue to sharpen and refine strategic thinking in the business environment.

Students should complete the Business Basics Certificate prior to taking Business Plus courses. It is strongly recommended that students take the courses in the order listed within the requirements to build on their knowledge in a practical way.

These business foundation courses will apply toward the BBA if students matriculate into the degree program.

Campus Locations: Main and Online (some courses available in Japan and Rome)

Program Code: BU-BUSP-CERT

Contact Information

Chuck Allen, Associate Vice Dean for Undergraduate Programs
Alter Hall, Room 369
callen@temple.edu

Requirements

- **Five courses required** (three of these must be taken at Temple University):

Code	Title	Credit Hours
ECON 1101	Macroeconomic Principles ¹	3
ECON 1102	Microeconomic Principles ¹	3
MKTG 2101	Marketing Management ²	3
RMI 2101	Introduction to Risk Management ²	3
STAT 1102	Quantitative Methods for Business II ^{1, 2}	4
Total Credit Hours		16

1

Appropriate math assessment or prerequisite course required prior to enrolling in Economics and Statistics courses.

2

These courses have prerequisites.

- A minimum grade of C in each course is required.
- The certificate will be awarded upon satisfactory completion of all required courses.
- Business Plus courses are available 100% online.

Corporate Compliance and Regulatory Policy Minor

Overview

Offered by Department of Risk, Actuarial Science, and Legal Studies, the **Minor in Corporate Compliance and Regulatory Policy** is open to all students. The minor is designed to expose students to a practical law-related field in which they can use their legal training with or without a graduate degree and in which they can find professional opportunities in numerous industries.

Campus Locations: Main and Online

Contact Information

Jeffrey Boles, Department Chair
 Speakman Hall, Room 204A
 215-204-4145
 jeffrey.boles@temple.edu

Requirements

- All students in the Fox School of Business and Management are required to take the two prerequisite courses. An additional four courses are required for the minor.
- The requirements for the minor are:

Code	Title	Credit Hours
Prerequisite Courses ¹		
BA 1103 or BA 1903	Legal and Ethical Reasoning in Business Honors Legal and Ethical Reasoning in Business	3
HRM 1101 or HRM 1901	Leadership and Organizational Management Honors Leadership and Organizational Management	3
Required Courses		
LGLS 1112	Law for Business	3
LGLS 3501	Introduction to Corporate Compliance	3
Electives		
Select two of the following:		6
LGLS 3511	Environmental Law and Sustainability	
LGLS 3523	Detecting Financial Crimes	

LGLS 3524

Legal and Policy Issues in the Workplace

Total Credit Hours**18**

1

Minimum grade of C is required in all prerequisites.

- All courses required for the minor must be taken at Temple University. Residency excludes the prerequisite courses.
- A grade point average of 2.0 in the minor is required as well as a minimum grade of C- in each course, unless otherwise specified.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- To declare or rescind this minor, visit the Fox School of Business and Management.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

Digital Marketing Minor

Overview

Students interested in expanding their career options through a general knowledge of marketing and information systems principles and specializing in digital marketing should consider completing a **Minor in Digital Marketing**, offered by the Department of Marketing. The Digital Marketing minor integrates marketing with digital technology and analytics to prepare students for new and emerging jobs related to analytics, blogging, search engine optimization, e-detailing, site design, Internet research, digital demographics, personalization, customer relationship management, information architecture, social media, e-commerce and media design.

The Digital Marketing minor is open to all students. The minor is particularly relevant for Marketing, Human Resource Management, Business Management, and Management Information Systems students. It is also ideal for students in Lew Klein College of Media and Communication.

Campus Location: Main

Note: Select online course options may be offered at the discretion of the department.

Learn more about the Digital Marketing minor.

Contact Information

Joydeep Srivastava, Department Chair
Alter Hall, Room 515
215-204-1620
jsrivastava@temple.edu

Melissa Glenn, Department Deputy Chair
Alter Hall, Room 518
215-204-4341
melissa.glenn@temple.edu

Requirements

- Quantitative, critical thinking, and problem-solving skills required for success in this minor; a cumulative GPA of 3.0 is recommended.
- **Eight courses required (six must be taken at Temple University):**

Code	Title	Credit Hours
ECON 1101 or ECON 1901	Macroeconomic Principles Honors Macroeconomic Principles	3
MIS 2101 or MIS 2901	Digital Systems ¹ Honors Digital Systems	3
MKTG 2101 or MKTG 2901	Marketing Management Honors Marketing Management	3
MIS 2502	Data and Analytics ¹	3
MIS 3504	Digital Design and Innovation ¹	3
MIS 3538	Social Media Innovation	3

MKTG 3501	Integrated Marketing Communications	3
MKTG 3508	Digital Marketing	3
Total Credit Hours		24

1

A minimum grade of C or higher is needed to enroll in MIS 2502 and MIS 3504.

Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.

- **Marketing majors** who declare Digital Marketing minor will complete MKTG 3501 and MKTG 3508 as well as two other Marketing electives for the Marketing major.
- **MIS majors** who declare Digital Marketing minor will complete MIS 3505 instead of MIS 2502, which is already required for the MIS major.
- Some courses are only offered once a year depending on demand for the course.
- A cumulative grade point average of 2.0 in the minor is required as well as a minimum grade of C- in each course unless otherwise specified.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- To declare or rescind this minor, visit the Fox School of Business and Management.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

Economics BBA

Overview

The **Bachelor of Business Administration in Economics** is offered by the Department of Economics through a joint effort between the College of Liberal Arts and the Fox School of Business and Management.

Economics is the study of how we allocate resources among alternative uses to satisfy our wants. Virtually all of the public and personal issues which confront us today have an important economic component. For this reason, the economic way of thinking plays a valuable role in helping us make sense of the complex world in which we live. In addition, the study of economics is excellent preparation for a wide range of careers. Economics majors with bachelor's degrees are well prepared to be managers in both the public and private sectors. Training in economics also provides a solid basis for professional study in law, business, public administration and the health sciences.

Campus Location: Main

Program Code: BU-ECBU-BBA

Student Organizations

The Temple Economics Society (TES) is the student professional organization for economics majors and is open to all students interested in economics. For more information, please see the TES web site or attend one of the weekly meetings (Fridays at noon in Alter Hall, Room 239).

Economics majors may also become members of Omicron Delta Epsilon (ODE), the National Honor Society, if they meet the admissions requirements of the organization. For more information, please see the ODE web site or contact Dimitrios Diamantaras (dimitrios.diamantaras@temple.edu).

Minor

Fox students who wish to understand basic business foundations and how the impact of economics affects public and personal issues may want to minor in Economics. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor. The requirements (p. 834) must be completed prior to graduation.

Contact Information

Michael Bognanno, Department Chair
Gladfelter Hall, Room 209
bognanno@temple.edu

Michael Leeds, Director of Undergraduate Studies and Advisor
Gladfelter Hall, Room 208
mleeds@temple.edu

Department of Economics
Gladfelter Hall, 2nd Floor

Learn more about the Bachelor of Business Administration in Economics.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 795) for the Bachelor of Business Administration including the requirements of the major listed below. Economics students must attain at least a 2.0 GPA in their major and 2.0 GPA overall in order to graduate.

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of Economics Major

Code	Title	Credit Hours
Required Courses		
ECON 3501 or ECON 3701	Intermediate Microeconomic Analysis Intermediate Microeconomic Analysis with Calculus	3
ECON 3502 or ECON 3702	Intermediate Macroeconomic Analysis Intermediate Macroeconomic Analysis with Calculus	3
ECON 3503 or ECON 3703	Introduction to Econometrics Econometric Theory	3
ECON 3598	Economics Writing Seminar ¹	3
Electives		
Select two of the following:		6
ECON 3503	Introduction to Econometrics (if not taken to meet major requirement above)	
ECON 3504	Mathematical Economics	
ECON 3506/3596	Energy, Ecology, and Economy	
ECON 3507/3597	Health Economics	
ECON 3511	The Economics and Management of Privatization	
ECON 3512	Public Finance	
ECON 3513	Economics of State and Local Governments	
ECON 3514	The Economics of Education and Human Capital	
ECON 3519	Game Theory and Strategic Behavior	
ECON 3522	Economic Theory of Networks	
ECON 3525	Urban Economics	
ECON 3531	History of Economic Theory	
ECON 3532	Economic History of the United States	
ECON 3535	Public Control of Business: Antitrust	
ECON 3536	Economics of American Industry	
ECON 3537	Comparative Economic Systems	
ECON 3538	Managerial Economics	
ECON 3541/3697	The Economics of Sports	
ECON 3543	Law and Economics	
ECON 3544	Computer-Based Modeling	

ECON 3545	Economics of Labor Markets
ECON 3546	Women in the Economy
ECON 3547	Economics of Development and Growth
ECON 3548	Behavioral Economics ²
ECON 3563	International Trade (highly recommended)
ECON 3564	International Monetary Economics (highly recommended)
ECON 3571	Money and Banking
ECON 3572	Owl Fund Seminar I
ECON 3580	Special Topics
ECON 3582	Independent Study
ECON 3672	Owl Fund Seminar II
ECON 3682	Independent Study
ECON 3698	Economic Inequality
ECON 3703	Econometric Theory (if not taken to meet major requirement above)
ECON 3900	Honors Topics in Economics
ECON 4021	Economics of Risk, Uncertainty, and Information
ECON 4071	Monetary Theory and Policy ³

Total Credit Hours **18**

1

This major capstone is usually taken in the final semester, and all prerequisites must be met.

2

In order to satisfy a Major Elective, Fox Students must take "Behavioral Economics" as ECON 3548. Students cannot receive credit for both ECON 3548 and ECON 3696.

3

This course was previously offered as ECON 3505. Students who have earned credit in ECON 3505 will not earn additional credit in ECON 4071.

ECON 3408, ECON 3581, ECON 3696, ECON 3999, and ECON 4999 cannot be used to fulfill an Elective for the Economics major. These courses as well as other courses in Economics not included above can be taken as free electives for the degree.

Suggested Academic Plan

Bachelor of Business Administration in Economics

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1		Credit Hours
Fall		
STAT 1001	Quantitative Methods for Business I	3
ECON 1101	Macroeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Breadth Course		3
Credit Hours		16
Spring		
STAT 1102	Quantitative Methods for Business II	4
ECON 1102	Microeconomic Principles	3
BA 1103	Legal and Ethical Reasoning in Business	3
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
GenEd Breadth Course		3
Credit Hours		16

Year 2		
Fall		
ACCT 2103	Financial and Managerial Accounting for Decision Making	4
STAT 2103	Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)	4
MIS 2101	Digital Systems	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Credit Hours		17
Spring		
MKTG 2101	Marketing Management	3
BA 2101	Professional Development Strategies	1
BA 2196	Business Communications	3
Select one of the following: ¹		3
BA 2501	Turning Numbers into Knowledge: Visualizing Data	
BA 2502	Business Analytics: Modern Data Science Techniques	
RMI 2101	Introduction to Risk Management	3
GenEd Breadth Course		3
Credit Hours		16
Year 3		
Fall		
FIN 3101	Financial Management	3
MSOM 3101	Operations Management	3
Select one of the following:		3
ECON 3501 or ECON 3701	Intermediate Microeconomic Analysis or Intermediate Microeconomic Analysis with Calculus	
ECON 3502 or ECON 3702	Intermediate Macroeconomic Analysis or Intermediate Macroeconomic Analysis with Calculus	
Business Elective ²		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
Select one of the following:		3
ECON 3502 or ECON 3702	Intermediate Macroeconomic Analysis or Intermediate Macroeconomic Analysis with Calculus	
ECON 3501 or ECON 3701	Intermediate Microeconomic Analysis or Intermediate Microeconomic Analysis with Calculus	
Business Elective ²		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Free Elective		3
Credit Hours		15
Year 4		
Fall		
BA 4102	Strategic Management	3
ECON 3503 or ECON 3703	Introduction to Econometrics or Econometric Theory	3
Select one ECON Elective from Requirements list		3
Business Elective ²		3
Free Elective		3
Credit Hours		15
Spring		
ECON 3598	Economics Writing Seminar	3

Select one ECON Elective from Requirements list	3
Free Elective	3
Free Elective	3
Free Elective	2
Credit Hours	14
Total Credit Hours	124

1

Please check with your departmental advisor on which course is most appropriate for the major.

2

2000-3999 electives can be selected from: ACCT, AS, BA, ECON, FIN, HRM, IB, LGLS, MIS, MKTG, RE, RMI, STAT, SCM, SGM. Please see your advisor for elective suggestions that match your career objectives.

Economics Minor

Overview

The **Minor in Economics**, offered by the Fox School of Business and Management, is open to Fox students only. This minor is for Fox students who wish to understand basic business foundations and how the impact of economics affects public and personal issues.

Non-business students interested in an Economics minor may complete the Minor in Economics in the College of Liberal Arts (p. 1009).

Campus Location: Main

Contact Information

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Michael Leeds, Director of Undergraduate Studies and Advisor
Gladfelter Hall, Room 208
mleeds@temple.edu

College of Liberal Arts' Department of Economics
Gladfelter Hall, 2nd Floor

Requirements

- **Four departmental courses are required** (three must be completed at Temple University):

Code	Title	Credit Hours
Required Courses		
ECON 3501 or ECON 3502	Intermediate Microeconomic Analysis Intermediate Macroeconomic Analysis	3
Select three of the following: ¹		9
ECON 3503	Introduction to Econometrics	
ECON 3504	Mathematical Economics	
ECON 3506/3596	Energy, Ecology, and Economy	
ECON 3507/3597	Health Economics	
ECON 3511	The Economics and Management of Privatization	
ECON 3512	Public Finance	
ECON 3513	Economics of State and Local Governments	
ECON 3514	The Economics of Education and Human Capital	
ECON 3519	Game Theory and Strategic Behavior	
ECON 3522	Economic Theory of Networks	
ECON 3525	Urban Economics	
ECON 3531	History of Economic Theory	
ECON 3532	Economic History of the United States	

ECON 3535	Public Control of Business: Antitrust
ECON 3536	Economics of American Industry
ECON 3537	Comparative Economic Systems
ECON 3538	Managerial Economics
ECON 3541/3697	The Economics of Sports
ECON 3543	Law and Economics
ECON 3544	Computer-Based Modeling
ECON 3545	Economics of Labor Markets
ECON 3546	Women in the Economy
ECON 3547	Economics of Development and Growth
ECON 3548	Behavioral Economics
ECON 3563	International Trade
ECON 3564	International Monetary Economics
ECON 3571	Money and Banking
ECON 3580	Special Topics
ECON 3582	Independent Study
ECON 3598	Economics Writing Seminar
ECON 3682	Independent Study
ECON 3900	Honors Topics in Economics

Total Credit Hours**12**

1

If both ECON 3501 and ECON 3502 are taken, one counts as one of these electives.

- ECON 3408, ECON 3581, ECON 3696, ECON 3999, and ECON 4999 cannot be used to fulfill an Elective for the Economics minor.
- A grade point average of 2.0 in courses in the minor is required as well as a minimum grade of C- in each course unless otherwise specified.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- To declare or rescind this minor, visit the Fox School of Business and Management.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

Entrepreneurship and Innovation Management BBA

Overview

Entrepreneurs are creative problem-solvers that are driven to create their own financial futures and have a big impact on the world. Entrepreneurship is a way of life; anyone can be entrepreneurial—whether you want to start the next Google, take control of your work-life balance with a lifestyle business, be a leader driving change and innovation in an existing company or have a positive impact on the world with a social venture.

The **Bachelor of Business Administration in Entrepreneurship and Innovation Management (EIM)** major and courses, offered by the Department of Management, are highly experiential and designed to be real-world relevant and high impact. Students will get out of the classroom to work on ideas and ventures about which they are passionate. Coursework focuses on a variety of topics that enable students to become successful entrepreneurs, high impact intrapreneurs and social change leaders. Students will learn how to operate with open mindsets, uncover high impact opportunities, develop innovative product and service solutions, quickly and affordably validate ideas, pivot as the world evolves, develop effective Business Model Canvases (BMC) and Business Plans, and successfully pitch for and secure funding. These skills are highly valued by employers and leaders within the entrepreneurial ecosystem.

Careers and Placements

Our graduates have appeared in the Forbes "30 under 30", have founded companies among the fastest growing in Philadelphia, have raised substantial funding as they launch and scale their ventures, and have created amazing positive impact as they address complex social issues.

The Entrepreneurship and Innovation Management major is a good choice for students who:

- would like to start a new venture or business;
- would like to achieve a desired lifestyle doing consulting, freelancing, or gig work;
- plan to assume responsibilities in a family business;

- want to work in the dynamic and exciting environment of startup ventures or the entrepreneurial ecosystem (for example, accelerators and incubators);
- want to innovate and lead change in a high-growth organization; or
- want to have positive social impact with a social venture, non-profit, or multi-bottom line organization.

Getting the Most Out of Your Major

Through Temple's Entrepreneurship and Innovation Management BBA you will learn to:

- Creatively solve business problems,
- Recognize opportunities to create value for customers,
- Develop and drive organizational innovation,
- Quickly and inexpensively test your ideas,
- Design business models that drive critical outcomes,
- Create high-impact pitch decks, and
- Write business plans for funding.

Co-Curricular Opportunities

We offer many academic and co-curricular opportunities for our entrepreneurship majors to get the most from their time at Temple:

- **Practical Hands-On Curriculum** - Come to class ready to identify opportunities and evolve your entrepreneurial ideas. Our courses are taught by successful serial entrepreneurs, experienced venture capital executives, senior innovators and successful executives who have turned ideas into reality across a wide range of contexts.
- **Learn about the IEI** - The Innovation & Entrepreneurship Institute houses co-curricular programs for the EIM major.
- **Join the 1810 Accelerator** - The 1810 Accelerator is the home for entrepreneurs and innovators on Temple's campus. Accelerator membership is open to students, alumni, faculty and staff from all 17 schools and colleges at Temple University. Apply for 1810 Accelerator membership.
- **Entrepreneurial Student Association (ESA)** - We expect all EIM majors to be active members in the ESA where they can meet exciting Philly-based entrepreneurs and work on a variety of interesting projects with local companies and the community.
- **Participate in IEI competitions** - Throughout the year, the Innovation & Entrepreneurship Institute (IEI) runs the Innovative Idea Competition (IIC), Changemaker Challenge (CMC), and Be Your Own Boss Bowl (BYOBB). EIM majors should be competing in these competitions as often as possible. Learn more about these competitions.
- **Entrepreneurial Internships** - We want our Entrepreneurship and Innovation Management majors to have relevant business experience when they graduate. Thus, our program includes a required internship course SGM 3685 in which students will do an internship within a startup, accelerator, incubator or other entrepreneurial support program.
- **Launch a Venture NOW!** - While all our classes let students work on projects that move their ideas closer to market readiness, one popular class lets students actually launch a new venture while in school: SGM 3504 Launch a New Venture in 100 Days. We want to be able to say that all of our EIM graduates are already successful entrepreneurs before they graduate.

Campus Location: Main

Program Code: BU-EIM-BBA

Related Academic Programs

For students interested in Entrepreneurship and Innovation Management (EIM), we offer several academic options including:

- Human Behavior General Education course: SGM 0827 Creativity and Organizational Innovation
- Double Major (students in many Fox majors can double count one course in both majors)
- Entrepreneurship and Innovation Management minor
- Entrepreneurship and Innovation Management undergraduate certificate (for non-business students)
- Master of Science in Innovation Management and Entrepreneurship
- MBA concentrations in Innovation Management and Entrepreneurship or Strategic Management
- Graduate certificate in Healthcare Innovation Management.

Other programs offered by the Department of Management are:

- International Business Administration Minor
- Organizational Leadership Minor
- Sales Minor

Note: Entrepreneurship courses are listed under the subject "Strategic Management" (SGM).

Contact Information

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alan.kerzner@temple.edu

Department of Management
Alter Hall, Room 333
215-204-5183
mgmtdept@temple.edu

Learn more about the Bachelor of Business Administration in Entrepreneurship and Innovation Management.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 795) for the Bachelor of Business Administration, including the requirements of the major listed below. Students must attain an overall GPA of 2.0 or higher in the major and must maintain a 2.0 GPA overall in order to graduate as an entrepreneurship major. Entrepreneurship & Innovation Management students are expected to participate in the Entrepreneurial Student Association.

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of Entrepreneurship & Innovation Management Major

Code	Title	Credit Hours
SGM 3501	Entrepreneurial and Innovative Thinking	3
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	3
SGM 4596	Strategic Business Planning: Feasibility Assessment / Business Planning for Entrepreneurial Ventures ¹	3
Select one Entrepreneurial Internship elective: ²		3
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
Select one Entrepreneurial Sales & Marketing elective:		3
SGM 3504	Launch a New Venture in 100 Days	
MKTG 3511	Marketing Research	
Select one Entrepreneurial Breadth-Depth elective:		3
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3504	Launch a New Venture in 100 Days ³	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures ³	

FIN 2527	Digital Disruption in Financial Services
HRM 3501	Power, Influence and Negotiation
HRM 3507	Intrapreneurship in the 21st Century
IB 2509	Short Study Trip Abroad: Doing Business in a Foreign Country ⁴
IB 3596	Global Entrepreneurship
MIS 3536	Information Systems Innovation
MIS 3538	Social Media Innovation
STHM 3426	Entrepreneurship in Sport, Recreation, Tourism, and Hospitality
SGM 3580	Special Topics - Strategic Management ⁵
SGM 3682	Independent Study ⁶

Total Credit Hours **18**

1

This is the major capstone and all prerequisites must be met.

2

Although internships are not a prerequisite for SGM 4596, students are strongly encouraged to take SGM 3585/SGM 3685 prior to their final semester at Temple to optimize options at graduation and balance workload.

3

SGM 3504 or SGM 3585 can only be taken to satisfy Entrepreneurial Breadth-Depth Elective if not already completed to satisfy other major course requirements.

4

Students interested in enrolling in IB 2509 should be aware that it is a competitive program and, if accepted, their project should be Entrepreneurship related. Please contact: study.abroad@temple.edu

5

SGM 3580 course topics vary by semester. Approval of the academic director, chair, or approved department personnel is required. Not all SGM 3580 course topics are appropriate for EIM students.

6

SGM 3682 Independent Study projects will be identified or created by the department or may be proposed by faculty/students collaborating where coursework does not match student's goals or needs and faculty are available to oversee a project. Approval of the academic director, chair, or approved department personnel is required.

Notes

Students pursuing a double major in business can double-count a maximum of one course toward both majors.

Students pursuing a minor may not double count courses for the major and minor.

Suggested Academic Plan

Bachelor of Business Administration in Entrepreneurship and Innovation Management

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1		Credit Hours
Fall		
STAT 1001	Quantitative Methods for Business I	3
ECON 1101	Macroeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Breadth Course		3
Credit Hours		16
Spring		
STAT 1102	Quantitative Methods for Business II	4
ECON 1102	Microeconomic Principles	3

BA 1103	Legal and Ethical Reasoning in Business	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course ¹		3
Credit Hours		16
Year 2		
Fall		
ACCT 2103	Financial and Managerial Accounting for Decision Making	4
STAT 2103	Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)	4
MIS 2101	Digital Systems	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Credit Hours		17
Spring		
MKTG 2101	Marketing Management	3
BA 2101	Professional Development Strategies	1
BA 2196	Business Communications	3
Select one of the following: ²		3
BA 2501	Turning Numbers into Knowledge: Visualizing Data	
BA 2502	Business Analytics: Modern Data Science Techniques	
RMI 2101	Introduction to Risk Management	3
GenEd Breadth Course		3
Credit Hours		16
Year 3		
Fall		
FIN 3101	Financial Management	3
MSOM 3101	Operations Management	3
SGM 3501	Entrepreneurial and Innovative Thinking	3
Business Elective ³		3
Free Elective		3
Credit Hours		15
Spring		
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	3
Select one Entrepreneurial Sales & Marketing elective:		3
SGM 3504	Launch a New Venture in 100 Days	
MKTG 3511	Marketing Research	
Select one Entrepreneurial Breadth-Depth elective:		3
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3682	Independent Study	
FIN 2527	Digital Disruption in Financial Services	
HRM 3501	Power, Influence and Negotiation	
HRM 3507	Intrapreneurship in the 21st Century	
IB 2509	Short Study Trip Abroad: Doing Business in a Foreign Country	
IB 3596	Global Entrepreneurship	
MIS 3536	Information Systems Innovation	
MIS 3538	Social Media Innovation	
STHM 3426	Entrepreneurship in Sport, Recreation, Tourism, and Hospitality	

Business Elective ³		3
GenEd Breadth Course		3
Credit Hours		15
Year 4		
Fall		
BA 4102	Strategic Management	3
Select one Entrepreneurial Internship elective:		3
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
GenEd Breadth Course		3
GenEd Breadth Course		3
Free Elective		3
Credit Hours		15
Spring		
SGM 4596	Strategic Business Planning: Feasibility Assessment / Business Planning for Entrepreneurial Ventures	3
Business Elective ³		3
Free Elective		3
Free Elective		3
Free Elective		2
Credit Hours		14
Total Credit Hours		124

1

SGM 0827 is recommended for students interested in participating in the Innovation Idea Competition or taking SGM 3504 Launch a New Venture in 100 Days. SGM 0827 also fulfills the GenEd Human Behavior (GB) requirement.

2

Please check with your departmental advisor on which course is most appropriate for the major.

3

2000-3999 electives can be selected from: ACCT, AS, BA, ECON, FIN, HRM, IB, LGLS, MIS, MKTG, RE, RMI, STAT, SCM, SGM. Please see your advisor for elective suggestions that match your career objectives.

Entrepreneurship and Innovation Management Certificate

Overview

Entrepreneurs are creative problem-solvers that are driven to create their own financial futures and have a big impact on the world. Entrepreneurship is a way of life; anyone can be entrepreneurial—whether you want to start the next Google, take control of your work-life balance with a lifestyle business, be a leader driving change and innovation in an existing company or have a positive impact on the world with a social venture.

Our Entrepreneurship and Innovation Management (EIM) courses and programs are highly experiential and designed to be real-world relevant and high impact. Students will get out of the classroom to work on ideas and ventures about which they are passionate. Coursework focuses on a variety of topics that enable students to become successful entrepreneurs, high impact intrapreneurs and social change leaders. Students will learn how to operate with open mindsets, uncover high impact opportunities, develop innovative product and service solutions, quickly and affordably validate ideas, pivot as the world evolves, develop effective Business Model Canvases (BMC) and Business Plans, and successfully pitch for and secure funding. These skills are highly valued by employers and leaders within the entrepreneurial ecosystem.

The **Certificate in Entrepreneurship and Innovation Management**, offered by the Department of Management, is an indicator that you are a proactive self-starter who can creatively solve problems and turn ideas into reality. Entrepreneurial thinking and innovation are the lifeblood of any organization. Even if you plan to work in a well-established company, the EIM certificate shows that you are able to go beyond your functional expertise and innovate when it counts. Companies are looking for employees that have specialization in a relevant field, as well as broad understanding of the business environment that allows them to approach issues from a strategic, outside-the-box perspective. This is part of what you will learn in the EIM certificate program.

The Entrepreneurship and Innovation Management certificate is open to non-Fox students only. Fox students should consider the Entrepreneurship and Innovation Management (EIM) minor (p. 842) or a dual major instead.

Campus Location: Main

Program Code: BU-EIM-CERT

Related Program

In collaboration with Fox, the Tyler School of Art and Architecture offers the certificate in Creative Entrepreneurship (p. 164).

Related Institute: Innovation & Entrepreneurship Institute (IEI)

Contact Information

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215-204-8188
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Department of Management Office
Alter Hall, Room 333
215-204-5183
mgmtdept@temple.edu

Learn more about the undergraduate certificate in Entrepreneurship and Innovation Management.

Requirements

- **Students must complete the following three-course sequence:**

Code	Title	Credit Hours
Select 9 credits from the following: ¹		9
SGM 0827	Creativity and Organizational Innovation ²	
SGM 3001	Leading and Managing Small Businesses and New Ventures (for non-business students)	
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management ³	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
or SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
SGM 3682	Independent Study ⁴	
AOD 3319	Skill Building for Social Entrepreneurship and Community Engagement	
BIOE 4311	The Entrepreneurial Bioengineer	
ENGR 3033	Entrepreneurial Engineering (Engineering students only)	
FMA 4475	The Artist in the Business World	
HORT 1566	Horticulture Business Management	
HRM 3507	Intrapreneurship in the 21st Century	
JRN 3709	The Entrepreneurial Journalist	
MSP 4614	Creating a Media Business	
MUST 4731	Arts Enterprise	
SCTC 4321	Entrepreneurship in Science and Technology	
STHM 3426	Entrepreneurship in Sport, Recreation, Tourism, and Hospitality	
TYLE 3211	Creative Cottage Industrialist	

Total Credit Hours

9

1

A maximum of 3 credits can be taken from outside of the Fox School of Business and Management for this certificate.

2

A maximum of 3 credits of GenEd courses can be utilized for completion of this certificate.

3

SGM 3580 course topics vary by semester. Approval of the academic director, chair, or approved department personnel is required. Not all SGM 3580 topics are appropriate for EIM students.

4

SGM 3682 Independent Study projects will be identified or created by the department or may be proposed by faculty/students collaborating where coursework does not match student's goals or needs and faculty are available to oversee a project. Approval of the academic director, chair, or approved department personnel is required.

- Courses cannot be used to meet certificate requirements if already used to meet the requirements for a major or a different minor or certificate.
- For more information and to declare or rescind this certificate, contact the entrepreneurship advisor in the Center for Undergraduate Advising, Fox School of Business, Speakman 101.

Interested students should discuss with their home college advisors or with personnel in the Innovation & Entrepreneurship Institute (1810 Liacouras Walk, 1st Floor) how the courses in the certificate will fit into their overall degree plan. Students are strongly encouraged to declare the certificate early in their academic career.

Entrepreneurship and Innovation Management Minor

Overview

Entrepreneurs are creative problem-solvers that are driven to create their own financial futures and have a big impact on the world. Entrepreneurship is a way of life; anyone can be entrepreneurial—whether you want to start the next Google, take control of your work-life balance with a lifestyle business, be a leader driving change and innovation in an existing company or have a positive impact on the world with a social venture.

The **Minor in Entrepreneurship and Innovation Management (EIM)**, offered by the Department of Management, is open to all students and is a great complement to any Temple major. It empowers students to follow multiple paths in their professional life and provides the problem-solving skills and strategic perspectives to take one's career to the next level. The EIM minor prepares students to start a business, run a consulting, freelancing or independent professional practice, be a productive member of an entrepreneurial or small business and entrepreneurial ecosystem, assume responsibilities in a family business, or become a highly effective leader in any growing, innovative business or social impact venture.

Our EIM courses and programs are highly experiential and designed to be real-world relevant and high impact. Students will get out of the classroom to work on ideas and ventures about which they are passionate. Coursework focuses on a variety of topics that enable students to become successful entrepreneurs, high impact intrapreneurs and social change leaders. Students will learn how to operate with open mindsets, uncover high impact opportunities, develop innovative product and service solutions, quickly and affordably validate ideas, pivot as the world evolves, develop effective Business Model Canvases (BMC) and Business Plans, and successfully pitch for and secure funding. These skills are highly valued by employers and leaders within the entrepreneurial ecosystem.

Campus Location: Main

Related Programs

Non-business students may also consider the EIM certificate (p. 840).

In collaboration with Fox, the Tyler School of Art and Architecture offers a certificate in Creative Entrepreneurship (p. 164).

Related Institute: Innovation & Entrepreneurship Institute (IEI)

Contact Information

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Department of Management Office

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215-204-5183
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Requirements

- **Eight courses are prerequisites¹ for the minor:**

Code	Title	Credit Hours
ECON 1101	Macroeconomic Principles	3
ECON 1102	Microeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
ACCT 2101	Financial Accounting	3
ACCT 2102	Managerial Accounting	3
or ACCT 2521	Cost Accounting	
MKTG 2101	Marketing Management	3
RMI 2101	Introduction to Risk Management	3
STAT 2103	Statistical Business Analytics (or STAT 2101 or MATH 1013)	4
One of the following can be substitute for STAT 2103 if required for the student's program:		
CEE 3048	Probability, Statistics & Stochastic Methods	
SOC 1167	Social Statistics	
SOC 3201	Statistical Methods in Sociology	

Total Credit Hours **25**

1

Minimum grades of C- are required in prerequisite courses and are not calculated in the minor GPA.

- **Eight course alternate prerequisites¹ for the minor:**

Code	Title	Credit Hours
ACCT 2101	Financial Accounting	3
or ACCT 2501	Survey of Accounting	
ECON 1101	Macroeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
MKTG 2101	Marketing Management	3
RMI 2501	Fundamentals of Personal Financial Planning	3
Three electives chosen from the menu of the General Business Studies minor, excluding SGM courses listed below. ²		9

Total Credit Hours **24**

1

Minimum grades of C- are required in prerequisite courses and are not calculated in the minor GPA.

2

Please see the General Business Studies minor (p. 853) for list of electives.

- **Three departmental courses are required** (two must be taken at Temple University):

Code	Title	Credit Hours
Select 9 credits from the following:		9
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3585	Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures	
or SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	

SGM 4596	Strategic Business Planning: Feasibility Assessment / Business Planning for Entrepreneurial Ventures 1	
HRM 3507	Intrapreneurship in the 21st Century	
SGM 3580	Special Topics - Strategic Management ²	
SGM 3682	Independent Study ³	

Total Credit Hours**9**

1

This writing intensive course is also the major capstone, and all prerequisites must be met.

2

SGM 3580 course topics vary by semester. Approval of the academic director, chair, or approved department personnel is required. Not all SGM 3580 topics are appropriate for EIM students.

3

SGM 3682 Independent Study projects will be identified or created by the department or may be proposed by faculty/students collaborating where coursework does not match student's goals or needs and faculty are available to oversee a project. Approval of the academic director, chair, or approved department personnel is required.

- A grade point average of 2.0 as well as a minimum grade of C- in each course is required unless otherwise specified.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- To declare or rescind this minor, visit the Fox School of Business and Management.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

Finance BBA

Overview

The **Bachelor of Business Administration in Finance**, offered by the Department of Finance, provides students with theoretical and practical knowledge that opens many employment opportunities in the financial industry and corporate sector. It is intended for students who plan to pursue careers in asset management, commercial and investment banking, corporate sector, consulting, and public finance. The curriculum covers a variety of topics that include the structure and functioning of financial markets, asset valuation, portfolio management, corporate finance, financial statement analysis, fixed income analysis, credit analysis, and risk management. Students acquire a variety of skills that are highly valuable by employers. The main competencies to be developed include analyzing financial data from professional platforms such as Bloomberg and S&P Capital IQ, producing analyst reports, building financial models, and making sound financial business decisions. In addition, students have an opportunity to participate in The William C. Dunkelberg Owl Fund, a real money student-managed investment fund, and obtain real-life investing experience.

Campus Location: Main and Online

Program Code: BU-FIN-BBA

Student Professional Organization

All Finance majors are encouraged to join the Temple Finance Association. This student professional organization offers numerous opportunities for Finance majors to attend career development seminars, connect with Fox alumni, and network with prominent business leaders and industry practitioners.

Licensure/Certification

Chartered Financial Analyst (CFA)

A Chartered Financial Analyst (CFA) credential is often required for employment or advancement in money management. The condition for taking the first CFA exam is either to have a completed bachelor's degree or be in the final year of a four-year degree.

To become a CFA Charter holder, you must

- pass all three levels of the exam; and
- have at least 36 months of experience as a professional in investments or a related field.

<https://www.cfainstitute.org/en/programs/cfa>

Financial Risk Manager (FRM)

The Financial Risk Manager (FRM) certification is the most valuable certification in the area of risk management. There are no educational requirements or professional prerequisites that should be satisfied to register for the FRM exam.

To obtain the FRM certification, you must

- pass the FRM Exam Part I;
- pass the FRM Exam Part II within 4 years of passing Part I; and
- demonstrate 2 years of professional full-time financial risk management work experience.

<https://www.garp.org/frm/frequently-asked-questions>

Minor

The Finance minor is designed for students who want to obtain a deeper understanding of financial principles and learn about their applications to various problems in the corporate, financial and government sectors. The minor is open to business and non-business students.

Requirements (p. 849) for the minor must be fulfilled prior to graduation. The courses counted toward a major or another minor cannot be used to meet the minor requirements.

Contact Information

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Learn more about the Bachelor of Business Administration in Finance.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 795) for the Bachelor of Business Administration, including the requirements of the major listed below. Students must attain an overall GPA of 2.0 and a 2.0 GPA in the major to graduate as a Finance major.

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of Finance Major

Code	Title	Credit Hours
FIN 3504	Intermediate Corporate Finance	3
FIN 3507	Security Analysis and Portfolio Management	3
Select one of the following:		3
FIN 4596	Seminar in Corporate Finance ¹	
FIN 4696	Seminar in Investment Analysis ¹	

Select three of the following:		9
FIN 3505	Bank Enterprise Risk Management	
FIN 3506	Derivatives and Financial Risk Management	
FIN 3508	Fixed Income Modeling and Analysis	
FIN 3509	Real Estate Investment and Finance ²	
FIN 3512	Financial Modeling	
FIN 3513	Financial Statement Analysis	
FIN 3515	Financial Markets and Institutions for Business	
FIN 3516	Corporate Valuation	
FIN 3517	Financial Data Analysis	
FIN 3522	Advanced Portfolio Analysis	
FIN 3526	Commercial Credit Essentials	
FIN 3551	International Finance	
FIN 3571	Owl Fund Seminar ³	
FIN 3671	Advanced Owl Fund Seminar ³	
Total Credit Hours		18

1

This major capstone is taken in the final semester, and all prerequisites must be met.

2

FIN 3509 cannot be used to meet the Finance major requirements if already used to meet another major, minor, or certificate requirement.

3

Requires permission of the instructor.

Suggested Academic Plan

Bachelor of Business Administration in Finance

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1		
Fall		Credit Hours
STAT 1001	Quantitative Methods for Business I	3
ECON 1101	Macroeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
	Credit Hours	16
Spring		
STAT 1102	Quantitative Methods for Business II	4
ECON 1102	Microeconomic Principles	3
BA 1103	Legal and Ethical Reasoning in Business	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
	Credit Hours	16
Year 2		
Fall		
ACCT 2103	Financial and Managerial Accounting for Decision Making	4
STAT 2103	Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)	4
MIS 2101	Digital Systems	3
MKTG 2101	Marketing Management	3

IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		17
Spring		
BA 2101	Professional Development Strategies	1
BA 2196	Business Communications	3
Select one of the following: ¹		3
BA 2501	Turning Numbers into Knowledge: Visualizing Data	
BA 2502	Business Analytics: Modern Data Science Techniques	
RMI 2101	Introduction to Risk Management	3
FIN 3101	Financial Management	3
Business Elective ²		3
Credit Hours		16
Year 3		
Fall		
MSOM 3101	Operations Management	3
Select one of the following:		3
FIN 3504	Intermediate Corporate Finance	
FIN 3507	Security Analysis and Portfolio Management	
Business Elective ²		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
Select one of the following:		3
FIN 3504	Intermediate Corporate Finance	
FIN 3507	Security Analysis and Portfolio Management	
Select one of the following:		3
FIN 3505	Bank Enterprise Risk Management	
FIN 3506	Derivatives and Financial Risk Management	
FIN 3508	Fixed Income Modeling and Analysis	
FIN 3509	Real Estate Investment and Finance	
FIN 3512	Financial Modeling	
FIN 3513	Financial Statement Analysis	
FIN 3515	Financial Markets and Institutions for Business	
FIN 3516	Corporate Valuation	
FIN 3517	Financial Data Analysis	
FIN 3522	Advanced Portfolio Analysis	
FIN 3526	Commercial Credit Essentials	
FIN 3551	International Finance	
FIN 3571	Owl Fund Seminar	
FIN 3671	Advanced Owl Fund Seminar	
Business Elective ²		3
GenEd Breadth Course		3
Free Elective		3
Credit Hours		15
Year 4		
Fall		
BA 4102	Strategic Management	3
Select one of the following:		3
FIN 3505	Bank Enterprise Risk Management	
FIN 3506	Derivatives and Financial Risk Management	

FIN 3508	Fixed Income Modeling and Analysis	
FIN 3509	Real Estate Investment and Finance	
FIN 3512	Financial Modeling	
FIN 3513	Financial Statement Analysis	
FIN 3515	Financial Markets and Institutions for Business	
FIN 3516	Corporate Valuation	
FIN 3517	Financial Data Analysis	
FIN 3522	Advanced Portfolio Analysis	
FIN 3526	Commercial Credit Essentials	
FIN 3551	International Finance	
FIN 3571	Owl Fund Seminar	
FIN 3671	Advanced Owl Fund Seminar	
GenEd Breadth Course		3
GenEd Breadth Course		3
Free Elective		3
Credit Hours		15
Spring		
Select one of the following:		3
FIN 4596	Seminar in Corporate Finance	
FIN 4696	Seminar in Investment Analysis	
Select one of the following:		3
FIN 3505	Bank Enterprise Risk Management	
FIN 3506	Derivatives and Financial Risk Management	
FIN 3508	Fixed Income Modeling and Analysis	
FIN 3509	Real Estate Investment and Finance	
FIN 3512	Financial Modeling	
FIN 3513	Financial Statement Analysis	
FIN 3515	Financial Markets and Institutions for Business	
FIN 3516	Corporate Valuation	
FIN 3517	Financial Data Analysis	
FIN 3522	Advanced Portfolio Analysis	
FIN 3526	Commercial Credit Essentials	
FIN 3551	International Finance	
FIN 3571	Owl Fund Seminar	
FIN 3671	Advanced Owl Fund Seminar	
Free Elective		3
Free Elective		3
Free Elective		2
Credit Hours		14
Total Credit Hours		124

1

Please check with your departmental advisor on which course is most appropriate for the major.

2

2000-3999 electives can be selected from: ACCT, AS, BA, ECON, FIN, HRM, IB, LGLS, MIS, MKTG, RE, RMI, STAT, SCM, SGM. **PLEASE NOTE:** FIN 2501 and FIN 2502 (1.5 credits each) are recommended to fulfill three (3) total business elective credits.

Finance Minor

Overview

The **Minor in Finance**, offered by the Department of Finance, allows students to obtain a deeper understanding of financial principles and learn about their applications to various problems faced by decision-makers in the corporate, financial and government sectors. It develops marketable skills and expands job opportunities for non-finance majors.

The minor is open to all students.

Campus Locations: Main and Online

Contact Information

Oleg Rytchkov, Department Chair
Alter Hall, Room 420
215-204-4146
rytchkov@temple.edu

Cindy Axelrod, Deputy Department Chair
Alter Hall, Room 422
215-204-1917
cindy.axelrod@temple.edu

Requirements

- **Eleven courses are required** (six of these courses must be taken at Temple University):

Code	Title	Credit Hours
Select one of the following:		3-4
ACCT 2101	Financial Accounting	
ACCT 2103	Financial and Managerial Accounting for Decision Making	
ECON 1101	Macroeconomic Principles	3
ECON 1102	Microeconomic Principles	3
FIN 3101	Financial Management	3
Pre-Calculus/Calculus sequence		7-8
STAT 1001 & STAT 1102	Quantitative Methods for Business I and Quantitative Methods for Business II	
MATH 1021 & MATH 1031	College Algebra and Differential and Integral Calculus	
MATH 1022 & MATH 1041	Precalculus and Calculus I	
STAT 2103	Statistical Business Analytics	4
FIN 3504	Intermediate Corporate Finance (must be completed at Temple)	3
FIN 3507	Security Analysis and Portfolio Management	3
Select two of the following:		6
FIN 3505	Bank Enterprise Risk Management	
FIN 3506	Derivatives and Financial Risk Management	
FIN 3509	Real Estate Investment and Finance	
FIN 3512	Financial Modeling	
FIN 3513	Financial Statement Analysis	
FIN 3515	Financial Markets and Institutions for Business	
FIN 3517	Financial Data Analysis	
FIN 3522	Advanced Portfolio Analysis	
FIN 3526	Commercial Credit Essentials	
FIN 3551	International Finance	
FIN 3571	Owl Fund Seminar ¹	

FIN 3671

Advanced Owl Fund Seminar ¹**Total Credit Hours****35-37**

1

Requires permission of the instructor.

- Minimum grades of C are required in all FIN courses. Minimum grades of C- required in all other courses.
- A grade point average of 2.0 in the minor is required.
- FIN courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- To declare or rescind this minor, visit the Fox School of Business and Management.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

Financial Planning BBA

Overview

The **Bachelor of Business Administration in Financial Planning**, offered by the Department of Finance, provides students with knowledge and skills that are necessary to become a financial planning professional. Financial planners help individuals meet their life goals through growing, managing and protecting their assets. They holistically evaluate clients' financial situations, develop and present recommendations, advise clients on retirement, taxes, and estate planning, create portfolios that meet clients' investment objectives, and monitor clients' progress toward their financial goals. A successful financial planner must be skilled in the following areas:

- Retirement planning;
- Investment allocation;
- Income tax and estate planning;
- Insurance and employee benefits planning; and
- Financial statement preparation and analysis.

Financial planners are in great demand nationally and in the Philadelphia region. Potential employers include national and regional banks (i.e., Wells Fargo, Bank of America, Citigroup, JPMorgan Chase), asset managers (i.e., Charles Schwab, Vanguard, Fidelity, T. Rowe Price), accounting firms, registered investment advisors, and independent financial planning businesses and institutions.

Campus Location: Main

Program Code: BU-FINP-BBA

Student Professional Organization

All Financial Planning majors are encouraged to join the Financial Planning Association (FPA). This student professional organization provides its members an opportunity to engage and interact with financial planning professionals from registered investment advisors, broker-dealers and national investment firms. The annual FPA Career Day event and weekly student-led workshops prepare students for internships and careers in financial planning.

Licensure/Certification

Certified Financial Planner (CFP)

A Certified Financial Planner (CFP) credential is the gold standard for employment and advancement in the financial planning industry. The CFP requirements are the same in all states. First and foremost, candidates must hold at least a bachelor's degree from an accredited college or university. Second, they must complete coursework offered by a Registered Program provider approved by the CFP Board. The BBA in Financial Planning at the Fox School of Business and Management has been a CFP Board Registered Program since July 2015. To maintain this status, it incorporates 72 required Principal Knowledge Topics in the course curriculum. Third, candidates must pass the CFP exam, which is given three times per year (March, July, September). Fourth, candidates must attain three years of relevant work experience. Fifth, candidates must sign an Ethics Declaration and undergo a background check.

<https://www.cfp.net/get-certified/certification-process>

Contact Information

Oleg Rytchkov, Department Chair

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rytchkov@temple.edu

Cindy Axelrod, Director of the Financial Planning Program
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Learn more about the Bachelor of Business Administration in Financial Planning.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 795) for the Bachelor of Business Administration, including the requirements of the major listed below. Students must attain an overall GPA of 2.0 and a 2.0 GPA in the major to graduate as a Finance major.

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of Financial Planning Major

Code	Title	Credit Hours
FIN 3507	Security Analysis and Portfolio Management	3
FIN 3519	Introduction to Financial Planning	3
LGLS 3519	Tax, Estate and Trust Planning	3
RMI 3519	Insurance, Benefits and Retirement Planning	3
FIN 4598	Seminar in Financial Planning ¹	3
Select one of the following:		3
AOD 1166	Interpersonal Processes through the Life Span	
AOD 2214	Conflict Processes	
AOD 2215	Mediation: Principles and Practice	
AOD 3316	Negotiation Processes	
AOD 3376	Facilitating Group Decision-Making	
HRM 3501	Power, Influence and Negotiation	
MKTG 3504	Professional Selling and Sales Management	

Total Credit Hours

18

1

This major capstone is taken in the final semester, and all prerequisites must be met.

Suggested Academic Plan

Bachelor of Business Administration in Financial Planning

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1		Credit Hours
Fall		
STAT 1001	Quantitative Methods for Business I	3
ECON 1101	Macroeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
Credit Hours		16
Spring		
STAT 1102	Quantitative Methods for Business II	4
ECON 1102	Microeconomic Principles	3
BA 1103	Legal and Ethical Reasoning in Business	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
ACCT 2103	Financial and Managerial Accounting for Decision Making	4
STAT 2103	Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)	4
MIS 2101	Digital Systems	3
MKTG 2101	Marketing Management	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		17
Spring		
FIN 3101	Financial Management	3
BA 2101	Professional Development Strategies	1
BA 2196	Business Communications	3
Select one of the following: ¹		3
BA 2501	Turning Numbers into Knowledge: Visualizing Data	
BA 2502	Business Analytics: Modern Data Science Techniques	
RMI 2101	Introduction to Risk Management	3
GenEd Breadth Course		3
Credit Hours		16
Year 3		
Fall		
MSOM 3101	Operations Management	3
FIN 3519	Introduction to Financial Planning	3
Business Elective ²		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
Select two of the following:		6
FIN 3507	Security Analysis and Portfolio Management	
LGLS 3519	Tax, Estate and Trust Planning	
RMI 3519	Insurance, Benefits and Retirement Planning	
Business Elective ²		3
GenEd Breadth Course		3

Free Elective		3
Credit Hours		15
Year 4		
Fall		
BA 4102	Strategic Management	3
Select one of the following:		3
FIN 3507	Security Analysis and Portfolio Management	
LGLS 3519	Tax, Estate and Trust Planning	
RMI 3519	Insurance, Benefits and Retirement Planning	
Business Elective ²		3
GenEd Breadth Course		3
Free Elective		3
Credit Hours		15
Spring		
FIN 4598	Seminar in Financial Planning	3
Select one of the following:		3
AOD 1166	Interpersonal Processes through the Life Span	
AOD 2214	Conflict Processes	
AOD 2215	Mediation: Principles and Practice	
AOD 3316	Negotiation Processes	
AOD 3376	Facilitating Group Decision-Making	
HRM 3501	Power, Influence and Negotiation	
MKTG 3504	Professional Selling and Sales Management	
Free Elective		3
Free Elective		3
Free Elective		2
Credit Hours		14
Total Credit Hours		124

1

Please check with your departmental advisor on which course is most appropriate for the major.

2

2000-3999 electives can be selected from: ACCT, AS, BA, ECON, FIN, HRM, IB, LGLS, MIS, MKTG, RE, RMI, STAT, SCM, SGM. Please see your advisor for elective suggestions that match your career objectives.

General Business Studies Minor

Overview

Offered by the Fox School of Business and Management, the **Minor in General Business Studies** is designed for undergraduate degree-seeking students outside the Fox School of Business and Management who are interested in a less quantitatively-focused business minor. The minor provides non-business students with an overview of some critical business areas and allows students the flexibility to select electives to explore interested areas of business. It is designed to enhance students' readiness for work in business or other organizations after graduation and increase their professional marketability.

Campus Locations: Main, Japan, and Online

Contact Information

Main Campus

Chuck Allen, Associate Vice Dean of Undergraduate Programs
Alter Hall, Room 369
callen@temple.edu

Temple Japan Campus

William Swinton, MBA, International Business Coordinator

swint@tuj.temple.edu

Requirements

- Please note that some courses may have additional prerequisites, especially in the Foundation area. Students are encouraged to view course descriptions before selecting.
- **Eight courses required** (five of these courses must be taken at Temple University):

Code	Title	Credit Hours
Foundation		
ECON 1101	Macroeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
ACCT 2103 or ACCT 2501	Financial and Managerial Accounting for Decision Making Survey of Accounting	3-4
MKTG 2101	Marketing Management	3
RMI 2501	Fundamentals of Personal Financial Planning	3
Electives		
Select three of the following:		9
ACCT 3511	Intermediate Accounting I	
BA 1103	Legal and Ethical Reasoning in Business	
BA 2501	Turning Numbers into Knowledge: Visualizing Data	
BA 2502	Business Analytics: Modern Data Science Techniques	
ECON 1102	Microeconomic Principles	
ECON 3503	Introduction to Econometrics	
ECON 3519	Game Theory and Strategic Behavior	
ECON 3538	Managerial Economics	
HCM 3501	Introduction to Health Services Systems	
HCM 3502	Healthcare Financing and Information Technology	
HCM 4596	Healthcare Quality and Risk Management	
HRM 2501	Introduction to Human Resource Management	
HRM 2511	Corporate Sustainability: People, Profits & Planet	
HRM 3501	Power, Influence and Negotiation	
HRM 3502	Leading People at Work	
HRM 3503	Communicating in Organizations	
HRM 3504	Leadership in the 21st Century	
HRM 3580	Special Topics - Human Resource Management	
IB 2501 or ASST 2511	Fundamentals of Asian Business Introduction to Asian Business	
IB/LAS 2502	Fundamentals of Latin American Business	
IB 2503	Fundamentals of European Business	
LGLS 1112 or LGLS 1102	Law for Business Law of Contracts	
LGLS 3580	Special Topics - Law	
MIS 2101	Digital Systems	
MIS 2502	Data and Analytics	
MIS 3406	Cloud Architecture	
MIS 3538	Social Media Innovation	
MKTG 3501	Integrated Marketing Communications	
MKTG 3504	Professional Selling and Sales Management	
MKTG 3508	Digital Marketing	
MKTG 3580	Special Topics - Marketing	
RE 3501	Real Estate Fundamentals	
RE 3502	Real Estate Practice	
RMI 2101	Introduction to Risk Management	

SCM 3505	Lean Six Sigma in Supply Chain Management	
SCM 3515	Principles of Supply Chain Management	
SCM 3516	Transportation and Logistics Management	
STAT 2103	Statistical Business Analytics (or STAT 2101)	
STAT 2521	Data Analysis and Statistical Computing	
STAT 2522	Survey Design and Sampling	
STAT 2523	Design of Experiments and Quality Control	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
Total Credit Hours		24-25

- A grade point average of 2.0 in the minor is required.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- To declare or rescind this minor, visit the Fox School of Business and Management.
- Foundation courses can be completed 100% online. Many, but not all, of the electives are online.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

Healthcare Management Minor

Overview

Offered by Department of Risk, Actuarial Science, and Legal Studies, the **Minor in Healthcare Management** is open to all students. This minor develops value-added skills for students who aim to understand the structure, policy, finance and strategy/operations issues of healthcare organizations.

Campus Location: Main

Contact Information

Edmund (Ned) Lafer, Assistant Professor of Practice
edmund.lafer@temple.edu

Requirements

- **Three courses required** (all three courses must be taken at Temple University):

Code	Title	Credit Hours
Required Courses		
HCM 3501	Introduction to Health Services Systems	3
HCM 3502	Healthcare Financing and Information Technology	3
HCM 4596	Healthcare Quality and Risk Management	3
Total Credit Hours		9

- Courses must be taken in sequence, not concurrently, so a minimum of three semesters is required to complete this minor.
- A grade point average of 2.0 in the minor is required as well as a minimum grade of C in each course unless otherwise specified.
- Health Economics (ECON 3507) is recommended but not required as an additional course.
- Risk Management majors who complete the Healthcare track are not eligible for the minor.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- To declare or rescind this minor, visit the Fox School of Business and Management.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

Human Resource Management BBA

Overview

The **Bachelor of Business Administration in Human Resource Management** (HRM), offered by the Department of Management, produces leaders who develop and deploy a crucial asset: the people who make up the organization. All organizations need great human talent to succeed, they need to reward and retain that talent, and they need all that talent to work well together. Human resource professionals recruit, train and develop, support, manage, and engage organizational members so that great goals can be achieved.

The Human Resource Management major

- Prepares students for careers in human resources (HR) either as generalists, specialists, or consultants;
- Focuses on HRM's role in creating synergies between the human and business sides of the business; and
- Links an organization's human capital with its productivity, reputation, and creation of sustainable profits.

If you like to think about humans and how they can do their best work together, this major is for you.

Campus Location: Main

Program Code: BU-HRM-BBA

Careers and Placements

The HRM major prepares graduates to be leaders in critical areas, including:

- Talent Acquisition;
- Training and Development;
- Compensation, Benefits, and Total Rewards;
- Employee Engagement;
- HR Metrics and Information Systems;
- Performance Management;
- Employee and Labor Relations;
- Ethical Practices in Labor and Employment; and,
- Legal Compliance with Local, State, and Federal Employment Regulations.

Typical first jobs for Human Resource Management majors include:

- HR Analyst,
- HR Generalist,
- HR Coordinator,
- Corporate Recruiter,
- Talent Development Specialist,
- Employee Relations Specialist,
- DE&I Coordinator,
- Compensation Analyst,
- Corporate Trainer, and
- HR Consultant.

Typical jobs held five to ten years out include managerial roles in these areas or movement into a specialty area of interest within the organization.

Minors

The Department of Management offers the following minors:

- Entrepreneurship and Innovation Management Minor
- International Business Administration Minor
- Organizational Leadership Minor
- Sales Minor

Related Academic Programs

RMI & HRM Focus

The Department of Risk, Actuarial Science, and Legal Studies offers Risk Management and Insurance (RMI) courses that complement the Department of Management's HRM courses for students interested in a career in employee benefits and/or human resource management. These courses allow students to broaden their career options by taking advantage of the cross-training offered by these departments.

- HRM major with a RMI focus: Students take RMI 3501 and RMI 3503.
- RMI major with a HRM focus: Students take HRM 2501 and HRM 3511.
- Dual HRM/RMI major: Students fulfill all requirements for both majors.

Graduate Program

- MS in Human Resource Management (MSHRM)

SHRM CP/SCP Certification

The Society for Human Resource Management offers graduating students the opportunity to sit for the SHRM CP/SCP Certification Exam. This comprehensive exam encompasses the entire field of human resource management. Upon passing the exam, the candidate is granted the designation of "Certified Professional" or "Senior Certified Professional" (CP/SCP).

- HRM students in their senior year are highly encouraged to register for, and prepare for, this exam with the goal of becoming certified (usually at the Certified Professional "CP" level).
- Certification with a SHRM CP/SCP credential differentiates you in the job market upon graduation and in the years ahead in your entire career.
- The SHRM CP/SCP Certification Preparation Course provides the materials, lectures, and activities needed to develop professional HR skills and to do well when you sit for the exam.
- Department of Management SHRM Certification Prep Scholarships are available to cover the SHRM CP/SCP Certification Preparation Course itself and associated materials.

Getting the Most Out of Your Major

Your successful growth into a professional field occurs both inside and outside the classroom. Human Resource Management majors are strongly encouraged to go to events, participate in activities, join a student professional organization (SPO), and do internships to maximize post-graduation success. Some of the benefits of extra-curricular activities are:

- Build friendships and networks outside of class,
- Build professional relationships with those currently in practice,
- Discover new areas and facets of your chosen field,
- Talk through your perceptions of the field with others interested in HR issues,
- Keep up to date with changes in the modern practice of HR, and
- Balance your class work with a variety of other activities.

Student Professional Organizations for HRM Majors

Society of Human Resource Management (TUSHRM)

One of the benefits of being an HRM major is the opportunity to join the student chapter of the Society of Human Resource Management (TUSHRM). TUSHRM is a 100% participative working organization; all members have an important role to play.

- Join other HR majors in creating, managing, and attending activities that build relationships with HR professionals.
- Staff various community service efforts, access mentoring opportunities and promote professional development programming.
- Dues are paid yearly to National SHRM, allowing for many benefits at the student chapter level, free membership in a regional Professional SHRM chapter (like Philly SHRM, SEPA SHRM, or GVFHRA), discounted rates for the SHRM CP/SCP Certification Exam, and access to members-only TU SHRM events (like the Head Shots meeting and the Informational Interviews).

For more information, contact faculty advisor Debra Casey at 215-204-4130 or debra.casey@temple.edu, or visit the TUSHRM web site.

Net Impact

For those HRM majors interested in making the world a better place (and who isn't?), a great SPO choice is Net Impact. Together with other Fox students, you will:

- Focus on strengthening leaders to use the power of business in positive ways;
- Involve yourself in important social, environmental, and economic impacts of business; and
- Show your interests in Corporate Social Responsibility (CSR), a leading issue for modern businesses around the world.

For more information, contact faculty advisor Lynne Andersson at 215-204-5088 or landerss@temple.edu, or visit the Net Impact web site.

Student Professional Sales Organization (PSO)

For those HRM majors who want to be at the top of their professional game, you'll want to check out the Student Professional Sales Organization (PSO). Together with other Fox students, you will:

- Learn skills that have relevancy in every career path;
- Build on your understanding of negotiation, influence and sales;
- Strengthen your professional communication skills;
- Participate in events, training, competitions, and conferences; and
- Compete in the signature annual Fox Sales Challenge event.

For more information, contact faculty advisor Tony Petrucci at 215-204-8138 or petrucci@temple.edu, or visit the PSO web site.

Internships

The most valuable thing you can do as a student to prepare for your career is an internship. Many students complete multiple internships in their college years. There are many ways within Fox, with CSPD's expert assistance, to find and evaluate internship opportunities.

The HRM 3581 Co-op Experience in Human Resource Management course combines academic work with your internship experience in a 3-credit course with a group ShareOut of experiences at the end. If interested in HRM 3581, contact faculty advisor Debra Casey at 215-204-4130 or debra.casey@temple.edu for more information.

Professional Development Program

The Fox Leadership Development Program

Fox majors are required to participate in the Fox Leadership Development Program (FLDP).

HRM Key Achievement Award ("KAA")

HRM majors, along with Fox students interested in HR issues, are encouraged to earn the **HRM Key Achievement Award**. While you earn the FLDP Points, you can also earn your KAA by attending and participating in a wide variety of events and activities that relate to the field of HRM, community service in HR related fields, and your growth from your studies into your professional career. Learn more at TUSHRM.

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Learn more about the Bachelor of Business Administration in Human Resource Management.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 795) for the Bachelor of Business Administration, including the requirements of the major listed below. Human Resource Management students must attain a 2.0 GPA in the major and a 2.0 cumulative GPA in order to graduate.

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of the Human Resource Management Major

Code	Title	Credit Hours
HRM 2501	Introduction to Human Resource Management ¹	3
HRM 3511	Compensation Management ¹	3
HRM 3512	Human Resource Management and Public Policy	3
HRM 4596	Organizational Staffing and Career Management ^{1, 2}	3
Select two of the following:		6
HRM 3501	Power, Influence and Negotiation ³	
HRM 3502	Leading People at Work ³	
HRM 3503	Communicating in Organizations ³	
HRM 3504	Leadership in the 21st Century ³	
or HRM 3505	Sustainable Organizational Leadership	
HRM 3506	HR Metrics: Using Data, Scorecards and Dashboards to Drive Business Performance	
HRM 3513	Labor Relations: Strategy and Practice	
HRM 3531	HR on the Ground (spring only)	
or HRM 3581	Co-op Experience in Human Resource Management	
HRM 3565	International Human Resource Management	
HRM 3580	Special Topics - Human Resource Management (topics may change) ⁴	
Total Credit Hours		18

1

HRM majors are required to participate in the Fox Leadership Development Program (FLDP). This program was created to respond to employer expectations regarding the skill sets of college graduates. Please refer to FLDP for more information.

2

This major capstone is typically taken in the final semester, and all prerequisites must be met.

3

These courses make up the Organizational Leadership Minor. However, they cannot be double counted for HRM major requirements if applied toward the Organizational Leadership Minor.

4

This course may be offered multiple semesters with different topics. It can be applied once toward the major. It can be used as a free elective if completed with a different topic.

Suggested Academic Plan

Bachelor of Business Administration in Human Resource Management

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1		Credit Hours
Fall		
STAT 1001	Quantitative Methods for Business I	3
ECON 1101	Macroeconomic Principles	3

HRM 1101	Leadership and Organizational Management	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
Credit Hours		16
Spring		
STAT 1102	Quantitative Methods for Business II	4
ECON 1102	Microeconomic Principles	3
BA 1103	Legal and Ethical Reasoning in Business	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
ACCT 2103	Financial and Managerial Accounting for Decision Making	4
STAT 2103	Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)	4
MIS 2101	Digital Systems	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Credit Hours		17
Spring		
BA 2101	Professional Development Strategies	1
BA 2196	Business Communications	3
Select one of the following: ¹		3
BA 2501	Turning Numbers into Knowledge: Visualizing Data	
BA 2502	Business Analytics: Modern Data Science Techniques	
MKTG 2101	Marketing Management	3
RMI 2101	Introduction to Risk Management	3
HRM 2501	Introduction to Human Resource Management	3
Credit Hours		16
Year 3		
Fall		
FIN 3101	Financial Management	3
MSOM 3101	Operations Management	3
Select one of the following:		3
HRM 3511	Compensation Management	
HRM 3512	Human Resource Management and Public Policy	
Select one of the following:		3
HRM 3501	Power, Influence and Negotiation	
HRM 3502	Leading People at Work	
HRM 3503	Communicating in Organizations	
HRM 3504 or HRM 3505	Leadership in the 21st Century or Sustainable Organizational Leadership	
HRM 3506	HR Metrics: Using Data, Scorecards and Dashboards to Drive Business Performance	
HRM 3513	Labor Relations: Strategy and Practice	
HRM 3531 or HRM 3581	HR on the Ground or Co-op Experience in Human Resource Management	
HRM 3565	International Human Resource Management	
HRM 3580	Special Topics - Human Resource Management	

Business Elective ²		3
Credit Hours		15
Spring		
Select one of the following:		3
HRM 3511	Compensation Management	
HRM 3512	Human Resource Management and Public Policy	
Business Elective ²		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Free Elective		3
Credit Hours		15
Year 4		
Fall		
BA 4102	Strategic Management	3
Select one of the following:		3
HRM 3501	Power, Influence and Negotiation	
HRM 3502	Leading People at Work	
HRM 3503	Communicating in Organizations	
HRM 3505 or HRM 3504	Sustainable Organizational Leadership or Leadership in the 21st Century	
HRM 3506	HR Metrics: Using Data, Scorecards and Dashboards to Drive Business Performance	
HRM 3513	Labor Relations: Strategy and Practice	
HRM 3581 or HRM 3531	Co-op Experience in Human Resource Management or HR on the Ground	
HRM 3565	International Human Resource Management	
HRM 3580	Special Topics - Human Resource Management	
Business Elective ²		3
GenEd Breadth Course		3
Free Elective		3
Credit Hours		15
Spring		
HRM 4596	Organizational Staffing and Career Management	3
GenEd Breadth Course		3
Free Elective		3
Free Elective		3
Free Elective		2
Credit Hours		14
Total Credit Hours		124

1

Please check with your departmental advisor on which course is most appropriate for the major.

2

2000-3999 electives can be selected from: ACCT, AS, BA, ECON, FIN, HRM, IB, LGLS, MIS, MKTG, RE, RMI, STAT, SCM, SGM. Please see your advisor for elective suggestions that match your career objectives.

International Business Administration Minor

Overview

The **Minor in International Business Administration**, offered by the Department of Management, uniquely prepares students for the global economy through project-based courses, internships and transformative study abroad opportunities. This minor is designed to benefit students of all majors by giving them an option to study International Business courses and, therefore, embrace an increasingly international world without having to be fully proficient in a foreign language. The International Business Administration minor is the perfect complement to any major.

The minor is open to all business and non-business students who have already selected a Temple University major.

Campus Location: Main

Contact Information

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Alter Hall, Room 333
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Requirements

- Open to business and non-business students.
- Designed to benefit students of all majors by giving them an option to study International Business courses and, therefore, embrace an increasingly international world without having to be fully proficient in a foreign language. The International Business Administration minor is the perfect complement to any major.
- **Four courses are prerequisites for this minor (two of these must be taken at Temple):**

Code	Title	Credit Hours
ECON 1101 or ECON 1901	Macroeconomic Principles ¹ Honors Macroeconomic Principles	3
ECON 1102 or ECON 1902	Microeconomic Principles ¹ Honors Microeconomic Principles	3
HRM 1101 or HRM 1901	Leadership and Organizational Management ¹ Honors Leadership and Organizational Management	3
MKTG 2101 or MKTG 2901	Marketing Management ² Honors Marketing Management	3
Total Credit Hours		12

1

A minimum grade of C- is required in ECON 1101/ECON 1901, ECON 1102/ECON 1902 and HRM 1101/HRM 1901.

2

A minimum grade of C is required in MKTG 2101/MKTG 2901.

Note: Prerequisite courses are not calculated in the minor GPA.

- **Required courses (three of these must be taken at Temple University):**

Code	Title	Credit Hours
Select two Geographical International Business electives:		6
IB 3101	Fundamentals of International Business	
IB 2501	Fundamentals of Asian Business	
IB 2502	Fundamentals of Latin American Business	
IB 2503	Fundamentals of European Business	
IB 2504	Fundamentals of Business in Africa and the Middle East	
IB 2509	Short Study Trip Abroad: Doing Business in a Foreign Country	

Electives

Select two of the following:

6

International Business & Marketing	
IB 3581 or IB 3585	International Business Internship
MKTG 3504	Professional Selling and Sales Management
MKTG 3505	Entrepreneurial Marketing
MKTG 3508	Digital Marketing
International Business & Supply Chain Management	
SCM 3515	Principles of Supply Chain Management ¹
SCM 3516	Transportation and Logistics Management ¹
International Business & Entrepreneurship	
IB 3596	Global Entrepreneurship ²
SGM 3002	Planning to Start Your Own Business
SGM 3501	Entrepreneurial and Innovative Thinking
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas
Total Credit Hours	12

1

SCM 3515 and SCM 3516 have additional prerequisites which would require non-business students to complete additional courses.

2

IB 3596 has an additional prerequisite.

- Two of the four prerequisite courses and three of the four required courses for the minor must be taken at Temple University.
- A grade point average of 2.0 in the minor is required as well as a minimum grade of C- in each course, unless otherwise specified.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- To declare or rescind this minor, visit the Fox School of Business and Management.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

International Business BBA with International Economics Concentration

Overview

The **Bachelor of Business Administration in International Business**, offered by the Department of Management, uniquely prepares students for the global economy through project-based courses, internships and transformative study abroad opportunities. The nationally recognized Fox International Business (IB) program, which has been supported by Temple University since the 1970s and the U.S. Department of Education since 2000 (CIBER grant), offers two options: an International Business major with six job market/employer-facing concentrations and an International Business Administration minor.

Students who wish to pursue the IB major **must select one of the following concentrations** to align their interest with those of employers:

- International Economics Concentration
- International Entrepreneurship Concentration
- International Finance Concentration
- International Marketing Concentration
- International Sales and Business Development Concentration
- International Supply Chain Management, Transportation and Logistics Concentration

Students are required to prove proficiency in a foreign language or waive that requirement through testing. In addition, it is highly recommended, but not required, for students to study abroad.

Careers and Placements

- **International Economics:** Manage or consult on projects in international organizations, government agencies, or non-governmental organizations.
- **International Entrepreneurship:** Manage operations in a small international firm or launch your own born-global venture.

- **International Finance:** Operate international aspects of the banking sector, including currency exchange or international payment methods for the bank's corporate clients involved in international business.
- **International Marketing:** Conduct international market research, lead product development, manage global or local lines of products and decide which marketing policies must be adapted to local conditions.
- **International Sales and Business Development:** Solicit new international clients while growing relationships with existing clients. Language proficiency, cultural sensitivity, and social negotiation skills are essential.
- **International Supply Chain Management, Transportation and Logistics:** Take charge of delivering products from various points across the globe in a safe and efficient manner. This is a detail-and-customer-oriented career in a fast-paced, high-pressure work environment.

Entry-level positions: Import/Export Coordinator, Foreign Affairs Analyst, Immigration Specialist, Business Analyst, Language Specialist, Operations Specialist/Analyst, Digital Marketer, International Researcher, Marketing & Business Development Associate, Global Mobility Services Associate, Business Strategy Associate, International Sales Coordinator, Logistics Coordinator.

Post entry-level positions: Administrative Manager, Global Business Manager, Business Analyst, Business Consultant, Trade Settlement Analyst, Executive Director, Senior Accountant, Project Management Consultant, Client Relationship Specialist.

Getting the Most Out of Your Major

Through specialized courses and experiences, students can focus on projects and the real world, not just textbooks. These courses include Global Entrepreneurship (IB 3596), International Internship (IB 3581/IB 3585) in Philadelphia, Rome or Tokyo, Short-term Study Abroad (IB 2509), and International Consulting (IB 4587). These courses uniquely prepare students to thrive anywhere, in either global Philadelphia or sunny Barcelona.

IB students often decide to immerse themselves in a foreign country and can spend a semester or more at the Temple University Rome campus or the Temple University Tokyo campus. Students can also go on exchange to any of our multiple partner locations: Paris or Lyon, France; Dublin, Ireland; London, UK; Oviedo, Spain; Seoul, South Korea; etc.

In addition to these international partners and campuses abroad, the Fox IB program is deeply connected to the local and regional ecosystem of international managers, companies, chambers of commerce and government agencies. The student-led International Business Association (IBA) facilitates interactions with these local experts and hiring managers on a weekly basis. In addition, the IBA provides a social network to discover cultures, languages and careers while also giving back through philanthropy.

Lastly, the top IB students are invited to join the prestigious IB Honor Society (Beta Gamma Sigma), which includes Marillynn Hewson (former Chairman, President and CEO of Lockheed Martin), Alan Greenspan (former Chairman of the Federal Reserve) and Ann-Marie Campbell (Executive Vice President of U.S. stores and international operations, Home Depot).

Campus Location: Main

Program Code: BU-IB-BBA

Minors and Certificates

International Business Administration Minor

The International Business Administration minor (p. 861) is the perfect complement to any major. This minor has attracted students from six different Temple colleges to make diversity through interdisciplinary pedagogy a reality. Students who wish to pursue this minor can select the geographic region of their choice through any IB 2500-level course: Asia, Africa and the Middle East, Europe, or Latin America. Neither mastery of a foreign language nor study abroad are required for the International Business Administration minor.

Other Department of Management Minors

- Entrepreneurship and Innovation Management Minor (p. 842)
- Organizational Leadership Minor (p. 905)
- Sales Minor (p. 921)

IB-related Certificates

The following interdisciplinary certificates are offered to enhance a student's international understanding and readiness for the global economy.

- Asian Business and Society (p. 975)
- Spanish and Latin American Studies for Business (p. 1164)

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Learn more about the Bachelor of Business Administration in International Business.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 795) for the Bachelor of Business Administration, including the requirements of the major listed below. International Business students must maintain a 2.0 GPA overall and a 2.0 GPA in the major to graduate.

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of International Economics Concentration

Undergraduate students may earn a Bachelor of Business Administration (B.B.A.) degree in International Business (IB) with a concentration in International Economics. Students are strongly encouraged to pursue a complementary major or minor to enhance their professional marketability by specializing in a functional area of business and/or pursuing area studies expertise.

Code	Title	Credit Hours
Foreign Language Requirement		
(All students must be proficient in two languages)		
Major Requirements		
IB 3101	Fundamentals of International Business	3
IB 3596	Global Entrepreneurship	3
IB 4587	International Business Practicum ¹	3
Select one Geographical Area IB course:		3
IB 2501 or ASST 2511	Fundamentals of Asian Business Introduction to Asian Business	
IB/LAS 2502	Fundamentals of Latin American Business	
IB 2503	Fundamentals of European Business	
IB 2504	Fundamentals of Business in Africa and the Middle East	
IB 2509	Short Study Trip Abroad: Doing Business in a Foreign Country	
Concentration Requirements		
Select two of the following:		6
IB 3581 or IB 3585	International Business Internship International Business Internship	

Any Economics course(s) at the 3000 level or above

Total Credit Hours **18**

1

This major capstone should be taken after all prerequisites are met.

Suggested Academic Plan

Bachelor of Business Administration in International Business with International Economics Concentration

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1		Credit Hours
Fall		
STAT 1001	Quantitative Methods for Business I	3
ECON 1101	Macroeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
Foreign Language or Free Elective		3-4
Credit Hours		16-17
Spring		
STAT 1102	Quantitative Methods for Business II	4
ECON 1102	Microeconomic Principles	3
BA 1103	Legal and Ethical Reasoning in Business	3
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
Foreign Language or Free Elective		3-4
Credit Hours		16-17
Year 2		
Fall		
ACCT 2103	Financial and Managerial Accounting for Decision Making	4
STAT 2103	Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)	4
MIS 2101	Digital Systems	3
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
Foreign Language or Free Elective		3
Credit Hours		17
Spring		
MKTG 2101	Marketing Management	3
BA 2101	Professional Development Strategies	1
BA 2196	Business Communications	3
Select one of the following: ¹		3
BA 2501	Turning Numbers into Knowledge: Visualizing Data	
BA 2502	Business Analytics: Modern Data Science Techniques	
RMI 2101	Introduction to Risk Management	3
Foreign Language or Free Elective		3
Credit Hours		16
Year 3		
Fall		
FIN 3101	Financial Management	3
MSOM 3101	Operations Management	3

IB 3101	Fundamentals of International Business	3
Select one Geographical Area IB course:		3
IB 2501 or ASST 2511	Fundamentals of Asian Business or Introduction to Asian Business	
IB 2502 or LAS 2502	Fundamentals of Latin American Business or Fundamentals of Latin American Business	
IB 2503	Fundamentals of European Business	
IB 2504	Fundamentals of Business in Africa and the Middle East	
IB 2509	Short Study Trip Abroad: Doing Business in a Foreign Country	
Business Elective ²		3
Credit Hours		15
Spring		
IB 3596	Global Entrepreneurship	3
Business Elective ²		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Free Elective		2
Credit Hours		14
Year 4		
Fall		
BA 4102	Strategic Management	3
Business Elective ²		3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
IB 4587	International Business Practicum	3
Select two of the following:		6
IB 3581 or IB 3585	International Business Internship or International Business Internship	
Any Economics course(s) at the 3000 level or above		
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Total Credit Hours		124-126

1

Please check with your departmental advisor on which course is most appropriate for the major.

2

2000-3999 electives can be selected from: ACCT, AS, BA, ECON, FIN, HRM, IB, LGLS, MIS, MKTG, RE, RMI, STAT, SCM, SGM. Please see your advisor for elective suggestions that match your career objectives.

International Business BBA with International Entrepreneurship Concentration

Overview

The **Bachelor of Business Administration in International Business**, offered by the Department of Management, uniquely prepares students for the global economy through project-based courses, internships and transformative study abroad opportunities. The nationally recognized Fox International Business (IB) program, which has been supported by Temple University since the 1970s and the U.S. Department of Education since 2000 (CIBER grant), offers two options: an International Business major with six job market/employer-facing concentrations and an International Business Administration minor.

Students who wish to pursue the IB major **must select one of the following concentrations** to align their interest with those of employers:

- International Economics Concentration
- International Entrepreneurship Concentration
- International Finance Concentration
- International Marketing Concentration
- International Sales and Business Development Concentration
- International Supply Chain Management, Transportation and Logistics Concentration

Students are required to prove proficiency in a foreign language or waive that requirement through testing. In addition, it is highly recommended, but not required, for students to study abroad.

Careers and Placements

- **International Economics:** Manage or consult on projects in international organizations, government agencies, or non-governmental organizations.
- **International Entrepreneurship:** Manage operations in a small international firm or launch your own born-global venture.
- **International Finance:** Operate international aspects of the banking sector, including currency exchange or international payment methods for the bank's corporate clients involved in international business.
- **International Marketing:** Conduct international market research, lead product development, manage global or local lines of products and decide which marketing policies must be adapted to local conditions.
- **International Sales and Business Development:** Solicit new international clients while growing relationships with existing clients. Language proficiency, cultural sensitivity, and social negotiation skills are essential.
- **International Supply Chain Management, Transportation and Logistics:** Take charge of delivering products from various points across the globe in a safe and efficient manner. This is a detail-and-customer-oriented career in a fast-paced, high-pressure work environment.

Entry-level positions: Import/Export Coordinator, Foreign Affairs Analyst, Immigration Specialist, Business Analyst, Language Specialist, Operations Specialist/Analyst, Digital Marketer, International Researcher, Marketing & Business Development Associate, Global Mobility Services Associate, Business Strategy Associate, International Sales Coordinator, Logistics Coordinator.

Post entry-level positions: Administrative Manager, Global Business Manager, Business Analyst, Business Consultant, Trade Settlement Analyst, Executive Director, Senior Accountant, Project Management Consultant, Client Relationship Specialist.

Getting the Most Out of Your Major

Through specialized courses and experiences, students can focus on projects and the real world, not just textbooks. These courses include Global Entrepreneurship (IB 3596), International Internship (IB 3581/IB 3585) in Philadelphia, Rome or Tokyo, Short-term Study Abroad (IB 2509), and International Consulting (IB 4587). These courses uniquely prepare students to thrive anywhere, in either global Philadelphia or sunny Barcelona.

IB students often decide to immerse themselves in a foreign country and can spend a semester or more at the Temple University Rome campus or the Temple University Tokyo campus. Students can also go on exchange to any of our multiple partner locations: Paris or Lyon, France; Dublin, Ireland; London, UK; Oviedo, Spain; Seoul, South Korea; etc.

In addition to these international partners and campuses abroad, the Fox IB program is deeply connected to the local and regional ecosystem of international managers, companies, chambers of commerce and government agencies. The student-led International Business Association (IBA) facilitates interactions with these local experts and hiring managers on a weekly basis. In addition, the IBA provides a social network to discover cultures, languages and careers while also giving back through philanthropy.

Lastly, the top IB students are invited to join the prestigious IB Honor Society (Beta Gamma Sigma), which includes Marillynn Hewson (former Chairman, President and CEO of Lockheed Martin), Alan Greenspan (former Chairman of the Federal Reserve) and Ann-Marie Campbell (Executive Vice President of U.S. stores and international operations, Home Depot).

Campus Location: Main

Program Code: BU-IB-BBA

Minors and Certificates

International Business Administration Minor

The International Business Administration minor (p. 861) is the perfect complement to any major. This minor has attracted students from six different Temple colleges to make diversity through interdisciplinary pedagogy a reality. Students who wish to pursue this minor can select the geographic region of their choice through any IB 2500-level course: Asia, Africa and the Middle East, Europe, or Latin America. Neither mastery of a foreign language nor study abroad are required for the International Business Administration minor.

Other Department of Management Minors

- Entrepreneurship and Innovation Management Minor (p. 842)
- Organizational Leadership Minor (p. 905)
- Sales Minor (p. 921)

IB-related Certificates

The following interdisciplinary certificates are offered to enhance a student's international understanding and readiness for the global economy.

- Asian Business and Society (p. 975)
- Spanish and Latin American Studies for Business (p. 1164)

Contact Information

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Department of Management
Alter Hall, Room 333
215-204-5183
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Learn more about the Bachelor of Business Administration in International Business.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 795) for the Bachelor of Business Administration, including the requirements of the major listed below. International Business students must maintain a 2.0 GPA overall and a 2.0 GPA in the major to graduate.

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of International Entrepreneurship Concentration

Undergraduate students may earn a Bachelor of Business Administration (B.B.A.) degree in International Business (IB) with a concentration in International Entrepreneurship. Students are strongly encouraged to pursue a complementary major or minor to enhance their professional marketability by specializing in a functional area of business and/or pursuing area studies expertise.

Code	Title	Credit Hours
Foreign Language Requirement		
(All students must be proficient in two languages)		
Major Requirements		
IB 3101	Fundamentals of International Business	3

IB 3596	Global Entrepreneurship	3
IB 4587	International Business Practicum ¹	3
Select one Geographical Area IB course:		3
IB 2501 or ASST 2511	Fundamentals of Asian Business Introduction to Asian Business	
IB/LAS 2502	Fundamentals of Latin American Business	
IB 2503	Fundamentals of European Business	
IB 2504	Fundamentals of Business in Africa and the Middle East	
IB 2509	Short Study Trip Abroad: Doing Business in a Foreign Country	

Concentration Requirements

Select two of the following:		6
IB 3581 or IB 3585	International Business Internship International Business Internship	
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3582	Independent Study	
SGM 3682	Independent Study	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	

Total Credit Hours**18**

1

This major capstone is taken in the final semester, and all prerequisites must be met.

Suggested Academic Plan**Bachelor of Business Administration in International Business with International Entrepreneurship Concentration****Suggested Plan for New Students Starting in the 2023-2024 Academic Year**

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1		Credit Hours
Fall		
STAT 1001	Quantitative Methods for Business I	3
ECON 1101	Macroeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Foreign Language or Free Elective		3-4
Credit Hours		16-17
Spring		
STAT 1102	Quantitative Methods for Business II	4
ECON 1102	Microeconomic Principles	3
BA 1103	Legal and Ethical Reasoning in Business	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Foreign Language or Free Elective		3-4
Credit Hours		16-17

Year 2		
Fall		
ACCT 2103	Financial and Managerial Accounting for Decision Making	4
STAT 2103	Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)	4
MIS 2101	Digital Systems	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Foreign Language or Free Elective		3
Credit Hours		17

Spring		
MKTG 2101	Marketing Management	3
BA 2101	Professional Development Strategies	1
BA 2196	Business Communications	3
Select one of the following: ¹		3
BA 2501	Turning Numbers into Knowledge: Visualizing Data	
BA 2502	Business Analytics: Modern Data Science Techniques	
RMI 2101	Introduction to Risk Management	3
Foreign Language or Free Elective		3
Credit Hours		16

Year 3		
Fall		
FIN 3101	Financial Management	3
MSOM 3101	Operations Management	3
IB 3101	Fundamentals of International Business	3
Select one Geographical Area IB course:		3
IB 2501 or ASST 2511	Fundamentals of Asian Business or Introduction to Asian Business	
IB 2502 or LAS 2502	Fundamentals of Latin American Business or Fundamentals of Latin American Business	
IB 2503	Fundamentals of European Business	
IB 2504	Fundamentals of Business in Africa and the Middle East	
IB 2509	Short Study Trip Abroad: Doing Business in a Foreign Country	
Business Elective ²		3
Credit Hours		15

Spring		
IB 3596	Global Entrepreneurship	3
Business Elective ²		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Free Elective		2
Credit Hours		14

Year 4		
Fall		
BA 4102	Strategic Management	3
Select one of the following:		3
IB 3581 or IB 3585	International Business Internship or International Business Internship	
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	

SGM 3580	Special Topics - Strategic Management	
SGM 3582	Independent Study	
SGM 3682	Independent Study	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
Business Elective ²		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
IB 4587	International Business Practicum	3
Select one of the following:		3
IB 3581 or IB 3585	International Business Internship or International Business Internship	
SGM 3002	Planning to Start Your Own Business	
SGM 3501	Entrepreneurial and Innovative Thinking	
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas	
SGM 3504	Launch a New Venture in 100 Days	
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact	
SGM 3521	Pitching and Funding Entrepreneurial Ventures	
SGM 3580	Special Topics - Strategic Management	
SGM 3582	Independent Study	
SGM 3682	Independent Study	
SGM 3685	New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder	
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Total Credit Hours		124-126

1

Please check with your departmental advisor on which course is most appropriate for the major.

2

2000-3999 electives can be selected from: ACCT, AS, BA, ECON, FIN, HRM, IB, LGLS, MIS, MKTG, RE, RMI, STAT, SCM, SGM. Please see your advisor for elective suggestions that match your career objectives.

International Business BBA with International Finance Concentration

Overview

The **Bachelor of Business Administration in International Business**, offered by the Department of Management, uniquely prepares students for the global economy through project-based courses, internships and transformative study abroad opportunities. The nationally recognized Fox International Business (IB) program, which has been supported by Temple University since the 1970s and the U.S. Department of Education since 2000 (CIBER grant), offers two options: an International Business major with six job market/employer-facing concentrations and an International Business Administration minor.

Students who wish to pursue the IB major **must select one of the following concentrations** to align their interest with those of employers:

- International Economics Concentration
- International Entrepreneurship Concentration
- International Finance Concentration
- International Marketing Concentration
- International Sales and Business Development Concentration
- International Supply Chain Management, Transportation and Logistics Concentration

Students are required to prove proficiency in a foreign language or waive that requirement through testing. In addition, it is highly recommended, but not required, for students to study abroad.

Careers and Placements

- **International Economics:** Manage or consult on projects in international organizations, government agencies, or non-governmental organizations.
- **International Entrepreneurship:** Manage operations in a small international firm or launch your own born-global venture.
- **International Finance:** Operate international aspects of the banking sector, including currency exchange or international payment methods for the bank's corporate clients involved in international business.
- **International Marketing:** Conduct international market research, lead product development, manage global or local lines of products and decide which marketing policies must be adapted to local conditions.
- **International Sales and Business Development:** Solicit new international clients while growing relationships with existing clients. Language proficiency, cultural sensitivity, and social negotiation skills are essential.
- **International Supply Chain Management, Transportation and Logistics:** Take charge of delivering products from various points across the globe in a safe and efficient manner. This is a detail-and-customer-oriented career in a fast-paced, high-pressure work environment.

Entry-level positions: Import/Export Coordinator, Foreign Affairs Analyst, Immigration Specialist, Business Analyst, Language Specialist, Operations Specialist/Analyst, Digital Marketer, International Researcher, Marketing & Business Development Associate, Global Mobility Services Associate, Business Strategy Associate, International Sales Coordinator, Logistics Coordinator.

Post entry-level positions: Administrative Manager, Global Business Manager, Business Analyst, Business Consultant, Trade Settlement Analyst, Executive Director, Senior Accountant, Project Management Consultant, Client Relationship Specialist.

Getting the Most Out of Your Major

Through specialized courses and experiences, students can focus on projects and the real world, not just textbooks. These courses include Global Entrepreneurship (IB 3596), International Internship (IB 3581/IB 3585) in Philadelphia, Rome or Tokyo, Short-term Study Abroad (IB 2509), and International Consulting (IB 4587). These courses uniquely prepare students to thrive anywhere, in either global Philadelphia or sunny Barcelona.

IB students often decide to immerse themselves in a foreign country and can spend a semester or more at the Temple University Rome campus or the Temple University Tokyo campus. Students can also go on exchange to any of our multiple partner locations: Paris or Lyon, France; Dublin, Ireland; London, UK; Oviedo, Spain; Seoul, South Korea; etc.

In addition to these international partners and campuses abroad, the Fox IB program is deeply connected to the local and regional ecosystem of international managers, companies, chambers of commerce and government agencies. The student-led International Business Association (IBA) facilitates interactions with these local experts and hiring managers on a weekly basis. In addition, the IBA provides a social network to discover cultures, languages and careers while also giving back through philanthropy.

Lastly, the top IB students are invited to join the prestigious IB Honor Society (Beta Gamma Sigma), which includes Marillynn Hewson (former Chairman, President and CEO of Lockheed Martin), Alan Greenspan (former Chairman of the Federal Reserve) and Ann-Marie Campbell (Executive Vice President of U.S. stores and international operations, Home Depot).

Campus Location: Main

Program Code: BU-IB-BBA

Minors and Certificates

International Business Administration Minor

The International Business Administration minor (p. 861) is the perfect complement to any major. This minor has attracted students from six different Temple colleges to make diversity through interdisciplinary pedagogy a reality. Students who wish to pursue this minor can select the geographic region of their choice through any IB 2500-level course: Asia, Africa and the Middle East, Europe, or Latin America. Neither mastery of a foreign language nor study abroad are required for the International Business Administration minor.

Other Department of Management Minors

- Entrepreneurship and Innovation Management Minor (p. 842)
- Organizational Leadership Minor (p. 905)
- Sales Minor (p. 921)

IB-related Certificates

The following interdisciplinary certificates are offered to enhance a student's international understanding and readiness for the global economy.

- Asian Business and Society (p. 975)
- Spanish and Latin American Studies for Business (p. 1164)

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Learn more about the Bachelor of Business Administration in International Business.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 795) for the Bachelor of Business Administration, including the requirements of the major listed below. International Business students must maintain a 2.0 GPA overall and a 2.0 GPA in the major to graduate.

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of International Finance Concentration

Undergraduate students may earn a Bachelor of Business Administration (B.B.A.) degree in International Business (IB) with a concentration in International Finance. Students are strongly encouraged to pursue a complementary major or minor to enhance their professional marketability by specializing in a functional area of business and/or pursuing area studies expertise.

Code	Title	Credit Hours
Foreign Language Requirement		
(All students must be proficient in two languages)		
Major Requirements		
IB 3101	Fundamentals of International Business	3
IB 3596	Global Entrepreneurship	3
IB 4587	International Business Practicum ¹	3
Select one Geographical Area IB course:		3
IB 2501 or ASST 2511	Fundamentals of Asian Business Introduction to Asian Business	
IB/LAS 2502	Fundamentals of Latin American Business	
IB 2503	Fundamentals of European Business	
IB 2504	Fundamentals of Business in Africa and the Middle East	
IB 2509	Short Study Trip Abroad: Doing Business in a Foreign Country	

Concentration Requirements

Select two of the following:	6
IB 3581 International Business Internship	
or IB 3585 International Business Internship	
Any Finance course(s) at the 3000 level or above (excluding FIN 3101)	

Total Credit Hours **18**

1

This major capstone is taken in the final semester, and all prerequisites must be met.

Suggested Academic Plan

Bachelor of Business Administration in International Business with International Finance Concentration

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1		Credit Hours
Fall		
STAT 1001	Quantitative Methods for Business I	3
ECON 1101	Macroeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
Foreign Language or Free Elective		3-4
Credit Hours		16-17
Spring		
STAT 1102	Quantitative Methods for Business II	4
ECON 1102	Microeconomic Principles	3
BA 1103	Legal and Ethical Reasoning in Business	3
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
Foreign Language or Free Elective		3-4
Credit Hours		16-17
Year 2		
Fall		
ACCT 2103	Financial and Managerial Accounting for Decision Making	4
STAT 2103	Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)	4
MIS 2101	Digital Systems	3
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
Foreign Language or Free Elective		3
Credit Hours		17
Spring		
MKTG 2101	Marketing Management	3
BA 2101	Professional Development Strategies	1
BA 2196	Business Communications	3
Select one of the following: ¹		3
BA 2501	Turning Numbers into Knowledge: Visualizing Data	
BA 2502	Business Analytics: Modern Data Science Techniques	
RMI 2101	Introduction to Risk Management	3
Foreign Language or Free Elective		3
Credit Hours		16

Year 3		
Fall		
FIN 3101	Financial Management	3
MSOM 3101	Operations Management	3
IB 3101	Fundamentals of International Business	3
Select one Geographical Area IB course:		3
IB 2501 or ASST 2511	Fundamentals of Asian Business or Introduction to Asian Business	
IB 2502 or LAS 2502	Fundamentals of Latin American Business or Fundamentals of Latin American Business	
IB 2503	Fundamentals of European Business	
IB 2504	Fundamentals of Business in Africa and the Middle East	
IB 2509	Short Study Trip Abroad: Doing Business in a Foreign Country	
Business Elective ²		3
Credit Hours		15
Spring		
IB 3596	Global Entrepreneurship	3
Business Elective ²		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Free Elective		2
Credit Hours		14
Year 4		
Fall		
BA 4102	Strategic Management	3
Select one of the following:		3
IB 3581 or IB 3585	International Business Internship or International Business Internship	
Any Finance course at the 3000 level or above (excluding FIN 3101)		
Business Elective ²		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
IB 4587	International Business Practicum	3
Select one of the following:		3
IB 3581 or IB 3585	International Business Internship or International Business Internship	
Any Finance course at the 3000 level or above (excluding FIN 3101)		
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Total Credit Hours		124-126

1

Please check with your departmental advisor on which course is most appropriate for the major.

2

2000-3999 electives can be selected from: ACCT, AS, BA, ECON, FIN, HRM, IB, LGLS, MIS, MKTG, RE, RMI, STAT, SCM, SGM. Please see your advisor for elective suggestions that match your career objectives.

International Business BBA with International Marketing Concentration

Overview

The **Bachelor of Business Administration in International Business**, offered by the Department of Management, uniquely prepares students for the global economy through project-based courses, internships and transformative study abroad opportunities. The nationally recognized Fox International Business (IB) program, which has been supported by Temple University since the 1970s and the U.S. Department of Education since 2000 (CIBER grant), offers two options: an International Business major with six job market/employer-facing concentrations and an International Business Administration minor.

Students who wish to pursue the IB major **must select one of the following concentrations** to align their interest with those of employers:

- International Economics Concentration
- International Entrepreneurship Concentration
- International Finance Concentration
- International Marketing Concentration
- International Sales and Business Development Concentration
- International Supply Chain Management, Transportation and Logistics Concentration

Students are required to prove proficiency in a foreign language or waive that requirement through testing. In addition, it is highly recommended, but not required, for students to study abroad.

Careers and Placements

- **International Economics:** Manage or consult on projects in international organizations, government agencies, or non-governmental organizations.
- **International Entrepreneurship:** Manage operations in a small international firm or launch your own born-global venture.
- **International Finance:** Operate international aspects of the banking sector, including currency exchange or international payment methods for the bank's corporate clients involved in international business.
- **International Marketing:** Conduct international market research, lead product development, manage global or local lines of products and decide which marketing policies must be adapted to local conditions.
- **International Sales and Business Development:** Solicit new international clients while growing relationships with existing clients. Language proficiency, cultural sensitivity, and social negotiation skills are essential.
- **International Supply Chain Management, Transportation and Logistics:** Take charge of delivering products from various points across the globe in a safe and efficient manner. This is a detail-and-customer-oriented career in a fast-paced, high-pressure work environment.

Entry-level positions: Import/Export Coordinator, Foreign Affairs Analyst, Immigration Specialist, Business Analyst, Language Specialist, Operations Specialist/Analyst, Digital Marketer, International Researcher, Marketing & Business Development Associate, Global Mobility Services Associate, Business Strategy Associate, International Sales Coordinator, Logistics Coordinator.

Post entry-level positions: Administrative Manager, Global Business Manager, Business Analyst, Business Consultant, Trade Settlement Analyst, Executive Director, Senior Accountant, Project Management Consultant, Client Relationship Specialist.

Getting the Most Out of Your Major

Through specialized courses and experiences, students can focus on projects and the real world, not just textbooks. These courses include Global Entrepreneurship (IB 3596), International Internship (IB 3581/IB 3585) in Philadelphia, Rome or Tokyo, Short-term Study Abroad (IB 2509), and International Consulting (IB 4587). These courses uniquely prepare students to thrive anywhere, in either global Philadelphia or sunny Barcelona.

IB students often decide to immerse themselves in a foreign country and can spend a semester or more at the Temple University Rome campus or the Temple University Tokyo campus. Students can also go on exchange to any of our multiple partner locations: Paris or Lyon, France; Dublin, Ireland; London, UK; Oviedo, Spain; Seoul, South Korea; etc.

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Campus Location: Main

Program Code: BU-IB-BBA

Minors and Certificates

International Business Administration Minor

The International Business Administration minor (p. 861) is the perfect complement to any major. This minor has attracted students from six different Temple colleges to make diversity through interdisciplinary pedagogy a reality. Students who wish to pursue this minor can select the geographic region of their choice through any IB 2500-level course: Asia, Africa and the Middle East, Europe, or Latin America. Neither mastery of a foreign language nor study abroad are required for the International Business Administration minor.

Other Department of Management Minors

- Entrepreneurship and Innovation Management Minor (p. 842)
- Organizational Leadership Minor (p. 905)
- Sales Minor (p. 921)

IB-related Certificates

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Learn more about the Bachelor of Business Administration in International Business.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 795) for the Bachelor of Business Administration, including the requirements of the major listed below. International Business students must maintain a 2.0 GPA overall and a 2.0 GPA in the major to graduate.

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of International Marketing Concentration

Undergraduate students may earn a Bachelor of Business Administration (B.B.A.) degree in International Business (IB) with a concentration in International Marketing. Students are strongly encouraged to pursue a complementary major or minor to enhance their professional marketability by specializing in a functional area of business and/or pursuing area studies expertise.

Code	Title	Credit Hours
Foreign Language Requirement		
(All students must be proficient in two languages)		
Major Requirements		
IB 3101	Fundamentals of International Business	3
IB 3596	Global Entrepreneurship	3
IB 4587	International Business Practicum ¹	3
Select one Geographical Area IB course:		3
IB 2501 or ASST 2511	Fundamentals of Asian Business Introduction to Asian Business	
IB/LAS 2502	Fundamentals of Latin American Business	
IB 2503	Fundamentals of European Business	
IB 2504	Fundamentals of Business in Africa and the Middle East	
IB 2509	Short Study Trip Abroad: Doing Business in a Foreign Country	
Concentration Requirements		
IB 3581 or IB 3585	International Business Internship ² International Business Internship	3
Any Marketing course at the 3000 level or above		3
Total Credit Hours		18

1

The major capstone should be taken after all prerequisites are met.

2

Either IB 3581 or IB 3585 must be completed as part of the concentration.

Suggested Academic Plan

Bachelor of Business Administration in International Business with International Marketing Concentration

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1		Credit Hours
Fall		
STAT 1001	Quantitative Methods for Business I	3
ECON 1101	Macroeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Foreign Language or Free Elective		3-4
Credit Hours		16-17
Spring		
STAT 1102	Quantitative Methods for Business II	4
ECON 1102	Microeconomic Principles	3
BA 1103	Legal and Ethical Reasoning in Business	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3

Foreign Language or Free Elective		3-4
Credit Hours		16-17
Year 2		
Fall		
ACCT 2103	Financial and Managerial Accounting for Decision Making	4
STAT 2103	Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)	4
MIS 2101	Digital Systems	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Foreign Language or Free Elective		3
Credit Hours		17
Spring		
MKTG 2101	Marketing Management	3
BA 2101	Professional Development Strategies	1
BA 2196	Business Communications	3
Select one of the following: ¹		3
BA 2501	Turning Numbers into Knowledge: Visualizing Data	
BA 2502	Business Analytics: Modern Data Science Techniques	
RMI 2101	Introduction to Risk Management	3
Foreign Language or Free Elective		3
Credit Hours		16
Year 3		
Fall		
FIN 3101	Financial Management	3
MSOM 3101	Operations Management	3
IB 3101	Fundamentals of International Business	3
Select one Geographical Area IB course:		3
IB 2501 or ASST 2511	Fundamentals of Asian Business or Introduction to Asian Business	
IB 2502 or LAS 2502	Fundamentals of Latin American Business or Fundamentals of Latin American Business	
IB 2503	Fundamentals of European Business	
IB 2504	Fundamentals of Business in Africa and the Middle East	
IB 2509	Short Study Trip Abroad: Doing Business in a Foreign Country	
Business Elective ²		3
Credit Hours		15
Spring		
IB 3596	Global Entrepreneurship	3
Business Elective ²		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Free Elective		2
Credit Hours		14
Year 4		
Fall		
BA 4102	Strategic Management	3
IB 3581 or IB 3585	International Business Internship or International Business Internship	3
Business Elective ²		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15

Spring

IB 4587	International Business Practicum	3
Any Marketing course at the 3000 level or above		3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Total Credit Hours		124-126

1

Please check with your departmental advisor on which course is most appropriate for the major.

2

2000-3999 electives can be selected from: ACCT, AS, BA, ECON, FIN, HRM, IB, LGLS, MIS, MKTG, RE, RMI, STAT, SCM, SGM. Please see your advisor for elective suggestions that match your career objectives.

International Business BBA with International Sales and Business Development Concentration

Overview

The **Bachelor of Business Administration in International Business**, offered by the Department of Management, uniquely prepares students for the global economy through project-based courses, internships and transformative study abroad opportunities. The nationally recognized Fox International Business (IB) program, which has been supported by Temple University since the 1970s and the U.S. Department of Education since 2000 (CIBER grant), offers two options: an International Business major with six job market/employer-facing concentrations and an International Business Administration minor.

Students who wish to pursue the IB major **must select one of the following concentrations** to align their interest with those of employers:

- International Economics Concentration
- International Entrepreneurship Concentration
- International Finance Concentration
- International Marketing Concentration
- International Sales and Business Development Concentration
- International Supply Chain Management, Transportation and Logistics Concentration

Students are required to prove proficiency in a foreign language or waive that requirement through testing. In addition, it is highly recommended, but not required, for students to study abroad.

Careers and Placements

- **International Economics:** Manage or consult on projects in international organizations, government agencies, or non-governmental organizations.
- **International Entrepreneurship:** Manage operations in a small international firm or launch your own born-global venture.
- **International Finance:** Operate international aspects of the banking sector, including currency exchange or international payment methods for the bank's corporate clients involved in international business.
- **International Marketing:** Conduct international market research, lead product development, manage global or local lines of products and decide which marketing policies must be adapted to local conditions.
- **International Sales and Business Development:** Solicit new international clients while growing relationships with existing clients. Language proficiency, cultural sensitivity, and social negotiation skills are essential.
- **International Supply Chain Management, Transportation and Logistics:** Take charge of delivering products from various points across the globe in a safe and efficient manner. This is a detail-and-customer-oriented career in a fast-paced, high-pressure work environment.

Entry-level positions: Import/Export Coordinator, Foreign Affairs Analyst, Immigration Specialist, Business Analyst, Language Specialist, Operations Specialist/Analyst, Digital Marketer, International Researcher, Marketing & Business Development Associate, Global Mobility Services Associate, Business Strategy Associate, International Sales Coordinator, Logistics Coordinator.

Post entry-level positions: Administrative Manager, Global Business Manager, Business Analyst, Business Consultant, Trade Settlement Analyst, Executive Director, Senior Accountant, Project Management Consultant, Client Relationship Specialist.

Getting the Most Out of Your Major

Through specialized courses and experiences, students can focus on projects and the real world, not just textbooks. These courses include Global Entrepreneurship (IB 3596), International Internship (IB 3581/IB 3585) in Philadelphia, Rome or Tokyo, Short-term Study Abroad (IB 2509), and International Consulting (IB 4587). These courses uniquely prepare students to thrive anywhere, in either global Philadelphia or sunny Barcelona.

IB students often decide to immerse themselves in a foreign country and can spend a semester or more at the Temple University Rome campus or the Temple University Tokyo campus. Students can also go on exchange to any of our multiple partner locations: Paris or Lyon, France; Dublin, Ireland; London, UK; Oviedo, Spain; Seoul, South Korea; etc.

In addition to these international partners and campuses abroad, the Fox IB program is deeply connected to the local and regional ecosystem of international managers, companies, chambers of commerce and government agencies. The student-led International Business Association (IBA) facilitates interactions with these local experts and hiring managers on a weekly basis. In addition, the IBA provides a social network to discover cultures, languages and careers while also giving back through philanthropy.

Lastly, the top IB students are invited to join the prestigious IB Honor Society (Beta Gamma Sigma), which includes Marillynn Hewson (former Chairman, President and CEO of Lockheed Martin), Alan Greenspan (former Chairman of the Federal Reserve) and Ann-Marie Campbell (Executive Vice President of U.S. stores and international operations, Home Depot).

Campus Location: Main

Program Code: BU-IB-BBA

Minors and Certificates

International Business Administration Minor

The International Business Administration minor (p. 861) is the perfect complement to any major. This minor has attracted students from six different Temple colleges to make diversity through interdisciplinary pedagogy a reality. Students who wish to pursue this minor can select the geographic region of their choice through any IB 2500-level course: Asia, Africa and the Middle East, Europe, or Latin America. Neither mastery of a foreign language nor study abroad are required for the International Business Administration minor.

Other Department of Management Minors

- Entrepreneurship and Innovation Management Minor (p. 842)
- Organizational Leadership Minor (p. 905)
- Sales Minor (p. 921)

IB-related Certificates

The following interdisciplinary certificates are offered to enhance a student's international understanding and readiness for the global economy.

- Asian Business and Society (p. 975)
- Spanish and Latin American Studies for Business (p. 1164)

Contact Information

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Department of Management
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Learn more about the Bachelor of Business Administration in International Business.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 795) for the Bachelor of Business Administration, including the requirements of the major listed below. International Business students must maintain a 2.0 GPA overall and a 2.0 GPA in the major to graduate.

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of International Sales & Business Development Concentration

Undergraduate students may earn a Bachelor of Business Administration (B.B.A.) degree in International Business (IB) with a concentration in International Sales & Business Development. Students are strongly encouraged to pursue a complementary major or minor to enhance their professional marketability by specializing in a functional area of business and/or pursuing area studies expertise.

Code	Title	Credit Hours
Foreign Language Requirement		
(All students must be proficient in two languages)		
Major Requirements		
IB 3101	Fundamentals of International Business	3
IB 3596	Global Entrepreneurship	3
IB 4587	International Business Practicum ¹	3
Select one Geographical Area IB course:		3
IB 2501	Fundamentals of Asian Business	
or ASST 2511	Introduction to Asian Business	
IB/LAS 2502	Fundamentals of Latin American Business	
IB 2503	Fundamentals of European Business	
IB 2504	Fundamentals of Business in Africa and the Middle East	
IB 2509	Short Study Trip Abroad: Doing Business in a Foreign Country	
Concentration Requirements		
Select two of the following:		6
IB 3581	International Business Internship	
or IB 3585	International Business Internship	
MKTG 3504	Professional Selling and Sales Management	
SGM 2525	Management Consulting: Principles and Practices	
Total Credit Hours		18

1

This major capstone should be taken after all prerequisites are met.

Suggested Academic Plan

Bachelor of Business Administration in International Business with International Sales and Business Development Concentration

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1		Credit Hours
Fall		
STAT 1001	Quantitative Methods for Business I	3
ECON 1101	Macroeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
Foreign Language or Free Elective		3-4
Credit Hours		16-17
Spring		
STAT 1102	Quantitative Methods for Business II	4
ECON 1102	Microeconomic Principles	3
BA 1103	Legal and Ethical Reasoning in Business	3
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
Foreign Language or Free Elective		3-4
Credit Hours		16-17
Year 2		
Fall		
ACCT 2103	Financial and Managerial Accounting for Decision Making	4
STAT 2103	Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)	4
MIS 2101	Digital Systems	3
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
Foreign Language or Free Elective		3
Credit Hours		17
Spring		
MKTG 2101	Marketing Management	3
BA 2101	Professional Development Strategies	1
BA 2196	Business Communications	3
Select one of the following: ¹		3
BA 2501	Turning Numbers into Knowledge: Visualizing Data	
BA 2502	Business Analytics: Modern Data Science Techniques	
RMI 2101	Introduction to Risk Management	3
Foreign Language or Free Elective		3
Credit Hours		16
Year 3		
Fall		
FIN 3101	Financial Management	3
MSOM 3101	Operations Management	3
IB 3101	Fundamentals of International Business	3
Select one Geographical Area IB course:		3
IB 2501	Fundamentals of Asian Business	
or ASST 2511	or Introduction to Asian Business	
IB 2502	Fundamentals of Latin American Business	
or LAS 2502	or Fundamentals of Latin American Business	
IB 2503	Fundamentals of European Business	
IB 2504	Fundamentals of Business in Africa and the Middle East	
IB 2509	Short Study Trip Abroad: Doing Business in a Foreign Country	
Business Elective ²		3
Credit Hours		15

Spring		
IB 3596	Global Entrepreneurship	3
Business Elective ²		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Free Elective		2
Credit Hours		14
Year 4		
Fall		
BA 4102	Strategic Management	3
Select one of the following:		3
IB 3581 or IB 3585	International Business Internship or International Business Internship	
MKTG 3504	Professional Selling and Sales Management	
SGM 2525	Management Consulting: Principles and Practices	
Business Elective ²		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
IB 4587	International Business Practicum	3
Select one of the following:		3
IB 3581 or IB 3585	International Business Internship or International Business Internship	
MKTG 3504	Professional Selling and Sales Management	
SGM 2525	Management Consulting: Principles and Practices	
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Total Credit Hours		124-126

1

Please check with your departmental advisor on which course is most appropriate for the major.

2

2000-3999 electives can be selected from: ACCT, AS, BA, ECON, FIN, HRM, IB, LGLS, MIS, MKTG, RE, RMI, STAT, SCM, SGM. Please see your advisor for elective suggestions that match your career objectives.

International Business BBA with International Supply Chain Management, Transportation and Logistics

Overview

The **Bachelor of Business Administration in International Business**, offered by the Department of Management, uniquely prepares students for the global economy through project-based courses, internships and transformative study abroad opportunities. The nationally recognized Fox International Business (IB) program, which has been supported by Temple University since the 1970s and the U.S. Department of Education since 2000 (CIBER grant), offers two options: an International Business major with six job market/employer-facing concentrations and an International Business Administration minor.

Students who wish to pursue the IB major **must select one of the following concentrations** to align their interest with those of employers:

- International Economics Concentration
- International Entrepreneurship Concentration
- International Finance Concentration
- International Marketing Concentration

- International Sales and Business Development Concentration
- International Supply Chain Management, Transportation and Logistics Concentration

Students are required to prove proficiency in a foreign language or waive that requirement through testing. In addition, it is highly recommended, but not required, for students to study abroad.

Careers and Placements

- **International Economics:** Manage or consult on projects in international organizations, government agencies, or non-governmental organizations.
- **International Entrepreneurship:** Manage operations in a small international firm or launch your own born-global venture.
- **International Finance:** Operate international aspects of the banking sector, including currency exchange or international payment methods for the bank's corporate clients involved in international business.
- **International Marketing:** Conduct international market research, lead product development, manage global or local lines of products and decide which marketing policies must be adapted to local conditions.
- **International Sales and Business Development:** Solicit new international clients while growing relationships with existing clients. Language proficiency, cultural sensitivity, and social negotiation skills are essential.
- **International Supply Chain Management, Transportation and Logistics:** Take charge of delivering products from various points across the globe in a safe and efficient manner. This is a detail-and-customer-oriented career in a fast-paced, high-pressure work environment.

Entry-level positions: Import/Export Coordinator, Foreign Affairs Analyst, Immigration Specialist, Business Analyst, Language Specialist, Operations Specialist/Analyst, Digital Marketer, International Researcher, Marketing & Business Development Associate, Global Mobility Services Associate, Business Strategy Associate, International Sales Coordinator, Logistics Coordinator.

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Getting the Most Out of Your Major

Through specialized courses and experiences, students can focus on projects and the real world, not just textbooks. These courses include Global Entrepreneurship (IB 3596), International Internship (IB 3581/IB 3585) in Philadelphia, Rome or Tokyo, Short-term Study Abroad (IB 2509), and International Consulting (IB 4587). These courses uniquely prepare students to thrive anywhere, in either global Philadelphia or sunny Barcelona.

IB students often decide to immerse themselves in a foreign country and can spend a semester or more at the Temple University Rome campus or the Temple University Tokyo campus. Students can also go on exchange to any of our multiple partner locations: Paris or Lyon, France; Dublin, Ireland; London, UK; Oviedo, Spain; Seoul, South Korea; etc.

In addition to these international partners and campuses abroad, the Fox IB program is deeply connected to the local and regional ecosystem of international managers, companies, chambers of commerce and government agencies. The student-led International Business Association (IBA) facilitates interactions with these local experts and hiring managers on a weekly basis. In addition, the IBA provides a social network to discover cultures, languages and careers while also giving back through philanthropy.

Lastly, the top IB students are invited to join the prestigious IB Honor Society (Beta Gamma Sigma), which includes Marillynn Hewson (former Chairman, President and CEO of Lockheed Martin), Alan Greenspan (former Chairman of the Federal Reserve) and Ann-Marie Campbell (Executive Vice President of U.S. stores and international operations, Home Depot).

Campus Location: Main

Program Code: BU-IB-BBA

Minors and Certificates

International Business Administration Minor

The International Business Administration minor (p. 861) is the perfect complement to any major. This minor has attracted students from six different Temple colleges to make diversity through interdisciplinary pedagogy a reality. Students who wish to pursue this minor can select the geographic region of their choice through any IB 2500-level course: Asia, Africa and the Middle East, Europe, or Latin America. Neither mastery of a foreign language nor study abroad are required for the International Business Administration minor.

Other Department of Management Minors

- Entrepreneurship and Innovation Management Minor (p. 842)
- Organizational Leadership Minor (p. 905)
- Sales Minor (p. 921)

IB-related Certificates

The following interdisciplinary certificates are offered to enhance a student's international understanding and readiness for the global economy.

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- Spanish and Latin American Studies for Business (p. 1164)

Contact Information

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Learn more about the Bachelor of Business Administration in International Business.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 795) for the Bachelor of Business Administration, including the requirements of the major listed below. International Business students must maintain a 2.0 GPA overall and a 2.0 GPA in the major to graduate.

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of International Supply Chain Management, Transportation & Logistics Concentration

Undergraduate students may earn a Bachelor of Business Administration (B.B.A.) degree in International Business (IB) with a concentration in International Supply Chain Management, Transportation & Logistics. Students are strongly encouraged to pursue a complementary major or minor to enhance their professional marketability by specializing in a functional area of business and/or pursuing area studies expertise.

Code	Title	Credit Hours
Foreign Language Requirement		
(All students must be proficient in two languages)		
Major Requirements		
IB 3101	Fundamentals of International Business	3
IB 3596	Global Entrepreneurship	3
IB 4587	International Business Practicum ¹	3
Select one Geographical Area IB course:		3
IB 2501 or ASST 2511	Fundamentals of Asian Business Introduction to Asian Business	

IB/LAS 2502	Fundamentals of Latin American Business	
IB 2503	Fundamentals of European Business	
IB 2504	Fundamentals of Business in Africa and the Middle East	
IB 2509	Short Study Trip Abroad: Doing Business in a Foreign Country	
Concentration Requirements		
IB 3581	International Business Internship ²	3
or IB 3585	International Business Internship	
Select one of the following:		3
SCM 3505	Lean Six Sigma in Supply Chain Management	
SCM 3515	Principles of Supply Chain Management	
SCM 3516	Transportation and Logistics Management	
SCM 3517	Inventory and Warehouse Management	
SCM 3518	Sourcing and Procurement	
Total Credit Hours		18

1

This major capstone is taken in the final semester, and all prerequisites must be met.

2

Either IB 3581 or IB 3585 must be completed as part of the concentration.

Suggested Academic Plan

Bachelor of Business Administration in International Business with International Supply Chain Management, Transportation and Logistics Concentration

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1		Credit Hours
Fall		
STAT 1001	Quantitative Methods for Business I	3
ECON 1101	Macroeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
Foreign Language or Free Elective		3-4
Credit Hours		16-17
Spring		
STAT 1102	Quantitative Methods for Business II	4
ECON 1102	Microeconomic Principles	3
BA 1103	Legal and Ethical Reasoning in Business	3
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
Foreign Language or Free Elective		3-4
Credit Hours		16-17
Year 2		
Fall		
ACCT 2103	Financial and Managerial Accounting for Decision Making	4
STAT 2103	Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)	4
MIS 2101	Digital Systems	3
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
Foreign Language or Free Elective		3
Credit Hours		17

Spring		
MKTG 2101	Marketing Management	3
BA 2101	Professional Development Strategies	1
BA 2196	Business Communications	3
Select one of the following: ¹		3
BA 2501	Turning Numbers into Knowledge: Visualizing Data	
BA 2502	Business Analytics: Modern Data Science Techniques	
RMI 2101	Introduction to Risk Management	3
Foreign Language or Free Elective		3
Credit Hours		16
Year 3		
Fall		
FIN 3101	Financial Management	3
MSOM 3101	Operations Management	3
IB 3101	Fundamentals of International Business	3
Select one Geographical Area IB course:		3
IB 2501 or ASST 2511	Fundamentals of Asian Business or Introduction to Asian Business	
IB 2502 or LAS 2502	Fundamentals of Latin American Business or Fundamentals of Latin American Business	
IB 2503	Fundamentals of European Business	
IB 2504	Fundamentals of Business in Africa and the Middle East	
IB 2509	Short Study Trip Abroad: Doing Business in a Foreign Country	
Business Elective ²		3
Credit Hours		15
Spring		
IB 3596	Global Entrepreneurship	3
Business Elective ²		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Free Elective		2
Credit Hours		14
Year 4		
Fall		
BA 4102	Strategic Management	3
IB 3581 or IB 3585	International Business Internship or International Business Internship	3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
IB 4587	International Business Practicum	3
Select one of the following:		3
SCM 3505	Lean Six Sigma in Supply Chain Management	
SCM 3515	Principles of Supply Chain Management	
SCM 3516	Transportation and Logistics Management	
SCM 3517	Inventory and Warehouse Management	
SCM 3518	Sourcing and Procurement	
Business Elective ²		3
GenEd Breadth Course		3

GenEd Breadth Course	3
Credit Hours	15
Total Credit Hours	124-126

1

Please check with your departmental advisor on which course is most appropriate for the major.

2

2000-3999 electives can be selected from: ACCT, AS, BA, ECON, FIN, HRM, IB, LGLS, MIS, MKTG, RE, RMI, STAT, SCM, SGM. Please see your advisor for elective suggestions that match your career objectives.

Legal Studies BBA

Overview

Offered by the Department of Risk, Actuarial Science, and Legal Studies, the **Bachelor of Business Administration in Legal Studies** is designed to acquaint students with the broad spectrum of the economic, political and sociological framework within which the law functions. It also may be pursued as a pre-law major in preparation for law school. Students will be exposed to a curriculum that will challenge their thinking process and reasoning abilities through the use of actual court cases, trial simulations, negotiations and other advocacy skills that stress written and oral communication. The Legal Studies major also offers students, who may not be interested in law school, with an academic foundation for future careers in corporate compliance, court administration, federal and state regulatory agencies, non-profit organizations, and other organizations in which a legal background combined with business studies is of critical importance.

All faculty are graduates of law school and many also possess PhD or other advanced law or academic degrees. Adjunct faculty are drawn from government agencies, private law firms, corporate law firms, and the federal and state judiciary.

Students pursuing this curriculum in preparation for the study of law should acquaint themselves with the content and format of the Law School Admissions Test (LSAT). Learn more about the LSAT and the Law School admissions process.

Campus Location: Main

Program Code: BU-LGLS-BBA

Student Professional Organization

Phil Alpha Delta

Legal Studies majors are encouraged to become involved in Phi Alpha Delta (PAD) Law Fraternity, International. This organization hosts guest speakers, sponsors law-related field trips, and assists students in gaining internships within the legal field.

The Temple Law Scholars Program

The Temple Law Scholars program provides an opportunity for outstanding students to gain provisional admission to Temple University's Beasley School of Law at the same time they are accepted into an undergraduate program of study. Law Scholars are expected to participate in the University Honors Program while undergraduates, after which they enroll in the Beasley School of Law, leading to the degree of Juris Doctor. Learn more about the Temple Law Scholars Program and its application process.

Minors

Legal Studies Minor

The Legal Studies minor, which is open to all students except for Legal Studies majors, is designed to expose students to a curriculum in legal studies, particularly students from any discipline who are considering law school or a similar career in the legal profession.

Requirements (p. 893) for this minor must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.

Corporate Compliance & Regulatory Policy Minor

The Corporate Compliance and Regulatory Policy minor, which is open to all students, is designed to expose students to a practical law-related field, compliance, where they can use their training with or without a graduate degree and in which they can find professional opportunities in numerous industries.

Requirements (p. 828) for this minor must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.

Contact Information

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Learn more about the Bachelor of Business Administration in Legal Studies.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 795) for the Bachelor of Business Administration, including the requirements of the major listed below. Legal Studies students must attain a 2.0 GPA in the major and a 2.0 cumulative GPA in order to graduate. Please note that GPA requirements for Law School admission will be significantly higher.

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of Legal Studies Major

Code	Title	Credit Hours
LGLS 1102	Law of Contracts	3
LGLS 1112	Law for Business	3
LGLS 3524	Legal and Policy Issues in the Workplace	3
LGLS 4596	Legal Reasoning in Action ¹	3
Select two of the following:		6
LGLS 3501	Introduction to Corporate Compliance	
LGLS 3509	Entertainment Law	
LGLS 3511	Environmental Law and Sustainability	
LGLS 3523	Detecting Financial Crimes	
LGLS 3580	Special Topics - Law	
LGLS 3581	Pre-Law Internship and Seminar	
LGLS 3582	Independent Study	
Total Credit Hours		18

1

This major capstone is taken in the final semester, and all prerequisites must be met.

Suggested Academic Plan

Bachelor of Business Administration in Legal Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1		Credit Hours
Fall		
STAT 1001	Quantitative Methods for Business I	3
ECON 1101	Macroeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
Credit Hours		16
Spring		
STAT 1102	Quantitative Methods for Business II	4
ECON 1102	Microeconomic Principles	3
BA 1103	Legal and Ethical Reasoning in Business	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
ACCT 2103	Financial and Managerial Accounting for Decision Making	4
STAT 2103	Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)	4
MIS 2101	Digital Systems	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Credit Hours		17
Spring		
MKTG 2101	Marketing Management	3
BA 2101	Professional Development Strategies	1
BA 2196	Business Communications	3
Select one of the following: ¹		3
BA 2501	Turning Numbers into Knowledge: Visualizing Data	
BA 2502	Business Analytics: Modern Data Science Techniques	
RMI 2101	Introduction to Risk Management	3
LGLS 1112	Law for Business	3
Credit Hours		16
Year 3		
Fall		
FIN 3101	Financial Management	3
MSOM 3101	Operations Management	3
LGLS 1102	Law of Contracts	3
LGLS 3524	Legal and Policy Issues in the Workplace	3
Business Elective ²		3
Credit Hours		15
Spring		
Select one of the following: ³		3
LGLS 3501	Introduction to Corporate Compliance	
LGLS 3509	Entertainment Law	
LGLS 3511	Environmental Law and Sustainability	
LGLS 3523	Detecting Financial Crimes	
LGLS 3580	Special Topics - Law	
LGLS 3581	Pre-Law Internship and Seminar	

LGLS 3582	Independent Study	
Business Elective ²		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Free Elective		3
Credit Hours		15
Year 4		
Fall		
BA 4102	Strategic Management	3
Select one of the following: ³		3
LGLS 3501	Introduction to Corporate Compliance	
LGLS 3509	Entertainment Law	
LGLS 3511	Environmental Law and Sustainability	
LGLS 3523	Detecting Financial Crimes	
LGLS 3580	Special Topics - Law	
LGLS 3581	Pre-Law Internship and Seminar	
LGLS 3582	Independent Study	
Business Elective ²		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
LGLS 4596	Legal Reasoning in Action	3
Free Elective		3
Free Elective		3
Free Elective		3
Free Elective		2
Credit Hours		14
Total Credit Hours		124

1

Please check with your departmental advisor on which course is most appropriate for the major.

2

2000-3999 electives can be selected from: ACCT, AS, BA, ECON, FIN, HRM, IB, LGLS, MIS, MKTG, RE, RMI, STAT, SCM, SGM. Please see your advisor for elective suggestions that match your career objectives.

3

Please note that some electives are only offered once a year depending on demand for the course.

Legal Studies Minor

Overview

Offered by Department of Risk, Actuarial Science, and Legal Studies, the **Minor in Legal Studies** is open to all students, with the exception of Legal Studies majors. The minor is designed to expose students to a curriculum in legal studies, particularly students majoring in other disciplines such as accounting, criminal justice, philosophy, risk management or finance who are considering law school. Students will learn how to read cases and statutes, do legal research and make a legal argument as well as develop their critical thinking skills and identify the legal issues that will impact their business and personal decisions.

Campus Location: Main

Contact Information

Jeffrey Boles, Department Chair
 Speakman Hall, Room 204A
 215-204-4145
 jeffrey.boles@temple.edu

Requirements

- All students are required to take the prerequisite course BA 1103, which is a lower division Fox School foundation.
- Five courses are required:**

Code	Title	Credit Hours
Prerequisite Course		
BA 1103	Legal and Ethical Reasoning in Business	3
Required Course		
LGLS 1112	Law for Business	3
Electives		
Select three of the following:		9
LGLS 1102	Law of Contracts	
LGLS 3501	Introduction to Corporate Compliance	
LGLS 3509	Entertainment Law	
LGLS 3511	Environmental Law and Sustainability	
LGLS 3523	Detecting Financial Crimes	
LGLS 3524	Legal and Policy Issues in the Workplace	
LGLS 3580	Special Topics - Law	
LGLS 3581	Pre-Law Internship and Seminar	
LGLS 3582	Independent Study	
RE 3501	Real Estate Fundamentals	
RE 3502	Real Estate Practice	
Total Credit Hours		15

- Three of the four courses required for the minor must be taken at Temple University. Residency excludes BA 1103.
- A grade point average of 2.0 in the minor is required as well as a minimum grade of C- in each course unless otherwise specified.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- To declare or rescind this minor, visit the Fox School of Business and Management.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

Management Information Systems BBA

Overview

Offered by the the Department of Management Information Systems, the **Bachelor of Business Administration in Management Information Systems** (MIS) produces digital leaders who design, architect and manage API-driven products. These products apply APIs, cloud, cyber-security, agile, user experience, and analytics to achieve business outcomes.

MIS prepares students to

- Design software applications that meet requirements and are enjoyable to use employing state-of-the-art UX techniques;
- Build web-based, API-driven business applications using HTML, CSS, JavaScript, and Node.js as well as frameworks such as Express;
- Deploy APIs on a robust cloud infrastructure using Amazon Web Services;
- Secure applications and businesses against cyber-threats applying cryptography and vulnerability discovery techniques; and
- Analyze critical business data using data mining techniques and navigate relational and NoSQL data stores using MySQL and MongoDB.

The BBA in MIS is a **STEM program** that provides access to STEM scholarships, as well as MIS department scholarships.

Campus Location: Main

Program Code: BU-MIS-BBA

Professional Achievement Program

MIS majors benefit from an innovative patent-pending PRO - professional achievement program, where students

1. Earn required points for professional development activities and for applying learning to practice (e.g., internships, student leadership)
2. Receive recognition for professional achievement on leaderboards, badges, professional achievement wire, and e-portfolios. 'Cash-in' points at the MIS Points Store.
3. Showcase their educational and professional achievements at the IT Career Fair.

Careers and Placement

MIS majors get placed in the top firms in the region and nationally. Learn about careers in IS and participate in the IT Career Fair which provides exclusive one-stop placement and internship opportunities for MIS students. The Temple University-led ISJobIndex.com project provides national-level data on jobs in the IS field:

- Bachelor MIS students' average salary is \$75,517 nationally. Salaries for IS graduates are higher than typical business majors.
- 81% of IS graduates are satisfied with their job offer.

Source: IS Job Index, <https://isjobindex.com/>

Minors and Certificates

Management Information Systems Minor

A minor in MIS provides undergraduate students the ability to specify, select, utilize, and apply information technology (IT) to their major field of study. The minor provides the skills and terminology needed to become an expert user of IT in the business world. The minor positions students for jobs in business application areas, consulting positions, technical liaisons, and selling and acquisition of business software.

Requirements (p. 899) for the minor must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor.

Digital Marketing Minor

The Digital Marketing minor prepares students for careers related to customer relationship management, social media, information architecture, e-commerce, search engine optimization, e-detailing, site design, Internet research, demographic and sales analytics, blogging, and media design. This minor is appropriate for all business students and is particularly relevant for Marketing, Human Resource Management, Business Management, and Management Information Systems students.

Requirements (p. 829) for the minor must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor.

Management Information Systems Certificate

The Management Information Systems certificate prepares students to identify, select and evaluate innovative technology solutions for business.

Requirements (p. 898) for the certificate must be completed prior to graduation. Courses cannot be used to meet certificate requirements if already used to meet the requirements for a major or a different minor or certificate. Contact the Management Information Systems department to declare the Management Information Systems certificate.

Contact Information

David Schuff, Department Chair
Speakman Hall, Room 210
215-204-5617
david.schuff@temple.edu
<https://community.mis.temple.edu/>

Mart Doyle, Associate Professor and Deputy Chair
Speakman Hall, Room 210B
215-204-4684
mdoyle@temple.edu

Joseph Allegra, Senior Associate Director
Speakman Hall, Room 210C
215-204-3060
jallegra@temple.edu

Learn more about the Bachelor of Business Administration in Management Information Systems.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 795) for the Bachelor of Business Administration, including the requirements of the major listed below. Management Information Systems students must attain a 2.0 GPA in the major and a 2.0 cumulative GPA in order to graduate.

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of the Management Information Systems Major

Code	Title	Credit Hours
MIS 2402	Web Application Development	3
MIS 2502	Data and Analytics	3
MIS 3406	Cloud Architecture	3
MIS 3506	User Experience Design	3
MIS 3502	Web Service Programming	3
MIS 4596	Managing Enterprise Cybersecurity ^{1, 2}	3
Total Credit Hours		18

1

This major capstone is taken in the final semester, and all prerequisites must be met.

2

Each MIS major student is required to achieve a minimum of 1,000 professional achievement points in order to graduate.

Suggested Academic Plan

Bachelor of Business Administration in Management Information Systems

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1		Credit Hours
Fall		
STAT 1001	Quantitative Methods for Business I	3
ECON 1101	Macroeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
Credit Hours		16
Spring		
STAT 1102	Quantitative Methods for Business II	4

ECON 1102	Microeconomic Principles	3
BA 1103	Legal and Ethical Reasoning in Business	3
MIS 2101	Digital Systems	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		16
Year 2		
Fall		
ACCT 2103	Financial and Managerial Accounting for Decision Making	4
STAT 2103	Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)	4
MIS 2402	Web Application Development	3
MIS 2502	Data and Analytics	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		17
Spring		
MKTG 2101	Marketing Management	3
BA 2101	Professional Development Strategies	1
BA 2196	Business Communications	3
Select one of the following: ¹		3
BA 2501	Turning Numbers into Knowledge: Visualizing Data	
BA 2502	Business Analytics: Modern Data Science Techniques	
MIS 3406	Cloud Architecture	3
MIS 3506	User Experience Design	3
Credit Hours		16
Year 3		
Fall		
RMI 2101	Introduction to Risk Management	3
FIN 3101	Financial Management	3
MSOM 3101	Operations Management	3
Business Elective ²		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
MIS 3502	Web Service Programming	3
Business Elective ²		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Free Elective		3
Credit Hours		15
Year 4		
Fall		
BA 4102	Strategic Management	3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Business Elective ²		3
Credit Hours		15
Spring		
MIS 4596	Managing Enterprise Cybersecurity	3
Free Elective		3
Free Elective		3

Free Elective	3
Free Elective	2
Credit Hours	14
Total Credit Hours	124

1

Please check with your departmental advisor on which course is most appropriate for the major.

2

2000-3999 electives can be selected from: ACCT, AS, BA, ECON, FIN, HRM, IB, LGLS, MIS, MKTG, RE, RMI, STAT, SCM, SGM. Please see your advisor for elective suggestions that match your career objectives. MIS 3535 is highly recommended as a business elective.

Management Information Systems Certificate

Overview

Offered by Department of Management Information Systems, the **Certificate in Management Information Systems (MIS)** is open to non-business students. The MIS certificate provides undergraduate students the ability to identify, select and evaluate innovative technology solutions for business. In this nine-credit certificate program, students become a knowledgeable user of information technology and develop the tools necessary to successfully interact with technology professionals. As a graduate of the program, students acquire valuable, translatable skills and differentiate themselves in an increasingly competitive industry.

Campus Location: Main

Program Code: BU-MIS-CERT

Contact Information

Joseph Allegra, Senior Associate Director
 Speakman Hall, Room 210C
 215-204-3060
 jallegra@temple.edu

Learn more about the undergraduate certificate in Management Information Systems.

Requirements

- **Three courses required** (all courses must be taken at Temple University):

Code	Title	Credit Hours
Required Courses		
MIS 2101	Digital Systems	3
MIS 2502	Data and Analytics	3
Elective		
Select one of the following:		3
MIS 0855	Data Science	
MIS 0955	Honors Data Science	
MIS 3406	Cloud Architecture	
MIS 3504	Digital Design and Innovation	
MIS 3505	Scripting for Data Science/Analytics	
MIS 3534	Strategic Management of Information Technology	
MIS 3536	Information Systems Innovation	
MIS 3538	Social Media Innovation	
Total Credit Hours		9

- A grade point average of 2.0 in the certificate is required, including a minimum grade of C in each course.
- Courses cannot be used to meet certificate requirements if already used to meet the requirements for a major or a different minor or certificate.

Interested students should discuss with their home college advisors how the courses in the certificate will fit into their overall degree plan and are strongly encouraged to declare the certificate early in their academic career.

Management Information Systems Minor

Overview

Offered by Department of Management Information Systems, the **Minor in Management Information Systems (MIS)** is open to all students. A minor in MIS provides undergraduate students the ability to identify, select, use and apply information technology (IT) to their major field of study. The minor provides the skills and terminology needed to become a knowledgeable user of IT in the business world and interact successfully with technology professionals in an organization. The MIS minor will position students for jobs in business application areas, consulting, technical liaisons, and selling and acquisition of business software. Students will

- Understand the key information technologies used by organizations;
- Learn how to specify technology solutions and engage with IT professionals;
- Understand the importance of business processes;
- Identify how specific IT solutions are designed and implemented to increase efficiency and effectiveness; and
- Apply data analytics to collect, store, analyze and disseminate organizational information.

To take courses for the MIS minor students must first declare their intent to minor in MIS.

Learn more about the Management Information Systems minor.

Campus Location: Main

Contact Information

Joseph Allegra, Senior Associate Director
 Speakman Hall, Room 210C
 215-204-3060
 jallegra@temple.edu

Requirements

- **Six courses are required for the minor** (four of these must be taken at Temple University):

Code	Title	Credit Hours
Required Courses		
ECON 1101	Macroeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
MIS 2101	Digital Systems	3
MIS 2502	Data and Analytics	3
MIS 3504	Digital Design and Innovation	3
Select one of the following:		3
MIS 0855	Data Science	
MIS 0955	Honors Data Science	
MIS 3505	Scripting for Data Science/Analytics	
MIS 3507	Defending Against Cyber Crime	
MIS 3534	Strategic Management of Information Technology	
MIS 3536	Information Systems Innovation	
MIS 3538	Social Media Innovation	
MIS 3580	Special Topics	
MIS 3581	Co-operative Experience in Management Information Systems	
Total Credit Hours		18

- A grade point average of 2.0 in the minor is required as well as a minimum grade of C- in each course unless otherwise specified.
- ECON 1101, HRM 1101 and MIS 2101 cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- For more information and to declare or rescind this minor visit the Fox MIS Minor web site.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

Marketing BBA

Overview

Marketing activities provide critical economic functions for the success of organizations. Companies of all sizes must develop effective marketing strategies to reach customers; this requires an understanding of how to innovate and develop new products, create effective promotional programs, price products and services, and distribute these in a global marketplace. Offered by the Department of Marketing, the **Bachelor of Business Administration in Marketing** provides students with career-ready skills and professional development opportunities.

The Marketing curriculum focuses on today's key marketing activities and performance metrics. The program immerses students in the applied quantitative methods and the behavioral sciences necessary to address contemporary marketing challenges. Experiential and active learning are frequently used in the upper division curriculum; cases and simulations, along with projects—many offered in cooperation with business and government organizations—allow students to apply their experiences to real-life scenarios and build their resumes and competencies.

Students are encouraged to choose major elective course pairings within the major curriculum which offer specific in-depth coverage of topics and provide job-ready skills. These industry focused sequences include: Consumer Insights, Sales Force Effectiveness and Retailing Management.

Campus Locations: Main and Online

Program Code: BU-MKTG-BBA

Careers

Marketing majors have varied career choices, including:

- Advertising, including media planning, social media, or account management;
- Customer Relationship Management;
- Data Analytics;
- Digital Marketing;
- Service Marketing;
- Marketing Management;
- Marketing Research and Consumer Insights;
- Marketing Coordination for Non-profit organizations such as hospitals and universities;
- Sales and Sales Management; and
- Wholesaling and Retail Management, including buying and allocations.

Student Professional Organizations

American Marketing Association

Marketing majors are encouraged to become involved in the **American Marketing Association (AMA)**, a student professional organization that offers students the opportunity to develop their professional network in marketing. The AMA hosts bi-weekly meetings, professional speaker sessions, and career development workshops. The AMA is open to all majors. For more information, please see the AMA web site or contact Professor Sheri Lambert at sheri.lambert@temple.edu or 215-204-7533.

Professional Sales Organization

Marketing Majors may also be interested in joining the Professional Sales Organization (PSO) or the Fashion & Business Club (F&B); each organization offers students access and insight to a variety of career paths in marketing.

Minors

Marketing Minor

Students in the Fox School of Business and Management and the School of Sport, Tourism and Hospitality Management who are interested in expanding their career options through a general knowledge of marketing principles and specializing in an area of marketing should consider completing

a minor in Marketing. The requirements (p. 904) must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor.

Digital Marketing Minor

The Digital Marketing minor, which is open to all Temple students, prepares students for careers related to customer relationship management, social media, information architecture, e-commerce, search engine optimization, e-detailing, site design, internet research, demographic and sales analytics, blogging, and media design. The Digital Marketing minor is appropriate for all BBA students in the Fox School of Business and Management and is particularly relevant for Marketing, Human Resource Management, Business Management, and Management Information Systems students. It is also ideal for Klein College of Media and Communication students. The requirements (p. 829) must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor.

Accelerated Program: 4+1 Master of Education Degree (MEd)

The 4+1 Master of Education (MEd) accelerated program is designed for students interested in pursuing a Master of Education while completing the Bachelor of Business Administration (BBA) in Marketing requirements. After completion of the programs, students earn a BBA degree and an MEd in Career and Technical Education with a concentration in Marketing Education, and a Commonwealth of Pennsylvania Instructional I Teaching Certificate in Marketing Education. Learn more about the application process and deadlines.

For more information on the accelerated program, contact:

College of Education and Human Development

+1 Accelerated Program Contact

215-204-8011

plus1@temple.edu

Contact Information

Joydeep Srivastava, Marketing Department Chair

Alter Hall, Room 515

215-204-1620

jsrivastava@temple.edu

Melissa Glenn, Marketing Department Deputy Chair

Alter Hall, Room 518

215-204-4341

melissa.glenn@temple.edu

Learn more about the Bachelor of Business Administration in Marketing.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 795) for the Bachelor of Business Administration, including the requirements of the major listed below. Marketing students must attain an overall GPA of 2.0 and a 2.0 GPA in the major to graduate.

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of the Marketing Major

Code	Title	Credit Hours
Required Courses		
MKTG 3509	Customer Data Analytics	3
MKTG 3511	Marketing Research	3
MKTG 3596	Consumer and Buyer Behavior	3
MKTG 4501	Marketing Strategy ¹	3
Marketing Electives		
Select two of the following:		6
MKTG 3501	Integrated Marketing Communications	
MKTG 3504	Professional Selling and Sales Management	
MKTG 3506	Retail Management	
MKTG 3508	Digital Marketing	
MKTG 3513	Service Marketing	
MKTG 3514	Sustainable Consumer Centric Innovation	
MKTG 3580	Special Topics - Marketing	
MKTG 3581	Marketing Internship/Co-Operative Experience ²	
MKTG 3582	Independent Study ²	
Total Credit Hours		18

1

This major capstone is taken in the final semester and all prerequisites must be met.

2

MKTG 3581 and MKTG 3582 are not offered every semester and offered at the discretion of the department. Permission of department required. Contact the Department's Deputy Chair (mglennf@temple.edu) for information.

Note: Some courses listed above have minimum grade requirements. Click the course for details.

Recommended Electives for Industry Focused Course Sequences

Consumer Insights

Code	Title	Credit Hours
MKTG 3501	Integrated Marketing Communications	3
or MKTG 3513	Service Marketing	
MKTG 3508	Digital Marketing	3

Sales Force Effectiveness

Code	Title	Credit Hours
MKTG 3501	Integrated Marketing Communications	3
or MKTG 3508	Digital Marketing	
MKTG 3504	Professional Selling and Sales Management	3

Retail Management

Code	Title	Credit Hours
MKTG 3508	Digital Marketing	3
or MKTG 3514	Sustainable Consumer Centric Innovation	
MKTG 3506	Retail Management	3

Suggested Academic Plan

Bachelor of Business Administration in Marketing

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1		Credit Hours
Fall		
STAT 1001	Quantitative Methods for Business I	3
ECON 1101	Macroeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Breadth Course		3
Credit Hours		16
Spring		
STAT 1102	Quantitative Methods for Business II	4
ECON 1102	Microeconomic Principles	3
BA 1103	Legal and Ethical Reasoning in Business	3
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
ACCT 2103	Financial and Managerial Accounting for Decision Making	4
STAT 2103	Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)	4
MIS 2101	Digital Systems	3
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
GenEd Breadth Course		3
Credit Hours		17
Spring		
MKTG 2101	Marketing Management	3
or MKTG 2901	or Honors Marketing Management	
BA 2101	Professional Development Strategies	1
BA 2196	Business Communications	3
or BA 2996	or Honors Business Communications	
Select one of the following: ¹		3
BA 2501	Turning Numbers into Knowledge: Visualizing Data	
BA 2502	Business Analytics: Modern Data Science Techniques	
RMI 2101	Introduction to Risk Management	3
GenEd Breadth Course		3
Credit Hours		16
Year 3		
Fall		
FIN 3101	Financial Management	3
or FIN 3901	or Honors Financial Management	
MSOM 3101	Operations Management	3
or MSOM 3901	or Honors Operations Management	
MKTG 3596	Consumer and Buyer Behavior	3
MKTG 3511	Marketing Research	3

Business Elective ²		3
Credit Hours		15
Spring		
MKTG 3509	Customer Data Analytics	3
Marketing Elective 1 ³		3
Business Elective ²		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 4		
Fall		
BA 4102	Strategic Management	3
Marketing Elective 2 ³		3
Business Elective ²		3
GenEd Breadth Course		3
Free Elective		3
Credit Hours		15
Spring		
MKTG 4501	Marketing Strategy	3
Free Elective		3
Free Elective		3
Free Elective		3
Free Elective		2
Credit Hours		14
Total Credit Hours		124

1

Please check with your departmental advisor on which course is most appropriate for the major.

2

2000-3999 electives can be selected from: ACCT, AS, BA, ECON, FIN, HRM, IB, LGLS, MIS, MKTG, RE, RMI, STAT, SCM, SGM. Please see your advisor for elective suggestions that match your career objectives.

3

See Major Requirements for MKTG elective course options.

Marketing Minor

Overview

The **Minor in Marketing**, offered by the Department of Marketing, allows students to explore a firm's value creation, customer acquisition, and development and retention processes, expanding career options especially for students with majors in Business Management, Entrepreneurship, Finance, Human Resources, International Business, Management Information Systems, and Real Estate. Students can develop career-based competencies in the marketing minor.

This minor is open only to students in the Fox School of Business and Management and the School of Sport, Tourism and Hospitality Management.

Campus Locations: Main and Online

Contact Information

Joydeep Srivastava, Marketing Department Chair
Alter Hall, Room 515
215-204-1620
jsrivastava@temple.edu

Melissa Glenn, Marketing Department Deputy Chair
Alter Hall, Room 518
215-204-4341

melissa.glenn@temple.edu

Requirements

- Both Fox and STHM students are required to take MKTG 2101 as part of their school's foundation requirements. STHM students also need to complete STAT 2103/STAT 2903 as a prerequisite.
- Four additional Marketing courses required** (all four must be taken at Temple University):

Code	Title	Credit Hours
Required Courses ¹		
MKTG 3511	Marketing Research	3
MKTG 3596	Consumer and Buyer Behavior	3
Electives ²		
Select two of the following:		6
MKTG 3501	Integrated Marketing Communications	
MKTG 3504	Professional Selling and Sales Management	
MKTG 3506	Retail Management	
MKTG 3508	Digital Marketing	
MKTG 3509	Customer Data Analytics	
MKTG 3513	Service Marketing	
MKTG 3514	Sustainable Consumer Centric Innovation	
MKTG 3580	Special Topics - Marketing	
Total Credit Hours		12

1

STHM students need the prerequisite STAT 2103/STAT 2903 for MKTG 3509 and MKTG 3511.

2

Students are encouraged to "smart pair" the electives for career readiness (e.g. Communications: MKTG 3501 and MKTG 3508; Sales: MKTG 3504 and MKTG 3501; Retailing and B2B: MKTG 3506 and MKTG 3508).

- A grade point average of 2.0 in the minor is required as well as a minimum grade of C in each course, including MKTG 2101.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- To declare or rescind this minor, visit the Fox School of Business and Management.
- Many of these courses are available online.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

Organizational Leadership Minor

Overview

The **Minor in Organizational Leadership**, offered by the Department of Management, is open to students in the Fox School of Business and Management (except for Business Management majors) and the School of Sport, Tourism and Hospitality Management.

Research shows that business school graduates need certain skills beyond their technical competence as they step into leadership roles. Graduates with the Organizational Leadership minor are better able to think and act in valuable ways that benefit the interests of multiple organizational stakeholders. The four courses comprising this minor enhance your organizational leadership skills, specifically:

- Organizational communication and influence;
- Conflict management and negotiation;
- Team building and performance management; and
- Critical thinking and problem-solving.

Campus Location: Main

Contact Information

John A. McClendon, Chair
Alter Hall, Room 354
215-204-1910
johnmac@temple.edu

Department of Management
Alter Hall, Room 333
215-204-5183
mgmtdept@temple.edu

Requirements

- The requirements for the minor are:

Code	Title	Credit Hours
ACCT 2101 or ACCT 2901 or ACCT 2501	Financial Accounting Honors Financial Accounting Survey of Accounting	3
ECON 1101 or ECON 1901	Macroeconomic Principles Honors Macroeconomic Principles	3
HRM 1101 or HRM 1901	Leadership and Organizational Management Honors Leadership and Organizational Management	3
MKTG 2101 or MKTG 2901	Marketing Management Honors Marketing Management	3
HRM 3501	Power, Influence and Negotiation	3
HRM 3502	Leading People at Work	3
HRM 3503	Communicating in Organizations	3
HRM 3504 or HRM 3904	Leadership in the 21st Century Honors, The Leadership Experience: Leading Yourself, Leading Change, Leading Communities	3
Total Credit Hours		24

- Five of the eight courses required for the minor must be taken at Temple University.
- A grade point average of 2.0 in the minor is required as well as a minimum grade of C- in each course, unless otherwise specified.
- HRM 3501, HRM 3502, HRM 3503, HRM 3504, or HRM 3904 cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- To declare or rescind this minor, visit the Fox School of Business and Management.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

Real Estate BBA

Overview

The **Bachelor of Business Administration in Real Estate**, offered by the Department of Finance, provides an educational foundation for students who are interested in real estate and considering careers in the real estate sector. Typical career paths include real estate investment and financial analysis, real estate financing and mortgage lending, real estate appraisal and valuation, property management, residential and commercial brokerage and marketing, and corporate real estate analysis.

Core competencies to be developed include the ability to analyze real estate investment opportunities from an investor and lender perspective, conduct asset and risk evaluation, implement risk management strategies, understand the dynamics of real estate markets, and navigate the legal and regulatory environment of real estate ownership, title transfer, and agency obligations common in real estate transactions.

Campus Location: Main

Program Code: BU-RE-BBA

Student Professional Organization

All Real Estate majors are strongly encouraged to join the Temple Real Estate Organization (TREO), the Fox School professional organization for students interested in real estate. TREO meets regularly throughout the semester and has an active real estate speaker series.

Licensure/Certification

To become licensed as a real estate sales agent in Pennsylvania, a candidate must be at least 18 years old, complete a pre-licensing class covering at least 75 hours of approved real estate material, submit to a background check, and pass the Pennsylvania licensing exam. Although the process of getting a real estate license is similar in most states, each state has its own unique rules that must be followed. Individuals already licensed in one state may also become licensed in other states through reciprocity, but reciprocity requirements vary from state to state.

Students who earned a BBA in Real Estate from Temple as well as Temple students who successfully completed RE 3501 and RE 3502 qualify under the Pennsylvania educational requirements to sit for the state real estate licensing exam.

Real estate majors who are interested in the appraisal profession can receive up to 258 hours of qualified appraisal education toward their state appraisal license through the agreement between Temple University and Appraisal Foundation.

Real Estate Degree Review Program (appraisalfoundation.org)

Minor

The Real Estate minor exposes students to the main principles of real estate development, valuation and management. Students who want to obtain their Pennsylvania real estate licenses have an opportunity to take courses that will prepare them for the licensing exam. The minor is open to business students only.

Requirements (p. 910) for the minor must be fulfilled prior to graduation. The courses counted toward a major or another minor cannot be used to meet the minor requirements.

Contact Information

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215-204-4146
rytchkov@temple.edu

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215-204-6675
david.wilk@temple.edu

Learn more about the Bachelor of Business Administration in Real Estate.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 795) for the Bachelor of Business Administration, including the requirements of the major listed below. Students must maintain a 2.0 GPA overall and a 2.0 GPA in the major to graduate.

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of Real Estate Major

Code	Title	Credit Hours
RE 3501	Real Estate Fundamentals	3
FIN 3509	Real Estate Investment and Finance	3
FIN 4597	Seminar in Real Estate Asset Analysis (spring only) ¹	3
Select three of the following:		9
ARCH 1001	Introduction to Design and the Environment	
ARCH 1013	Architectural Representation for Non-Majors	
FIN 3514	Commercial Real Estate Analysis	
FIN 3523	Real Estate Financial Modeling	
FIN 3524	Real Estate Finance and Mortgage Markets	
FIN 3525	Real Estate Development	
RE 3502	Real Estate Practice	
RE 3524	Residential Property Management	
RE 3525	Management of Corporate Real Estate Assets	

Total Credit Hours **18**

1

This major capstone is taken in the final semester, and all prerequisites must be met. This course is currently only offered in the Spring semester.

Suggested Academic Plan

Bachelor of Business Administration in Real Estate

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1		Credit Hours
Fall		
STAT 1001	Quantitative Methods for Business I	3
ECON 1101	Macroeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Breadth Course		3
Credit Hours		16
Spring		
STAT 1102	Quantitative Methods for Business II	4
ECON 1102	Microeconomic Principles	3
BA 1103	Legal and Ethical Reasoning in Business	3
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
ACCT 2103	Financial and Managerial Accounting for Decision Making	4
STAT 2103	Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)	4
MIS 2101	Digital Systems	3
MKTG 2101	Marketing Management	3
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
Credit Hours		17

Spring			
BA 2101	Professional Development Strategies		1
BA 2196	Business Communications		3
Select one of the following: ¹			3
BA 2501	Turning Numbers into Knowledge: Visualizing Data		
BA 2502	Business Analytics: Modern Data Science Techniques		
RMI 2101	Introduction to Risk Management		3
FIN 3101	Financial Management		3
GenEd Breadth Course			3
Credit Hours			16
Year 3			
Fall			
MSOM 3101	Operations Management		3
FIN 3509	Real Estate Investment and Finance		3
RE 3501	Real Estate Fundamentals		3
Business Elective ²			3
GenEd Breadth Course			3
Credit Hours			15
Spring			
Select two of the following:			6
ARCH 1001	Introduction to Design and the Environment		
ARCH 1013	Architectural Representation for Non-Majors		
FIN 3514	Commercial Real Estate Analysis		
FIN 3523	Real Estate Financial Modeling		
FIN 3524	Real Estate Finance and Mortgage Markets		
FIN 3525	Real Estate Development		
RE 3502	Real Estate Practice		
RE 3524	Residential Property Management		
RE 3525	Management of Corporate Real Estate Assets		
Business Elective ²			3
GenEd Breadth Course			3
GenEd Breadth Course			3
Credit Hours			15
Year 4			
Fall			
BA 4102	Strategic Management		3
Select one of the following:			3
ARCH 1001	Introduction to Design and the Environment		
ARCH 1013	Architectural Representation for Non-Majors		
FIN 3514	Commercial Real Estate Analysis		
FIN 3523	Real Estate Financial Modeling		
FIN 3524	Real Estate Finance and Mortgage Markets		
FIN 3525	Real Estate Development		
RE 3502	Real Estate Practice		
RE 3524	Residential Property Management		
RE 3525	Management of Corporate Real Estate Assets		
Business Elective ²			3
GenEd Breadth Course			3
Free Elective			3
Credit Hours			15
Spring			
FIN 4597	Seminar in Real Estate Asset Analysis (spring only)		3

Free Elective	3
Free Elective	3
Free Elective	3
Free Elective	2
Credit Hours	14
Total Credit Hours	124

1

Please check with your departmental advisor on which course is most appropriate for the major.

2

2000-3999 electives can be selected from: ACCT, AS, BA, ECON, FIN, HRM, IB, LGLS, MIS, MKTG, RE, RMI, STAT, SCM, SGM. Please see your advisor for elective suggestions that match your career objectives.

Real Estate Minor

Overview

The **Minor in Real Estate**, offered by the Department of Finance, exposes students to the main principles of real estate development, valuation and management. Students who want to obtain their Pennsylvania real estate licenses have an opportunity to take courses that will prepare them for the licensing exam.

The minor is open to business students only.

Campus Location: Main

Contact Information

Oleg Rytchkov, Department Chair
Alter Hall, Room 420
215-204-4146
rytchkov@temple.edu

David J. Wilk, Director of the Real Estate Program
1810 Liacouras Walk, Suite 230
215-204-6675
david.wilk@temple.edu

Requirements

- **Six courses are required:**

Code	Title	Credit Hours
BA 1103	Legal and Ethical Reasoning in Business ¹	3
or LGLS 1101	Legal Environment of Business	
FIN 3101	Financial Management	3
FIN 3509	Real Estate Investment and Finance	3
RE 3501	Real Estate Fundamentals	3
RE 3502	Real Estate Practice	3
Select one of the following:		3
FIN 3514	Commercial Real Estate Analysis	
FIN 3523	Real Estate Financial Modeling	
FIN 3524	Real Estate Finance and Mortgage Markets	
FIN 3525	Real Estate Development	
RE 3524	Residential Property Management	
RE 3525	Management of Corporate Real Estate Assets	
Total Credit Hours		18

1

Minimum grade of C- is required.

- Minimum grades of C are required for the FIN and RE courses.
- A grade point average of 2.0 in the minor is required.
- Except for BA 1103, LGLS 1101, and FIN 3101, courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- To declare or rescind this minor, visit the Fox School of Business and Management.

Interested students should discuss with their school/college advisor on how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

Risk Management and Insurance BBA with Healthcare Risk Management Concentration

Overview

Offered by the Department of Risk, Actuarial Science and Legal Studies, the **Bachelor of Business Administration in Risk Management and Insurance** (RMI) prepares students to identify and evaluate various sources of risk, then select and implement solutions to control these risks through insurance and other mechanisms of risk transfer and distribution.

Graduates of this program often enter the risk management or employee benefit departments of large businesses and other organizations. They may also take challenging positions within insurance or benefit consulting firms, brokerage firms, agency operations, or insurance companies.

Concentrations

Student who wish to pursue the RMI major **must select one of the following concentrations** to align with their career interests:

- Healthcare Risk Management
- Managing Corporate Risk
- Managing Human Capital Risk

Students pursuing the **Healthcare Risk Management concentration** will explore the dynamics between risk management, quality improvement and patient safety and learn how these aspects impact the business of healthcare and patient health. They will examine the financial, technological and health services systems required to successfully operate healthcare management organizations.

Campus Location: Main

Program Code: BU-RMI-BBA

Student Professional Organization

Risk Management and Insurance majors are strongly encouraged to become active in the Sigma chapter of Gamma Iota Sigma (GIS), Temple's national award-winning professional student organization in Risk Management, Insurance, and Actuarial Science. The organization hosts numerous guest speakers from the industry, sponsors a variety of career development seminars, and maintains a widely-distributed résumé book. For more information, contact the GIS president at 215-204-9368 or visit the web site at www.sigmachapter.org.

RMI and HRM Focus

The Department of Risk, Actuarial Science and Legal Studies offers Risk Management and Insurance (RMI) courses that complement the Department of Management's Human Resource Management (HRM) courses for students interested in a career in employee benefits and/or human resource management. These courses allow students to broaden their career options by taking advantage of the cross-training offered by these departments.

- HRM major with a RMI focus: Students take RMI 3501 and RMI 3503.
- RMI major with a HRM focus: Students take HRM 2501 and HRM 3511.
- Dual HRM/RMI major: Students fulfill all requirements for both majors.

For more information on joint HRM/RMI courses, contact Rob Drennan at 215-204-8894.

Minor

Students in any college who are interested in the health professions and want to enhance their skills by understanding the business principles underlying healthcare systems should consider a minor in Healthcare Management (p. 855). Risk Management majors in the Healthcare Risk Management concentration are not eligible for the minor. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor.

Contact Information

R. B. Drennan, Program Director
Alter Hall, Room 628
215-204-8894
rob.drennan@temple.edu

Learn more about the Bachelor of Business Administration in Risk Management and Insurance.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation requirements (p. 795) for the Bachelor of Business Administration, including the requirements of the major listed below. Students pursuing any of the Risk Management and Insurance major/tracks must attain a 2.0 cumulative GPA and 2.0 in the major/track to graduate with the Risk Management major.

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of Healthcare Risk Management Concentration

Code	Title	Credit Hours
RMI 3501	Managing Human Capital Risk	3
RMI 3502	Managing Property Liability Risk I	3
HCM 3501	Introduction to Health Services Systems	3
HCM 3502	Healthcare Financing and Information Technology	3
HCM 4596	Healthcare Quality and Risk Management	3
Select one of the following:		3
RMI 3504	Managing Property Liability Risk II	
RMI 3505	Risk Financing	
RMI 3506	Risk Analytics	
LGLS 3501	Introduction to Corporate Compliance	
ECON 3507	Health Economics	
Total Credit Hours		18

Suggested Academic Plan

Bachelor of Business Administration in Risk Management and Insurance with Healthcare Risk Management Concentration

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1		Credit Hours
Fall		
STAT 1001	Quantitative Methods for Business I	3
ECON 1101	Macroeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3

ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
Credit Hours		16
Spring		
STAT 1102	Quantitative Methods for Business II	4
ECON 1102	Microeconomic Principles	3
BA 1103	Legal and Ethical Reasoning in Business	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
ACCT 2103	Financial and Managerial Accounting for Decision Making	4
STAT 2103	Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)	4
MIS 2101	Digital Systems	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Credit Hours		17
Spring		
MKTG 2101	Marketing Management	3
BA 2101	Professional Development Strategies	1
BA 2196	Business Communications	3
Select one of the following: ¹		3
BA 2501	Turning Numbers into Knowledge: Visualizing Data	
BA 2502	Business Analytics: Modern Data Science Techniques	
RMI 2101	Introduction to Risk Management	3
GenEd Breadth Course		3
Credit Hours		16
Year 3		
Fall		
FIN 3101	Financial Management	3
MSOM 3101	Operations Management	3
RMI 3501	Managing Human Capital Risk	3
RMI 3502	Managing Property Liability Risk I	3
HCM 3501	Introduction to Health Services Systems	3
Credit Hours		15
Spring		
HCM 3502	Healthcare Financing and Information Technology	3
Business Elective ²		3
GenEd Breadth Course		3
Free Elective		3
Free Elective		3
Credit Hours		15
Year 4		
Fall		
BA 4102	Strategic Management	3
HCM 4596	Healthcare Quality and Risk Management	3
Business Elective ²		3
GenEd Breadth Course		3

GenEd Breadth Course		3
	Credit Hours	15
Spring		
Select one of the following:		3
RMI 3504	Managing Property Liability Risk II	
RMI 3505	Risk Financing	
RMI 3506	Risk Analytics	
LGLS 3501	Introduction to Corporate Compliance	
ECON 3507	Health Economics	
Business Elective ²		3
Free Elective		3
Free Elective		3
Free Elective		2
	Credit Hours	14
	Total Credit Hours	124

1

Please check with your departmental advisor on which course is most appropriate for the major.

2

2000-3999 electives can be selected from: ACCT, AS, BA, ECON, FIN, HRM, IB, LGLS, MIS, MKTG, RE, RMI, STAT, SCM, SGM. Please see your advisor for elective suggestions that match your career objectives.

Risk Management and Insurance BBA with Managing Corporate Risk Concentration

Overview

Offered by the Department of Risk, Actuarial Science and Legal Studies, the **Bachelor of Business Administration in Risk Management and Insurance** (RMI) prepares students to identify and evaluate various sources of risk, then select and implement solutions to control these risks through insurance and other mechanisms of risk transfer and distribution.

Graduates of this program often enter the risk management or employee benefit departments of large businesses and other organizations. They may also take challenging positions within insurance or benefit consulting firms, brokerage firms, agency operations, or insurance companies.

Concentrations

Student who wish to pursue the RMI major **must select one of the following concentrations** to align with their career interests:

- Healthcare Risk Management
- Managing Corporate Risk
- Managing Human Capital Risk

Students pursuing the **Managing Corporate Risk concentration** will gain a comprehensive understanding of risk management within complex global organizations and corporations. They will learn how to identify and manage emerging risks by using tools such as key risk indicators, risk maps, risk registers and more. Students also obtain foundational knowledge of the financial characteristics of the property-liability insurance industry as well as non-insurance financing techniques available to corporations.

Campus Location: Main

Program Code: BU-RMI-BBA

Student Professional Organization

Risk Management and Insurance majors are strongly encouraged to become active in the Sigma chapter of Gamma Iota Sigma (GIS), Temple's national award-winning professional student organization in Risk Management, Insurance, and Actuarial Science. The organization hosts numerous guest speakers from the industry, sponsors a variety of career development seminars, and maintains a widely-distributed résumé book. For more information, contact the GIS president at 215-204-9368 or visit the web site at www.sigmachapter.org.

RMI and HRM Focus

The Department of Risk, Actuarial Science and Legal Studies offers Risk Management and Insurance (RMI) courses that complement the Department of Management's Human Resource Management (HRM) courses for students interested in a career in employee benefits and/or human resource management. These courses allow students to broaden their career options by taking advantage of the cross-training offered by these departments.

- HRM major with a RMI focus: Students take RMI 3501 and RMI 3503.
- RMI major with a HRM focus: Students take HRM 2501 and HRM 3511.
- Dual HRM/RMI major: Students fulfill all requirements for both majors.

For more information on joint HRM/RMI courses, contact Rob Drennan at 215-204-8894.

Minor

Students in any college who are interested in the health professions and want to enhance their skills by understanding the business principles underlying healthcare systems should consider a minor in Healthcare Management (p. 855). Risk Management majors in the Healthcare Risk Management concentration are not eligible for the minor. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor.

Contact Information

R. B. Drennan, Program Director
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215-204-8894
rob.drennan@temple.edu

Learn more about the Bachelor of Business Administration in Risk Management and Insurance.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation requirements (p. 795) for the Bachelor of Business Administration, including the requirements of the major listed below. Students pursuing any of the Risk Management and Insurance major/tracks must attain a 2.0 cumulative GPA and 2.0 in the major/track to graduate with the Risk Management major.

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of Managing Corporate Risk Concentration

Code	Title	Credit Hours
RMI 3501	Managing Human Capital Risk	3
RMI 3502	Managing Property Liability Risk I	3
RMI 3504	Managing Property Liability Risk II	3
RMI 4597	Managing Risk Across the Enterprise ¹	3
Select two of the following:		6
RMI 3503	Retirement Plans	
RMI 3505	Risk Financing	
RMI 3506	Risk Analytics	
RMI 3567	Managing International Risk	

RMI 4596

Advanced Topics in Managing Human Capital Risk

Total Credit Hours**18**

1

This major capstone is taken in the final semester, and all prerequisites must be met.

Suggested Academic Plan**Bachelor of Business Administration in Risk Management and Insurance with Managing Corporate Risk Concentration****Suggested Plan for New Students Starting in the 2023-2024 Academic Year**

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1

Fall		Credit Hours
STAT 1001	Quantitative Methods for Business I	3
ECON 1101	Macroeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
Credit Hours		16

Spring

STAT 1102	Quantitative Methods for Business II	4
ECON 1102	Microeconomic Principles	3
BA 1103	Legal and Ethical Reasoning in Business	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Credit Hours		16

Year 2

Fall		
ACCT 2103	Financial and Managerial Accounting for Decision Making	4
STAT 2103	Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)	4
MIS 2101	Digital Systems	3
RMI 2101	Introduction to Risk Management	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		17

Spring

MKTG 2101	Marketing Management	3
BA 2101	Professional Development Strategies	1
BA 2196	Business Communications	3
Select one of the following: ¹		3
BA 2501	Turning Numbers into Knowledge: Visualizing Data	
BA 2502	Business Analytics: Modern Data Science Techniques	
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16

Year 3

Fall		
FIN 3101	Financial Management	3
MSOM 3101	Operations Management	3

RMI 3501	Managing Human Capital Risk	3
RMI 3502	Managing Property Liability Risk I	3
Business Elective ²		3
Credit Hours		15
Spring		
RMI 3504	Managing Property Liability Risk II	3
Select one of the following:		3
RMI 3503	Retirement Plans	
RMI 3505	Risk Financing	
RMI 3506	Risk Analytics	
RMI 3567	Managing International Risk	
RMI 4596	Advanced Topics in Managing Human Capital Risk	
Business Elective ²		3
GenEd Breadth Course		3
Free Elective		3
Credit Hours		15
Year 4		
Fall		
BA 4102	Strategic Management	3
Select one of the following:		3
RMI 3503	Retirement Plans	
RMI 3505	Risk Financing	
RMI 3506	Risk Analytics	
RMI 3567	Managing International Risk	
RMI 4596	Advanced Topics in Managing Human Capital Risk	
Business Elective ²		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
RMI 4597	Managing Risk Across the Enterprise	3
Free Elective		3
Free Elective		3
Free Elective		3
Free Elective		2
Credit Hours		14
Total Credit Hours		124

1

Please check with your departmental advisor on which course is most appropriate for the major.

2

2000-3999 electives can be selected from: ACCT, AS, BA, ECON, FIN, HRM, IB, LGLS, MIS, MKTG, RE, RMI, STAT, SCM, SGM. Please see your advisor for elective suggestions that match your career objectives.

Risk Management and Insurance BBA with Managing Human Capital Risk Concentration

Overview

Offered by the Department of Risk, Actuarial Science and Legal Studies, the **Bachelor of Business Administration in Risk Management and Insurance** (RMI) prepares students to identify and evaluate various sources of risk, then select and implement solutions to control these risks through insurance and other mechanisms of risk transfer and distribution.

Graduates of this program often enter the risk management or employee benefit departments of large businesses and other organizations. They may also take challenging positions within insurance or benefit consulting firms, brokerage firms, agency operations, or insurance companies.

Concentrations

Student who wish to pursue the RMI major **must select one of the following concentrations** to align with their career interests:

- Healthcare Risk Management
- Managing Corporate Risk
- Managing Human Capital Risk

Students pursuing the **Managing Human Capital Risk concentration** will examine issues in the operation and design of health and welfare employee benefit plans. They will analyze the types of individual retirement and pension plans, as well as other employee benefit topics that organizations manage.

Campus Location: Main

Program Code: BU-RMI-BBA

Student Professional Organization

Risk Management and Insurance majors are strongly encouraged to become active in the Sigma chapter of Gamma Iota Sigma (GIS), Temple's national award-winning professional student organization in Risk Management, Insurance, and Actuarial Science. The organization hosts numerous guest speakers from the industry, sponsors a variety of career development seminars, and maintains a widely-distributed résumé book. For more information, contact the GIS president at 215-204-9368 or visit the web site at www.sigmachapter.org.

RMI and HRM Focus

The Department of Risk, Actuarial Science and Legal Studies offers Risk Management and Insurance (RMI) courses that complement the Department of Management's Human Resource Management (HRM) courses for students interested in a career in employee benefits and/or human resource management. These courses allow students to broaden their career options by taking advantage of the cross-training offered by these departments.

- HRM major with a RMI focus: Students take RMI 3501 and RMI 3503.
- RMI major with a HRM focus: Students take HRM 2501 and HRM 3511.
- Dual HRM/RMI major: Students fulfill all requirements for both majors.

For more information on joint HRM/RMI courses, contact Rob Drennan at 215-204-8894.

Minor

Students in any college who are interested in the health professions and want to enhance their skills by understanding the business principles underlying healthcare systems should consider a minor in Healthcare Management (p. 855). Risk Management majors in the Healthcare Risk Management concentration are not eligible for the minor. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor.

Contact Information

R. B. Drennan, Program Director
Alter Hall, Room 628
215-204-8894
rob.drennan@temple.edu

Learn more about the Bachelor of Business Administration in Risk Management and Insurance.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation requirements (p. 795) for the Bachelor of Business Administration, including the requirements of the major listed below. Students pursuing any of the Risk Management and Insurance major/tracks must attain a 2.0 cumulative GPA and 2.0 in the major/track to graduate with the Risk Management major.

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of Managing Human Capital Risk Concentration

Code	Title	Credit Hours
RMI 3501	Managing Human Capital Risk	3
RMI 3502	Managing Property Liability Risk I	3
RMI 3503	Retirement Plans	3
RMI 4596	Advanced Topics in Managing Human Capital Risk (fall only) ¹	3
Select two of the following:		6
RMI 3504	Managing Property Liability Risk II	
RMI 3505	Risk Financing	
RMI 3506	Risk Analytics	
RMI 3567	Managing International Risk	
RMI 4597	Managing Risk Across the Enterprise	
Total Credit Hours		18

1

This major capstone is taken in the final fall semester, and all prerequisites must be met.

2

Completion of prerequisites HCM 3501 Introduction to Health Services Systems and HCM 3502 Healthcare Financing and Information Technology required. HCM 3501 and HCM 3502 can be used to replace free electives (6 credits).

Suggested Academic Plan

Bachelor of Business Administration in Risk Management and Insurance with Managing Human Capital Risk Concentration

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1		Credit Hours
Fall		
STAT 1001	Quantitative Methods for Business I	3
ECON 1101	Macroeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Breadth Course		3
Credit Hours		16
Spring		
STAT 1102	Quantitative Methods for Business II	4
ECON 1102	Microeconomic Principles	3
BA 1103	Legal and Ethical Reasoning in Business	3
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	

GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
ACCT 2103	Financial and Managerial Accounting for Decision Making	4
STAT 2103	Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)	4
MIS 2101	Digital Systems	3
RMI 2101	Introduction to Risk Management	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		17
Spring		
MKTG 2101	Marketing Management	3
BA 2101	Professional Development Strategies	1
BA 2196	Business Communications	3
Select one of the following: ¹		3
BA 2501	Turning Numbers into Knowledge: Visualizing Data	
BA 2502	Business Analytics: Modern Data Science Techniques	
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 3		
Fall		
FIN 3101	Financial Management	3
MSOM 3101	Operations Management	3
RMI 3501	Managing Human Capital Risk	3
RMI 3502	Managing Property Liability Risk I	3
Business Elective ²		3
Credit Hours		15
Spring		
RMI 3503	Retirement Plans	3
Business Elective ²		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Free Elective		3
Credit Hours		15
Year 4		
Fall		
RMI 4596	Advanced Topics in Managing Human Capital Risk (fall only)	3
Select one of the following:		3
RMI 3504	Managing Property Liability Risk II	
RMI 3505	Risk Financing	
RMI 3506	Risk Analytics	
RMI 3567	Managing International Risk	
RMI 4597	Managing Risk Across the Enterprise	
Business Elective ²		3
GenEd Breadth Course		3
Free Elective		3
Credit Hours		15
Spring		
BA 4102	Strategic Management	3
Select one of the following:		3

RMI 3504	Managing Property Liability Risk II	
RMI 3505	Risk Financing	
RMI 3506	Risk Analytics	
RMI 3567	Managing International Risk	
RMI 4597	Managing Risk Across the Enterprise	
Free Elective		3
Free Elective		3
Free Elective		2
Credit Hours		14
Total Credit Hours		124

1

Please check with your departmental advisor on which course is most appropriate for the major.

2

2000-3999 electives can be selected from: ACCT, AS, BA, ECON, FIN, HRM, IB, LGLS, MIS, MKTG, RE, RMI, STAT, SCM, SGM. Please see your advisor for elective suggestions that match your career objectives.

Sales Minor

Overview

The **Minor in Sales**, offered by the Department of Management, allows business students to augment their business degree with specific skills and expertise that are valued in many different fields and industries. Graduates with the Sales minor can combine this expertise with any business major to align with personalized career strategies. These skills are valuable in a wide variety of business contexts, making graduates with this minor stand out in their chosen field.

This minor is open to Fox School of Business and Management students only.

The major includes an emphasis on

- Sales,
- Persuasion,
- Negotiation,
- Marketing, and
- Customer relationship management.

Campus Location: Main

Contact Information

John A. McClendon, Chair
Alter Hall, Room 354
215-204-1910
johnmac@temple.edu

Tony Petrucci, Associate Professor, Sales Minor
Alter Hall, Room 333f
215-204-8183
tony.petrucci@temple.edu

Department of Management Office
Alter Hall, Room 333
215-204-5183
mgmtdept@temple.edu

Requirements

- **Six courses are required** (four of these must be taken at Temple University):

Code	Title	Credit Hours
HRM 1101	Leadership and Organizational Management	3
MKTG 2101	Marketing Management	3
MKTG 3501	Integrated Marketing Communications	3
MKTG 3504	Professional Selling and Sales Management	3
HRM 3501	Power, Influence and Negotiation	3
Select one of the following:		3
HRM 3502	Leading People at Work	
HRM 3503	Communicating in Organizations	
HRM 3504	Leadership in the 21st Century	
or HRM 3904	Honors, The Leadership Experience: Leading Yourself, Leading Change, Leading Communities	
Total Credit Hours		18

- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- **Marketing majors** who declare the Sales minor will complete MKTG 3501 and MKTG 3504 for the minor, as well as two other Marketing electives for the Marketing major.
- **Business Management majors** who declare the Sales minor will complete HRM 3504 or HRM 3904 instead of HRM 3501, as well as HRM 3502. See below.

Code	Title	Credit Hours
HRM 1101	Leadership and Organizational Management	3
MKTG 2101	Marketing Management	3
MKTG 3501	Integrated Marketing Communications	3
MKTG 3504	Professional Selling and Sales Management	3
HRM 3504	Leadership in the 21st Century	3
or HRM 3904	Honors, The Leadership Experience: Leading Yourself, Leading Change, Leading Communities	
HRM 3502	Leading People at Work	3
Total Credit Hours		18

- A cumulative grade point average of 2.0 in the minor is required, as well as a minimum grade of C- in each course unless otherwise specified.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- To declare or rescind this minor, visit the Fox School of Business and Management.

Statistical Science and Data Analytics BS

Overview

The Department of Statistics, Operations and Data Science offers the **Bachelor of Science in Statistical Science and Data Analytics**. A recent Best Jobs list compiled by CareerCast (a Local and National Job search company) ranks Data Scientist as No. 1 in their list of the best jobs with high demand. As we survey representatives from different companies, the consistent message we receive is that the cost of hiring and the demand for talent are skyrocketing. The demand is driven by the proliferation of computing technology, software and statistical tools for capturing and interpreting the substantial volume of data now available at the enterprise, government and personal levels.

The educational objective of the program is to provide graduates with a rigorous and broad-based curriculum providing:

1. Rigorous quantitative foundation;
2. Alignment and coordination with the established quantitative disciplines at Fox and at Temple University;
3. Exposure to programming and modern languages such as Python, R and SQL; and
4. Effective communication skills.

With this degree, there are a wide range of employment areas including decision-making in business, healthcare, public policy and the pharmaceutical industry, as well as in social media and commercial areas. In each field, there are large bodies of data accumulated in need of being explored, understood and analyzed. Reputable national organizations, like the American Statistical Association (ASA), endorse the value of undergraduate

programs in statistics as a reflection of the increasing importance of the discipline. Statistics programs should be flexible enough to prepare bachelor's graduates to either be functioning statisticians in a service-oriented economy or go on to graduate school. We ensure students entering the work force or heading to graduate school have the appropriate capacity to "think with data" and to pose and answer statistical questions.

Minor

Skilled users of data enhance their career opportunities. Students in any major who wish to become proficient in the ability to select, utilize and apply quantitative and data analysis skills can pursue a minor in Statistical Science and Data Analytics. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor. Requirements (p. 926) for the minor must be completed prior to graduation.

Campus Location: Main

Program Code: BU-SSDA-BS

Contact Information

Edoardo M. Airoidi, Chair and Millard E. Gladfelter Professor of Statistics and Data Science
airoidi@temple.edu

Lauren Burns, Deputy Chair and Academic Director
lburns@temple.edu

Learn more about the Bachelor of Science in Statistical Science and Data Analytics.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 795) for the Bachelor of Science, including the requirements of the major listed below. Students must attain an overall GPA of 2.0 and a 2.0 GPA in the major to graduate as a Statistical Science and Data Analytics major.

Core Requirements

Code	Title	Credit Hours
ECON 1101 or ECON 1901	Macroeconomic Principles Honors Macroeconomic Principles	3
ECON 1102 or ECON 1902	Microeconomic Principles Honors Microeconomic Principles	3
BA 1103 or BA 1903	Legal and Ethical Reasoning in Business Honors Legal and Ethical Reasoning in Business	3
ACCT 2103 or ACCT 2903	Financial and Managerial Accounting for Decision Making Honors Financial and Managerial Accounting	4
BA 2104	Excel for Business Applications	1
BA 2196 or BA 2996	Business Communications Honors Business Communications	3
BA 2502	Business Analytics: Modern Data Science Techniques	3
RMI 2101 or RMI 2901	Introduction to Risk Management Honors Introduction to Risk Management	3
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4

STAT 2103 or STAT 2903	Statistical Business Analytics Honors Statistical Business Analytics	4
CIS 1051	Introduction to Problem Solving and Programming in Python	4
BA 2101	Professional Development Strategies	1
Total Credit Hours		40

Note: In order to graduate, a grade of C- or better must be obtained in all FSBM core requirements.

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of Statistical Science and Data Analytics Major

Code	Title	Credit Hours
BA 2501	Turning Numbers into Knowledge: Visualizing Data	3
STAT 2501	Quantitative Foundations for Data Science (spring only)	3
STAT 2521	Data Analysis and Statistical Computing	3
STAT 2522	Survey Design and Sampling (spring only)	3
STAT 2523	Design of Experiments and Quality Control (fall only)	3
STAT 3502	Regression and Predictive Analytics (fall only)	3
STAT 3503	Applied Statistics and Data Science	3
STAT 3504	Time Series and Forecasting Models (fall only)	3
STAT 3506	Nonparametric and Categorical Data Analysis (fall only)	3
STAT 3507	Intermediate Statistics	3
STAT 3508	Data Management, Missing Data, and Outlier Analysis	3
STAT 4596	Capstone: Statistical Science and Data Analytics (spring only)	3
Select three (3) business electives ¹		9-12
Total Credit Hours		45-48

1

2000-3999 electives can be selected from: ACCT, AS, BA, ECON, FIN, HRM, IB, LGLS, MIS, MKTG, RE, RMI, STAT, SCM, SGM. Please see your advisor for elective suggestions that match your career objectives. Interested students should consider research with faculty members (Independent Study) as part of their electives.

Suggested Academic Plan

Bachelor of Science in Statistical Science and Data Analytics

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1		Credit Hours
Fall		
MATH 1041	Calculus I (waives GenEd Quantitative Literacy requirement)	4
BA 2104	Excel for Business Applications	1
ECON 1102	Microeconomic Principles	3
BA 1103 or BA 1903	Legal and Ethical Reasoning in Business or Honors Legal and Ethical Reasoning in Business	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		15
Spring		
MATH 1042	Calculus II	4

STAT 2103	Statistical Business Analytics	4
ECON 1101	Macroeconomic Principles	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Credit Hours		17
Year 2		
Fall		
STAT 2521	Data Analysis and Statistical Computing	3
BA 2196	Business Communications	3
ACCT 2103 or ACCT 2903	Financial and Managerial Accounting for Decision Making or Honors Financial and Managerial Accounting	4
CIS 1051	Introduction to Problem Solving and Programming in Python	4
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		17
Spring		
STAT 2501	Quantitative Foundations for Data Science	3
STAT 2522	Survey Design and Sampling	3
BA 2502	Business Analytics: Modern Data Science Techniques	3
BA 2101	Professional Development Strategies	1
RMI 2101	Introduction to Risk Management	3
GenEd Breadth Course		3
Credit Hours		16
Year 3		
Fall		
BA 2501	Turning Numbers into Knowledge: Visualizing Data	3
STAT 2523	Design of Experiments and Quality Control	3
STAT 3502	Regression and Predictive Analytics	3
Business Elective 1 ¹		3-4
Free Elective		3-2
Credit Hours		15
Spring		
STAT 3503	Applied Statistics and Data Science	3
STAT 3507	Intermediate Statistics	3
STAT 3508	Data Management, Missing Data, and Outlier Analysis	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 4		
Fall		
STAT 3504	Time Series and Forecasting Models	3
STAT 3506	Nonparametric and Categorical Data Analysis	3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
STAT 4596	Capstone: Statistical Science and Data Analytics	3
Business Elective 2 ¹		3-4
Business Elective 3 ¹		3-4

Free Elective	3-1
Credit Hours	12
Total Credit Hours	122

1

2000-3999 electives can be selected from: ACCT, AS, BA, ECON, FIN, HRM, IB, LGLS, MIS, MKTG, RE, RMI, STAT, SCM, SGM. Please see your advisor for elective suggestions that match your career objectives. Interested students should consider research with faculty members (Independent Study) as part of their electives.

Statistical Science and Data Analytics Minor

Overview

Offered by the Department of Statistics, Operations and Data Science, the **Minor in Statistical Science and Data Analytics** is open to all students.

Becoming a skilled user of data enhances career opportunities. Students in any major who wish to become proficient in the ability to select, utilize and apply quantitative and data analysis skills can pursue this minor.

Campus Location: Main

Contact Information

Lauren Burns, Deputy Chair and Academic Director
lburns@temple.edu

Requirements

- Open to business or non-business students.
- Completion of MATH 1022/STAT 1001 or calculus with a minimum grade of C- is a prerequisite for some courses in this minor.
- **Six courses are required** (four of six must be taken at Temple University):

Code	Title	Credit Hours
BA 2501	Turning Numbers into Knowledge: Visualizing Data ¹	3
Select one of the following:		1-4
STAT 2103	Statistical Business Analytics	
or STAT 2903	Honors Statistical Business Analytics	
STAT 2104	Selected Topics in Statistical Business Analytics	
STAT 2521	Data Analysis and Statistical Computing	3
STAT 3502	Regression and Predictive Analytics	3
Select two of the following:		6
BA 2502	Business Analytics: Modern Data Science Techniques ¹	
STAT 2522	Survey Design and Sampling	
STAT 2523	Design of Experiments and Quality Control	
STAT 3503	Applied Statistics and Data Science	
STAT 3504	Time Series and Forecasting Models	
STAT 3506	Nonparametric and Categorical Data Analysis	
STAT 3508	Data Management, Missing Data, and Outlier Analysis	
Total Credit Hours		16-19

1

A minimum grade of C- or better is required for these courses.

- One of the following courses can be substituted for STAT 2103/STAT 2903 if required for the student's program:

Code	Title	Credit Hours
CEE 3048	Probability, Statistics & Stochastic Methods	3
SOC 1167	Social Statistics	3
SOC 3201	Statistical Methods in Sociology	4
MATH 3031	Probability Theory I	3

ECE 3522	Stochastic Processes in Signals and Systems	3
AS 2101	Actuarial Probability and Statistics II	3
ANTH 0825	Quantitative Methods in the Social Sciences	4
POLS 0825	Quantitative Methods in the Social Sciences	4
PSY 0825	Quantitative Methods in the Social Sciences	4
SOC 0825	Quantitative Methods in the Social Sciences	4

- A grade point average of 2.0 in the minor is required, as well as a minimum grade of C in each course (except where noted).
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- To declare or rescind this minor, visit the Fox School of Business and Management.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

Supply Chain Management BBA

Overview

Supply Chain Management (SCM) is both an art and a science; SCM is a discipline focused on planning and forecasting, purchasing, product assembly, moving, storage, distribution, sales and customer service—in short, all of the activities that take place to get the right products and services into the right hands, in the right quantity, at the right time, and at the right price.

Supply chain management professionals are involved in every facet of the business process and strive to achieve a sustainable competitive advantage by building and delivering products better, faster and at a better value. To achieve success, SCM professionals must work across disciplines, interacting with nearly every department in an organization.

Offered by the Department of Statistics, Operations and Data Science, the **Bachelor of Business Administration in Supply Chain Management** provides students with basic knowledge of supply chain management, such as distribution strategies, planning and procurement, while also working on their communication, negotiation and leadership skills.

The major is complemented by seminars and career fairs to share industry best practices from the leaders in the market; these experiences introduce and acquaint students with the variety of jobs and responsibilities in SCM and help students identify areas of interest for their careers.

The SCM major provides opportunities for students to learn about supply chain management in an integrated business framework from distinguished faculty and regional industry experts in the area of supply chain management. The program prepares students to operate and lead major aspects of the supply system in established and start-up firms.

The curriculum focuses on providing knowledge on topics of practical skills and competencies: Supply Chain Principles, Transportation and Logistics Management, Procurement, Warehousing, and Inventory Management. Courses balance theory and practice in supply chain management to bridge the gap between academic and business practices and devise innovative research and teaching methods.

A key feature of this major is that it provides students with individualized career and academic advising. The SCM faculty work with the Center for Student Professional Development (CSPD) to help students stay connected with the regional industry associations, leaders, alumni and corporate partners to prepare them for their future challenges upon entering the work force.

The SCM major requires a high level of quantitative, critical thinking and problem-solving skills; students with an overall GPA of 2.75 or more are recommended to enroll in the major. Prospective students are invited to discuss options with Program Director Misty Blessley (misty.blessley@temple.edu), PhD.

Student Professional Organization (SPO)

Temple University Supply Chain Association (TU-SCA) is a Supply Chain Management SPO that connects students with industry professionals and standards. For more information, contact Misty Blessley (misty.blessley@temple.edu), PhD.

Minor

The Supply Chain Management minor is ideal for students innovative enough to think creatively, yet meticulous enough to forecast the bigger picture. Students completing the SCM minor pursue careers which direct the efficient flow of goods and services within and among organizations—from suppliers and manufacturers to retailers and consumers.

The SCM minor's course sequence is a strong complement to several Fox School majors such as Accounting, Finance, International Business, Management Information Systems, Marketing, and Healthcare Management.

The SCM minor provides students with basic knowledge of supply chain management, such as distribution strategies, planning and procurement, while also working on their communication, negotiation and leadership abilities. Courses balance theory and practice in supply chain management to bridge the gap between academic and business practices and devise innovative research and teaching methods. The minor prepares students to operate and lead major aspects of the supply system in established and start-up firms.

The requirements (p. 930) must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor.

Campus Locations: Main and Online

Program Code: BU-SCM-BBA

Contact Information

Edo Airoidi, PhD, Statistics, Operations and Data Science Department Chair
1810 Liacouras Walk, Room 339
215-204-4275
airoidi@temple.edu

Learn more about the Bachelor of Business Administration in Supply Chain Management.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 795) for the Bachelor of Business Administration, including the requirements of the major listed below. Supply Chain Management students must attain an overall GPA of 2.0 and a 2.0 GPA in the major to graduate.

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of the Supply Chain Management Major

Code	Title	Credit Hours
SCM 3507	Data Management and Analytics for Business Strategies	3
SCM 3515	Principles of Supply Chain Management	3
SCM 3516	Transportation and Logistics Management	3
SCM 3517	Inventory and Warehouse Management	3
SCM 3596	Sourcing and Procurement ¹	3
Select one of the following:		3
SCM 3505	Lean Six Sigma in Supply Chain Management	
SCM 3506	Project Management	
Total Credit Hours		18

1

This is the major capstone and all prerequisites must be met.

Suggested Free Elective Credits to Complement the Major

Code	Title	Credit Hours
SCM 3580	Special Topics in Supply Chain Management	3
SCM 3581	SCM Internship/Co-Operative Experience	3
SCM 3582	SCM Independent Study	3

Students are also encouraged to pursue minors that pair well with a Supply Chain major (Business Analytics, Finance, Marketing, International Business). Students are encouraged to speak with an advisor in choosing electives or minors that best match their areas of interest.

Suggested Academic Plan**Bachelor of Business Administration in Supply Chain Management****Suggested Plan for New Students Starting in the 2023-2024 Academic Year**

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1		Credit Hours
Fall		
STAT 1001	Quantitative Methods for Business I	3
ECON 1101	Macroeconomic Principles	3
HRM 1101	Leadership and Organizational Management	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
Credit Hours		16
Spring		
STAT 1102	Quantitative Methods for Business II	4
ECON 1102	Microeconomic Principles	3
BA 1103	Legal and Ethical Reasoning in Business	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
ACCT 2103	Financial and Managerial Accounting for Decision Making	4
STAT 2103	Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)	4
MIS 2101	Digital Systems	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Credit Hours		17
Spring		
MKTG 2101	Marketing Management	3
BA 2101	Professional Development Strategies	1
BA 2196	Business Communications	3
Select one of the following: ¹		3
BA 2501	Turning Numbers into Knowledge: Visualizing Data	
BA 2502	Business Analytics: Modern Data Science Techniques	
RMI 2101	Introduction to Risk Management	3
GenEd Breadth Course		3
Credit Hours		16

Year 3		
Fall		
FIN 3101	Financial Management	3
MSOM 3101	Operations Management	3
SCM 3515	Principles of Supply Chain Management	3
Business Elective ²		3
Free Elective ³		3
Credit Hours		15
Spring		
SCM 3507	Data Management and Analytics for Business Strategies	3
SCM 3516	Transportation and Logistics Management	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Free Elective ³		3
Credit Hours		15
Year 4		
Fall		
SCM 3517	Inventory and Warehouse Management ⁴	3
Select one of the following:		3
SCM 3505	Lean Six Sigma in Supply Chain Management	
SCM 3506	Project Management	
Business Elective ²		3
GenEd Breadth Course		3
Free Elective ³		3
Credit Hours		15
Spring		
BA 4102	Strategic Management	3
SCM 3596	Sourcing and Procurement ⁴	3
Business Elective ²		3
Free Elective ³		3
Free Elective ³		2
Credit Hours		14
Total Credit Hours		124

1
Please check with your departmental advisor on which course is most appropriate for the major.

2
2000-3999 electives can be selected from: ACCT, AS, BA, ECON, FIN, HRM, IB, LGLS, MIS, MKTG, RE, RMI, STAT, SCM, SGM. Please see your advisor for elective suggestions that match your career objectives.

3
See Requirements section for list of suggested free electives to complement the major.

4
This is the major capstone and all prerequisites must be met.

Supply Chain Management Minor

Overview

Offered by Department of Statistics, Operations and Data Science, the **Minor in Supply Chain Management (SCM)** is open to Fox students only and is ideal for students innovative enough to think creatively, yet meticulous enough to forecast the bigger picture.

Students completing the SCM minor pursue careers which direct the efficient flow of goods and services within and among organizations—from suppliers and manufacturers to retailers and consumers.

The SCM minor's course sequence is a strong complement to all business majors, especially Accounting, Finance, International Business, Management Information Systems, Marketing, and Healthcare Management.

The SCM minor provides students with basic knowledge of supply chain management, such as distribution strategies, planning and procurement, while also working on students' communication, negotiation and leadership abilities.

SCM courses balance theory and practice in supply chain management to bridge the gap between academic and business practices and devise innovative research and teaching methods. The minor prepares students to operate and lead major aspects of the supply system in established and start-up firms.

Student Professional Organization (SPO)

Temple University Supply Chain Association (TU-SCA) is a Supply Chain Management SPO that connects students with industry professionals and standards. For more information, contact Misty Blessley (misty.blessley@temple.edu), PhD.

Campus: Main and Online

Contact Information

All interested students must meet with Misty Blessley, PhD (misty.blessley@temple.edu) to declare or rescind this minor.

Edo Airoidi, PhD, Statistics, Operations and Data Science Department Chair
1810 Liacouras Walk, Room 339
215-204-4275
airoidi@temple.edu

Requirements

- Open to business students.
- Integrates SCM topics and themes to prepare students for new and emerging jobs related to SCM, Fulfillment, Planning, Storage and Distribution, and Customer Service.
- Quantitative, critical thinking and problem-solving skills required for success in this minor; a cumulative GPA of 2.75 is recommended.
- **Four courses required** (three must be taken at Temple University):

Code	Title	Credit Hours
SCM 3515	Principles of Supply Chain Management	3
Select one of the following:		3
SCM 3516	Transportation and Logistics Management	
SCM 3517	Inventory and Warehouse Management	
SCM 3596	Sourcing and Procurement ¹	
Select two of the following:		6
SCM 3505	Lean Six Sigma in Supply Chain Management	
SCM 3506	Project Management	
SCM 3507	Data Management and Analytics for Business Strategies	
SCM 3516	Transportation and Logistics Management	
SCM 3517	Inventory and Warehouse Management	
SCM 3596	Sourcing and Procurement ¹	
Total Credit Hours		12

1

Students need to complete SCM 3515 and SCM 3516 (C or better grade in each) to be eligible to register for this course.

- Courses taken for this minor cannot be double-counted toward the major or another minor.
- A cumulative grade point average of 2.0 in courses in the minor is required as well as a minimum grade of C- in each course unless otherwise specified.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.

Interested students should discuss with their advisor how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

College of Liberal Arts

Overview

Given the current pace of social and technological change in the world community, a firm grounding in the liberal arts is essential to one's prospects for success. Although recent trends in higher education highlight the proliferation of job-specific training, a well-rounded, liberal arts education is more relevant now than ever before. While highly specialized training and knowledge may prove helpful in landing one's first job, those who will build successful careers and lead us into the future will have a much broader, more transferable set of skills. Graduates of the College of Liberal Arts will be able to think critically while analyzing complex issues and developing creative solutions to problems that we have not yet imagined. The written and oral communication skills honed by a liberal arts program will allow our graduates to communicate their ideas concisely and effectively to both specialized and lay audiences. Working across disciplines to evaluate ideas and arguments throughout their college career, liberal arts graduates develop the technological and cultural literacy necessary to thrive in the global marketplace. In short, our leaders of the future will possess the skills and attributes that have long defined a liberal arts education.

In the College of Liberal Arts, our students learn *how* to learn by exploring a rich diversity of rigorous coursework in the humanities and social sciences, including anthropology, English, history, philosophy, sociology, religion, psychology and foreign languages. Many of our courses are taught in intimate, seminar-style settings that encourage students to engage our world-class faculty in meaningful discourse that expands world views and enhances analytical reasoning skills. Equally important is the flexibility afforded students within the liberal arts curriculum, which provides them with myriad opportunities to supplement their classroom education in meaningful ways by participating in study abroad programs, engaging in directed research, pursuing original scholarship through independent studies, and gaining valuable professional experience in internship programs. Taken together, these liberal arts experiences not only prepare students for rewarding careers, but for fulfilling lives as informed and engaged citizens of the world.

Accreditation

Departments and programs at Temple University are accredited by the Middle States Commission on Higher Education (<https://www.msche.org/>). Individual departments and programs may carry additional accreditation by the official accreditation body for that discipline.

Special Programs

Accelerated +1 BA/MA Programs

High achieving students in any undergraduate program in the College of Liberal Arts have the opportunity to apply to begin a master's degree program during their junior year. Students admitted into these programs typically take up to 12 graduate credits that count towards both the BA and the MA degrees, leaving only one year of additional coursework beyond the baccalaureate degree to complete the master's degree. Students accepted into these programs are not required to take the Graduate Record Examination, the standardized test most students take to gain entry to graduate school.

The following programs are available in the College of Liberal Arts. Most master's degrees are open to students who are continuing in the same discipline.

- BA in Criminal Justice / MA in Criminal Justice
- BA in Economics / MA in Economics
- BA in English / MA in English
- BA in Environmental Studies / MA in Geography and Urban Studies
- BA in Gender, Sexuality and Women's Studies / MA in Sociology
- BA in Geography and Urban Studies / MA in Geography and Urban Studies
- BS in Neuroscience: Systems, Behavior, and Plasticity / MS in Neuroscience: Systems, Behavior, and Plasticity
- BA in Philosophy / MA in Philosophy
- BA in Political Science / MA in Political Science
- BA in Psychology / MS in Psychological Research
- BA in Sociology / MA in Sociology
- BA in Spanish / MA in Spanish

Two master's degree programs will consider students from any undergraduate degree program:

- BA or BS / MPP in Public Policy
- BA or BS / PSM in Geographic Information Systems

Learn more about Accelerated +1 programs.

First-Year Writing Program

<https://liberalarts.temple.edu/academics/departments-and-programs/english/undergraduate/first-year-writing-program>
1046 Mazur Hall

Rachael Groner, Director
215-204-1820
rgroner@temple.edu

Cate Almon, Associate Director
215-204-2212
calmon@temple.edu

First-Year Writing includes two 4-credit courses, ENG 0701 Introduction to Academic Discourse and ENG 0802 Analytical Reading and Writing. First-Year Writing also includes ENG 0711 and ENG 0812, which are alternative versions of ENG 0701 and ENG 0802 (respectively) designated especially for English as a Second Language (ESL) students. The ESL sections of all of our courses are equivalent in weight and credit to their direct counterparts.

Entering students are either placed into the 0701-0802 sequence, placed into 0802 only, or exempted from these courses entirely. Placement is determined by Institutional Research and Assessment and is based on the SAT/ACT score, AP English score, and/or a placement assessment.

If a student places into ENG 0701/ENG 0711, he or she may not enroll in ENG 0802/ENG 0812 until the first course is completed successfully, with a grade of C- or better. ENG 0802/ENG 0812 may not be taken for credit by students who have successfully completed ENG 0902 Honors Writing About Literature.

ENG 0802/ENG 0812 (or ENG 0902 for University Honors students) is a required course in the General Education program. Students are strongly advised to successfully complete this course before taking the Intellectual Heritage sequence IH 0851 and IH 0852, any upper-level course in the College of Liberal Arts (all courses numbered 2000-4999), and all Writing Intensive courses (course numbers ending in -96, -97, and -98).

Students are advised to take the required three-course sequence of *Analytical Reading and Writing*, *Intellectual Heritage I: The Good Life*, and *Intellectual Heritage II: The Common Good* (IH 0851 and IH 0852, or IH 0951 and IH 0952 for Honors students) in order and in successive semesters.

Intellectual Heritage Program

<https://liberalarts.temple.edu/departments-and-programs/intellectual-heritage/>
214 Mazur Hall
215-204-3177

Heath F. Davis, Director
hfd@temple.edu

Douglas Greenfield, Senior Associate Director
dmg33@temple.edu

Sheryl Sawin, Associate Director
sheryl.sawin@temple.edu

The Intellectual Heritage (IH) Program offers two complementary courses, IH 0851 Intellectual Heritage I: The Good Life and IH 0852 Intellectual Heritage II: The Common Good, which are foundation courses in Temple University's General Education curriculum. The IH curriculum introduces students to intellectually and artistically influential works, both ancient and modern, from cultures around the world. In small seminars, students read and discuss books that have shaped the way people think and act, working together to interpret their historical significance, their relation to one another, and their relevance today.

Students are required to complete both courses to fulfill their General Education requirements. Transfer students should see their academic advisor for more information regarding their IH placement. Satisfactory completion of ENG 0802 is strongly advised prior to taking the Intellectual Heritage sequence. Honors versions of the Intellectual Heritage sequence are offered as IH 0951 Honors Intellectual Heritage I: The Good Life and IH 0952 Honors Intellectual Heritage II: The Common Good.

Law Scholars Program

Paul Crowe, Director
7th floor Mazur Hall
215-204-8591
pcrowe@temple.edu

The Temple Law Scholars Program provides an opportunity for outstanding students to gain provisional admission to the Temple University Beasley School of Law at the same time they are accepted into the College of Liberal Arts. As Temple Law Scholars, students spend their undergraduate years in Temple's Honors Program, after which they enroll in the Beasley School of Law, leading to the JD degree. Scholars will take advantage of special opportunities, including internships, mock trial competitions, attendance at special events and lectures, and sitting in on law school classes.

The Temple Law Scholars Program is highly selective. To be considered, applicants must be accepted into the Honors Program. High class standing, high SAT scores, and superior letters of recommendation are expected, as is an articulate, thoughtful essay. In addition, other criteria used in the

decision-making process include above-average maturity, community service, leadership, and a genuine commitment to the legal profession and service to others.

Application to the Temple Law Scholars Program takes place at the same time students apply to the College of Liberal Arts. The application materials include the Temple undergraduate admission application, the Temple Law Scholars application, a letter of recommendation, and an essay on a topic assigned by the Temple Law Scholars admissions committee. An interview may also be required. The deadline for receipt of all application materials is April 1. Applications received before March 1 will receive priority treatment.

Majors' Associations

Most of the departments in the College of Liberal Arts support student interest groups, clubs, and majors' associations. These organizations provide opportunities for students from the individual disciplines of the liberal arts to meet one another and to extend the learning experience beyond the classroom. Some of these associations invite their alumni back to campus to connect with current undergraduates and talk with them about the wide range of career options open to liberal arts graduates.

Participation in the majors' associations has significant benefits. Active involvement cultivates skills in leadership, team work, cultural sensitivity, and public speaking, all of which are highly valued in the workplace. Students are strongly encouraged to participate in these organizations. For more information, see your department's web site or faculty advisor.

Joyce K. Salzberg Center for Professional Development

<https://liberalarts.temple.edu/students/professional-development/>
Gladfelter Hall, Room 120
215-204-7971

Anne Bayless
Sharyn R. and Eric S. Schlesinger Director of Student Professional Development
abayless@temple.edu

Carissa Forde, MPH
Associate Director
carissa.forde@temple.edu

Given the rapidly-changing nature of the world economy, a degree in the liberal arts has never been more valuable. Our professional development advisors teach students in the liberal arts how they can best leverage their skills to prepare for careers in a broad array of industries, including government, non-profit, corporate, education, etc. We are committed to enhancing students' professionalism and empowering students to present themselves successfully as candidates for internships and employment opportunities. We also work with students interested in preparing for graduate or professional school.

We provide an array of services to students in the College of Liberal Arts, including one-on-one appointments with a Professional Development Advisor to discuss internship, jobs, and/or graduate school. To schedule an appointment, call 215-204-7971. Advisors can help with:

- Drafting and editing résumés;
- Writing and revising cover letters;
- Practicing interview skills;
- Strategizing on internships and job opportunities search;
- Building a personal brand; and,
- Connecting a student's unique experience with potential employers.

In addition to working individually with students, our professional development advisors collaborate with faculty, administrators and prospective employers to coordinate and host a number of career-related workshops and events, including:

- Internship information sessions;
- Graduate School 101;
- Career fairs and employer visits in partnership with the university Career Center;
- Skill-building training workshops; and,
- Alumni networking events.

Affiliated Academic Courses

CLA 1002 Professional Development for Liberal Arts Majors (1 s.h.): Designed to guide students as they explore the transferability of the skills they have acquired in the liberal arts with an emphasis on the value of those skills in the marketplace. Students will learn how to search effectively for internship and career opportunities, communicate professionally, develop an application-ready résumé and prepare for networking and professional interviews.

CLA 2685 Internship (1 to 12 s.h.): Provides students with the opportunity to complete an internship for upper-level elective credit in the College of Liberal Arts. Interested students should meet with a professional development advisor and complete an internship contract.

Study Abroad

Undergraduates majoring in any liberal arts discipline may pursue a large variety of study abroad options. Temple University has campuses in Rome, Italy, and Tokyo, Japan. We offer programs in London, England, Oviedo, Spain, and exchange programs with universities in England, Germany, and Puerto Rico. Summer programs are offered in a number of countries, such as France, Germany, Ghana, Great Britain, India, Italy, Japan, and South Africa. In addition, CLA undergraduates can choose to study in non-Temple programs around the world.

Students are urged to see an advisor about one year prior to their anticipated study abroad semester to determine their academic plan.

See the Office of Education Abroad and Overseas Campuses, 200 Tuttleman Learning Center or <https://studyabroad.temple.edu> for more information about study abroad options.

Honors Societies and Awards for Achievement

Awards

During the graduation season in May, the Baccalaureate Awards Ceremony is held to honor seniors who have demonstrated outstanding academic performance and/or exceptional service to the college. These prizes are awarded competitively and are a testament to the excellence of the College of Liberal Arts undergraduates. Learn more about awards offered for particular majors. Additional information may be obtained via department web sites, or ask a faculty advisor about the awards nomination process.

Departmental Honors Programs

Several departments in the College of Liberal Arts offer an Honors track for their majors. Students should consult the *Bulletin* information listed under the individual majors for eligibility, specific program requirements, and contacts.

University Honors

The College of Liberal Arts participates in the university-wide honors program. Go to the University Honors Program (p. 58) section in this *Bulletin* for more information.

Phi Beta Kappa

See the Honor Societies (p. 61) section of the *Undergraduate Bulletin*.

College of Liberal Arts - Information Technology (CLA IT)

The College of Liberal Arts offers cutting-edge technology and resources for students, faculty and staff. Our IT staff manages over 110 technology-enabled smart classrooms and meeting spaces, more than 575 computer stations in laboratory, kiosk, and classroom settings, in addition to a wireless network with 100% coverage in all CLA spaces.

<https://liberalarts.temple.edu/about/information-technology/>
Mazur Hall, Room 21
215-204-3213

Marc Getty, Senior Director of Information Technology
215-962-5603
marc.getty@temple.edu

Rodney Holloway, Evening Manager, Computer Labs
R.T.Holloway@temple.edu

Crystal Schulz, Daytime Manager, Computer Labs
crystal.schulz@temple.edu

Computer Labs and Computer Classrooms

CLA IT maintains 11 computer classrooms ranging in size from 14 to 70 seats, plus a 100 seat public drop-in lab located in Mazur 21. For complete details, see <https://liberalarts.temple.edu/about/information-technology/computer-labs-classrooms>.

Hours of Operation

Fall/Spring Semesters and Study/Exam Days: All facilities are open 8:00 AM to 8:00 PM Monday through Thursday and until 5:30 PM on Friday.

Summer Sessions, Spring Break, and Winter Break: All facilities are open 8:15 AM to 5:15 PM weekdays.

Administration

Office of the Dean
12th Floor, Mazur Hall
1114 W. Polett Walk

Richard E. Deeg, PhD, Dean

Hiram Aldarondo, PhD, Senior Associate Dean for Academic Affairs
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215-204-6923

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gibson@temple.edu
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Center for Academic Advising
120 Gladfelter Hall
1115 Polett Walk
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claaac@temple.edu

Chris Wolfgang, EdD, Assistant Dean for Student Services
cwolfgan@temple.edu

Anar Khandvala, MEd, Director
anar@temple.edu

Contact Information

On the department or academic program pages within this *Bulletin*, students will find contact information for departmental representatives (department chairs, undergraduate advisors, etc.). Other faculty contact information is available using the Cherry and White directory or by visiting the College of Liberal Arts' departmental web sites.

Faculty members keep regular office hours each semester, which are posted on syllabi and in the department offices.

Undergraduate Programs

- Africology and African American Studies BA (p. 959)
- Africology and African American Studies Minor (p. 963)
- American Studies BA (p. 963)
- American Studies Minor (p. 967)
- Ancient Mediterranean Studies Minor (p. 969)
- Anthropology BA (p. 970)
- Anthropology Minor (p. 973)
- Arabic Certificate (p. 974)
- Arabic Minor (p. 975)
- Asian Business and Society Certificate (p. 975)
- Asian Studies BA (p. 976)
- Asian Studies Minor (p. 980)
- Biomedical Anthropology Minor (p. 981)
- Chinese BA (p. 982)
- Chinese Certificate (p. 985)
- Chinese Minor (p. 986)
- Classical Languages and Literature Minor (p. 987)
- Classics BA with Classical Civilizations Concentration (p. 988)
- Classics BA with Classical Languages and Literature Concentration (p. 992)

- Clinical and Health Psychology Minor (p. 996)
- Cognitive Neuroscience Minor (p. 996)
- Creative Writing Minor (p. 998)
- Criminal Justice BA (p. 999)
- Criminal Justice Minor (p. 1003)
- Cybersecurity and Human Behavior Certificate (p. 1004)
- Economics BA (p. 1005)
- Economics Minor (p. 1009)
- English BA (p. 1010)
- English Minor (p. 1014)
- Environmental Studies BA (p. 1014)
- Environmental Studies Minor (p. 1020)
- Ethics Certificate (p. 1020)
- French BA (p. 1021)
- French Certificate (p. 1024)
- French Minor (p. 1025)
- Gender, Sexuality and Women's Studies BA (p. 1026)
- Gender, Sexuality and Women's Studies Certificate (p. 1032)
- Gender, Sexuality and Women's Studies Minor (p. 1032)
- General Program AA (p. 1033)
- General Program BA (p. 1034)
- Geographic Information Systems Certificate (p. 1037)
- Geography and Urban Studies BA (p. 1038)
- Geography and Urban Studies Minor (p. 1043)
- German Certificate (p. 1043)
- German Language and Cultural Studies BA (p. 1044)
- German Language and Cultural Studies Minor (p. 1048)
- Global Studies BA (p. 1049)
- Global Studies Minor (p. 1056)
- Health Research Certificate (p. 1059)
- History BA (p. 1060)
- History Minor (p. 1064)
- Interdisciplinary German Studies BA (p. 1065)
- Interdisciplinary German Studies Minor (p. 1068)
- International Affairs BA (p. 1069)
- International Business Studies BS (p. 1076)
- Italian BA (p. 1079)
- Italian Certificate (p. 1083)
- Italian Minor (p. 1083)
- Italian Studies BA (p. 1084)
- Italian Studies Minor (p. 1087)
- Japanese BA (p. 1088)
- Japanese Certificate (p. 1092)
- Japanese Minor (p. 1092)
- Jewish Secular Studies Certificate (p. 1093)
- Jewish Studies BA (p. 1094)
- Jewish Studies Minor (p. 1097)
- Language and Cross-Cultural Communication Certificate (p. 1099)
- Latin American Studies BA (p. 1099)
- Latin American Studies Certificate (p. 1103)
- Latin American Studies Minor (p. 1103)
- Lesbian, Gay, Bisexual and Transgender Studies Minor (p. 1104)

- Liberal Studies BA (p. 1105)
- Management Career Certificate (p. 1110)
- Mathematical Economics BA (CLA) (p. 1112)
- Neuroscience Research Minor (p. 1116)
- Neuroscience: Systems, Behavior and Plasticity BS (p. 1117)
- Philosophy BA (p. 1121)
- Philosophy Minor (p. 1127)
- Political Economy Certificate (p. 1127)
- Political Science BA (p. 1129)
- Political Science Minor (p. 1135)
- Portuguese Minor (p. 1136)
- Professional Writing Certificate (p. 1136)
- Psychological Studies BA (p. 1137)
- Psychology BA (p. 1140)
- Psychology Minor (p. 1147)
- Public Policy Minor (p. 1148)
- Religion BA (p. 1150)
- Religion Minor (p. 1154)
- Social Science Research Certificate (p. 1154)
- Sociology BA (p. 1155)
- Sociology Minor (p. 1163)
- Sociology of Health Minor (p. 1163)
- Spanish and Latin American Studies for Business Certificate (p. 1164)
- Spanish and Latinx Studies for the Health and Human Services Professions Certificate (p. 1165)
- Spanish BA (p. 1166)
- Spanish Certificate (p. 1177)
- Spanish Minor (p. 1177)
- Sports and Society Certificate (p. 1178)
- Visual Anthropology Minor (p. 1179)

Academic Policies and Regulations

University policies (p. 1835) and regulations generally apply to all undergraduate students and provide a framework within which schools and colleges may specify further conditions or variations appropriate to students in their courses or programs.

Academic Residency Requirements

Upon transferring into the College of Liberal Arts, all students must complete at least 30 credits of coursework as a degree-seeking student, completing at least half of the courses required for any major, minor, or certificate program at Temple University.

In order to be considered for Latin honors (p. 1855) (*cum laude*, *magna cum laude*, and *summa cum laude*), a student must complete a minimum of 60 credits at Temple University and meet the GPA requirements as set out in the University policy.

Change of Program

Students who wish to complete a Change of Program (COP) into the College of Liberal Arts from other colleges and schools at Temple must have at least a 2.0 GPA in the intended major and overall. Students will not be permitted to COP as undeclared majors if they have completed, or are in the process of completing, 60 or more credits.

Course Levels

All College of Liberal Arts undergraduate courses are open to all students who have successfully completed appropriate course prerequisites and are divided into four categories:

- Preparatory courses numbered 0700-0799.
- General Education courses numbered 0800-0999.
- Lower-level courses numbered 1000-1999.
- Upper-level courses numbered 2000-4999.

Courses Taken at Other Institutions

Students must complete the "Petition to Take Courses Elsewhere" form in advance of registering at another institution. Students access the form by logging into the TUportal, selecting the Student Tools tab, and under the University Forms channel, select Permission to Take Courses Elsewhere. This form will be routed to the student's advising unit for approval. (Refer to Permission to Complete a Course at Another Institution after Matriculation (p. 1858).)

Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List (p. 1849) policy for specific GPA and credit-hour requirements.

Declaration of Major

Students in the College of Liberal Arts must declare their major before completing 60 credits, including credits transferred from other institutions. Undeclared students with 45 or more credits must meet with an advisor in the Center for Academic Advising and Professional Development before registering.

Foreign Language Course Placement Policy

Students who have studied a foreign language in the four years prior to admission to Temple must take a placement exam if they wish to continue in that language. If a period of more than four years has elapsed between a student's graduation from high school and admission to college, s/he is eligible to enroll in the first level of the language s/he studied in high school.

If a student enrolls in a course level lower than the placement score indicates, s/he will not receive graduation credit for the course or will be dropped from the course by the College of Liberal Arts. If a student wishes to receive credit for a course lower than that indicated by the placement exam, s/he must receive permission from the department chair or program coordinator for that language.

Heritage speakers (also known as native speakers) of a foreign language taught by Temple University must meet with the language program coordinator or department chairperson to assess their readiness and course placement in the language skills sequence. Students will not receive credit for courses lower than their placement indicates. A student with pre-existing language skills (family background, travel or study in a foreign country, participation in non-credit summer language institutes, etc.) who then enrolls in lower division courses in that same language will not receive graduation credit for the course and may be dropped from the course by the College of Liberal Arts.

Foreign Language Regression in Coursework Policy

- Students who have completed 4000 level coursework may enroll in courses at the 3000 level, but not at the 1000 or 2000 level.
- Students who have completed the 3000 level may enroll in courses at the 2000 level, but not at the 1000 level.
- Students who have completed a 2000 level course may not enroll at the 1000 level.
- General Education courses at the 0800 and 0900 levels are not language skills courses and are open to all students.

If a student seeks permission for an exception to the Regression policy, s/he should discuss the request with the program coordinator for the language.

Graduation Application Process

Currently enrolled students in a degree-program, such as a Certificate, Bachelor, Master, Doctoral or professional degree, should apply to graduate when they become degree-eligible. Students should regularly meet with their academic advisors to ensure academic program requirements are being met and that their intended graduation date is up-to-date. Learn more about the graduation application process.

Grievances, Academic

Title IX of the Educational Amendments Act of 1972 requires that each college or university establish due process for the resolution of academic grievances. This is to protect students from prejudiced and capricious academic evaluation. All undergraduate students enrolled in the College of Liberal Arts have a right to appeal grades which they deem unfair and unreasonable. The student must provide evidence indicating a mistake, fraud, or bad faith on the part of an instructor. Students will not be allowed to grieve a grade unless it is accompanied by such evidence.

Students should first contact their instructor to discuss the grade(s) in question, and if the matter cannot be resolved at that level, students are then urged to talk with the chairperson for the department in which this course was given. Chairperson information is available in this publication. A student must initiate the first stage of an academic grievance by the dates in the College of Liberal Arts Grievance Procedure.

For more information, students should contact the college's Undergraduate Grievance Officer, Amanda Gibson, at gibson@temple.edu or 215-204-8504.

Grievances, Non-Academic

Students may have grievances that are not academic in nature. Such grievances should be directed to other offices on campus, which may include the Office of the Dean of Students, the Equal Opportunity Compliance office, Office of University Housing and Residential Life, and other units on campus.

Students unsure as to where to proceed with a non-academic grievance should consult either with the Office of the Dean of Students or the college's Center for Academic Advising and Professional Development.

Internship and Individual Studies

BA and BS degree students in the College of Liberal Arts are permitted to take up to 12 credits of internship and up to 9 credits of Independent Study/Directed Readings/Directed Research.

Placement Assessments

All incoming freshmen are placed into English, Mathematics, and foreign language classes according to their SAT/ACT score and/or diagnostic tests.

Transfer students who have not completed the equivalent of ENG 0802 or a college-level math will receive placement in these subjects once they have completed diagnostic assessments.

Students placed into ENG 0701/ENG 0711 must register each semester for that course until the requirement is completed. Only upon successful completion of ENG 0701/ENG 0711 can such students enroll in ENG 0802/ENG 0812. Students assigned to courses designed to remedy deficiencies in mathematics are required to complete those courses (MATH 0701 or MATH 0702) before enrolling in the mathematics component of the University General Education Program (GenEd (p. 83)). Incoming students must also take a foreign language placement examination if they plan to continue a language previously studied or if they wish to place out of the foreign language requirement.

Plagiarism and Academic Cheating

Plagiarism and academic cheating are unacceptable in College of Liberal Arts courses. The development of independent thought and a respect for the thoughts of others is essential to intellectual growth. The penalty for plagiarism or cheating as a first offense is normally an F in the course in which the offense is committed. In such cases, the instructor will write a report to the dean. The CLA Grievance Committee will adjudicate appeals made by students and serious cases, or repeat offenses, referred to the committee by an instructor or the dean. The dean may recommend suspension or expulsion from the university when warranted. Instructors may also refer the offense to the University Disciplinary Committee (UDC) for adjudication.

The prohibition against plagiarism and cheating is intended to foster this independence and respect. For more information, see Academic Honesty (p. 42) under Student Responsibilities.

Standing - Academic Warning, Probation, Dismissal, and Reinstatement

To maintain academic good standing in the university, a student enrolled in an associate or baccalaureate degree-seeking program must achieve both a semester grade point average and a cumulative grade point average of at least a 2.0. See the University policy on Academic Standing for details on academic warning, academic probation, academic dismissal and reinstatement. There is a related policy on Academic Forgiveness.

Withdrawal from Classes

During the first two weeks of the fall or spring semester or summer sessions, students may drop one or more courses with no record of the course(s) appearing on the transcript. After the drop period but prior to the deadline for the applicable term set forth in the university's academic calendar, students may withdraw with the assistance of an academic advisor or by using the withdrawal function in Self-Service Banner (SSB). Instructors' signatures are not required to withdraw. The course will be recorded on the transcript with the notation of "W," indicating that the student withdrew. After the withdrawal deadline, students may not withdraw from courses.

For the complete policy, please refer to the Academic Policies (p. 1850) section of this *Bulletin*.

Requirements for the Baccalaureate Degree

Credit Hour Requirements

Bachelor of Arts (BA) and Bachelor of Science (BS) degrees in the College of Liberal Arts require a minimum of 123 credits, distributed according to the university and college policy outlined below, with at least a 2.0 cumulative grade point average (GPA). A minimum 2.0 GPA must also be maintained in College of Liberal Arts and College of Science and Technology (hereafter "CLA/CST") coursework and in the major.

To earn a CLA baccalaureate degree, a student must complete a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). Of that, 6 credits must be outside the student's major division (e.g. Social Sciences or Humanities).

Students are permitted to take up to 9 credits of independent work such as Independent Study, Directed Readings, and Research courses and up to 12 credits of internship credits. Any affiliated courses with a regular meeting time do not count towards this limit but do count towards the bachelor's degree.

Degree Eligibility

The College of Liberal Arts does not award baccalaureate degrees to students who have already completed an accredited first Bachelor's, Master's, or PhD degree, regardless of when the degree was completed.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

University Requirements

All students entering an undergraduate degree program are required to complete the university General Education (GenEd (p. 83)) curriculum.

All students must take a minimum of two writing-intensive courses at Temple University as designated by their major requirements. The specific writing-intensive courses required for each major are listed on the individual program pages and are identified by "WI."

Foreign Language/Global Studies Requirement for Bachelor of Arts Students

NOTE: This is *not* required for students majoring in the Bachelor of Science in Neuroscience: Systems, Behavior, and Plasticity program.

1. All BA students complete the second level of a foreign language;
2. All BA students must complete at least one course from the GenEd Global/World Society category; and
3. All BA students must complete one of the following options:
 - Third level of a foreign language;
 - Demonstrated proficiency in a foreign language;
 - A second General Education Global/World Society course;
 - Study Abroad at an approved program; or
 - Take one CLA Global Studies course from the following list:

Code	Title	Credit Hours
ANTH 2361	Peoples of Latin America	3
ANTH 2362	Peoples and Cultures of the Caribbean	3
ANTH 2364	People and Cultures of the Middle East and North Africa	3
ANTH 2374	The Anthropology of Modern China	3
ASST 2021	Japanese Literature in Film	3
ASST 2501	Introduction to East Asia: China	3
ASST 2502	Introduction to East Asia: Japan	3
ASST 2503	Introduction to Southeast Asia: Insular	3
ASST 2504	Introduction to Southeast Asia: Mainland	3
CHI 2011	Pre-Modern Chinese Literature	3
ENG 2601	Introduction to Postcolonial Literatures	3
ENG 2712	International Film	3
ENG 3112	Masterpieces of European Drama	3
GUS 2032	Urban Systems in a Global Economy	3
GUS 2073	African Development	3
GUS 3073	Geography of Travel and Tourism	3
GUS 3058	Environment and Development	3
GRC 2002	Gender in Classical Antiquity	3
GRC 2101	The Greeks	3
GRC 2102	The Romans	3
HIST 1702	World History Modern	3
HIST 2304	20th Century Europe: A Continent in Crisis	3
HIST 2702	Imperialism, Race, and Empire	3
ITAL 2221	Italian Culture through Film	3
ITAL 3201	Italian Culture and Civilization	3
ITAL 3240	Topics in Italian Cinema and Literature (in English)	3
JPNS 2012	Modern and Contemporary Japanese Literature in Translation	3
JPNS 2021	Japanese Literature in Film	3
LAS 1001	Perspectives on Latin America	3
POLS 1201	Foreign Governments and Politics	3
POLS 1301	International Politics	3

REL 2002	Religion and Human Sexuality	3
REL 2606	Introduction to Islam	3
REL 3001	Earth Ethics	3
RUS 1201	Russian Culture	3
SOC 3219	Understanding Globalization	3
SOC 3221	Global Development	3
SOC 3511	Environmental Sociology: The End of the World as We Know It?	3

Major

Students must also complete the requirements of a major. The minimum acceptable grade in a course taken to fulfill major requirements is a "C-," though students need a 2.0 GPA overall in major coursework in order to graduate. At least half of the coursework required for a major must be taken at Temple University.

Students are permitted to double-major (both inside CLA and across schools and colleges) but Temple University does not permit transcription of a third major.

Students are encouraged to declare their major as soon as possible, and university policy requires that a major must be declared by the time a student has earned 60 credits.

Major requirements are determined by the effective semester of their declaration. The Center for Academic Advising and Professional Development is responsible for making this assignment and informs the student via e-mail.

Students who wish to declare or change their major or minor should consult the Center for Academic Advising and Professional Development.

BA and BS majors are offered in the divisions of the Humanities and the Social Sciences.

- **Humanities:** Chinese, Classics, English (includes the Creative Writing concentration), French, German Language and Cultural Studies, Greek and Roman Classics, Interdisciplinary German Studies, Italian, Italian Studies, Japanese (only available at our Japan campus), Philosophy, Religion, and Spanish (includes the options in Language, Literature and Linguistics; Professional Studies; and Education).
- **Social Sciences:** Africology and African American Studies, American Studies, Anthropology (includes tracks in Human Biology and Visual Anthropology), Asian Studies, Criminal Justice, Economics, Environmental Studies, Gender, Sexuality and Women's Studies, Geography and Urban Studies, Global Studies, History, Jewish Studies, Latin American Studies, Mathematical Economics, Neuroscience: Systems, Behavior and Plasticity (BS), Political Science, Psychology, and Sociology (includes Sociology of Health option).

Upper-level Distribution Requirements

All BA and BS students in the College of Liberal Arts must complete upper-level distribution requirements by taking two upper-level (numbered 2000-4999) CLA courses outside the curriculum division of the major (or upper-level College of Science and Technology courses) as stated above. Students who have double majors in two different divisions automatically satisfy the distribution requirement.

Note: The Humanities Division has been expanded to include upper-level courses in Art History from the Tyler School of Art and Architecture.

Professional Development Requirement

All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for any CLA major. Other courses that may be used to fulfill this requirement are CJ 1002 Professional Development in Criminal Justice, ENG 1801 Career Seminar, HIST 1012 Professional Development for History Majors, NSCI 1002 Careers in Neuroscience, POLS 1002 Careers in Political Science, PSY 1002 Careers in Psychology and SOC 1002 Professional Development for Sociology Majors.

Note: Because there is significant overlap in course content, students will receive credit for only one of these courses.

Military Science Courses

Undergraduate students in the College of Liberal Arts whose degree programs allow for free electives may apply up to 12 credits of military science courses at the 3000 and 4000 levels in Aerospace Studies (Air Force ROTC), Military Science (Army ROTC), and Naval Science (Navy ROTC).

Courses Inapplicable to Graduation

Students will not receive credits for lower-level courses after successful completion of higher-level courses in sequenced courses of study. This only applies to the First Year Writing sequence in English (0701-0802), and all courses in Mathematics and Foreign Languages. For example, after passing a SPAN 1002 Basic II course, a student will not receive credits for SPAN 1001 Basic I.

Credit/No Credit

During the junior and senior years, any College of Liberal Arts student who is in good standing and taking a minimum of 12 semester hours may elect to take one course each semester on a Credit/No Credit basis, except for courses that count toward major, minor, GenEd, or distributional requirements. Application must be made at the Center for Academic Advising and Professional Development during the first two weeks of a fall or spring semester course and during the first three days of a first or second summer session course.

Special Major and Minor Requirements

Interdisciplinary Major

Rather than major in an existing department or program, students may apply for a major in Interdisciplinary Studies. The proposed major should consist of coursework totaling at least 36 semester hours and be justified in terms of some thematic unit of cohesive rationale. The program must not closely resemble any major currently available in the College of Liberal Arts.

The proposed major program may include courses outside of the College of Liberal Arts, but at least 24 semester hours must be in upper-level liberal arts or science courses. The student's proposal must be sponsored by two faculty members from different departments, at least one of whom must be in the College of Liberal Arts. Approval for the program must be obtained from the College of Liberal Arts' Center for Academic Advising and Professional Development prior to the initiation of the last 60 semester hours of the degree.

Please contact Chris Wolfgang at chris.wolfgang@temple.edu for more information.

Honors Interdisciplinary Major

Students in the University Honors Program may apply for a College of Liberal Arts Honors Interdisciplinary Major. They must complete the degree requirements of the BA in the College of Liberal Arts and the requirements for the Interdisciplinary Major described above as well as the requirements for the University Honors Program. Approval for this program must also be obtained from the University Honors Committee prior to the initiation of the last 60 semester hours of the degree.

In addition, the proposed major program should include submission of an acceptable honors thesis to the University Honors Oversight Committee.

Minor

Students may also choose to complete the requirements for a minor. The minimum acceptable grade in a course taken to fulfill minor requirements is "C-," though students need a 2.0 GPA in the minor in order to have it awarded at graduation. At least half of the courses taken by a student to fulfill the minor must be taken at Temple. Students may declare a minor at the Center for Academic Advising and Professional Development. The College of Liberal Arts offers minors in:

- Africology and African American Studies
- American Studies
- Ancient Mediterranean Studies
- Anthropology
- Arabic
- Asian Studies
- Biomedical Anthropology
- Chinese
- Classical Languages and Literature
- Clinical and Health Psychology
- Cognitive Neuroscience
- Creative Writing
- Criminal Justice
- Economics
- English
- Environmental Studies
- French
- Gender, Sexuality and Women's Studies
- Geography and Urban Studies
- German Language and Cultural Studies
- Global Studies
- History
- Interdisciplinary German Studies

- Italian
- Italian Studies
- Japanese
- Jewish Studies
- Latin American Studies
- Lesbian, Gay, Bisexual and Transgender Studies (LGBT)
- Neuroscience Research
- Philosophy
- Political Science
- Portuguese
- Psychology
- Public Policy
- Religion
- Sociology
- Sociology of Health
- Spanish
- Visual Anthropology

Certificates of Specialization

Students may choose to complete the requirements for an additional certificate of specialization. At least half of the courses taken by a student to fulfill a certificate of specialization must be taken at Temple. Students may declare a certificate in the Center for Academic Advising and Professional Development. Certificates of specialization are available in the following programs:

- Asian Business and Society
- Cybersecurity and Human Behavior
- Ethics
- Foreign Languages: Arabic, Chinese, French, German, Italian, Japanese, Spanish
- Gender, Sexuality and Women's Studies
- Geographic Information Systems
- Health Research
- Jewish Secular Studies
- Language and Cross-Cultural Communication
- Latin American Studies
- Management Career Certificate
- Political Economy
- Professional Writing
- Social Science Research
- Spanish and Latin American Studies for Business
- Spanish and Latinx Studies for the Health and Human Services Professions
- Sports and Society

Academic Advising

Center for Academic Advising
120 Gladfelter Hall
1114 Polett Walk
215-204-7971
claaac@temple.edu

<https://liberalarts.temple.edu/students/academic-advising/>

Chris Wolfgang, EdD, Assistant Dean for Student Services
cwolfgan@temple.edu

Anar Khandvala, MEd, Director
anar@temple.edu

The Center for Academic Advising in the College of Liberal Arts helps students plan curricula, choose majors, make vocational and post-graduate plans, and resolve a variety of academic matters. Services are provided by a staff of full-time professional advisors. The Center informs students about the results of placement testing and assignment into corresponding courses. Monitoring academic progress and graduation clearance is also the responsibility of the Advising Center. Through individual appointments and group workshops, the Center offers the following services:

- New Student Orientation.
- Advising and registration assistance for all students in the College of Liberal Arts. Students enrolled in the University Honors Program also receive advising in the Honors Program Office in Tuttleman Learning Center, Suite 201. Students are strongly encouraged to seek faculty advising in their major department.
- It is recommended, and in some cases required, that students consult with an advisor prior to registration. The advisor will review the proposed coursework and inform students of the requirements for graduation. In addition, the advisor helps students achieve breadth in their curriculum and provides other needed assistance.
- Academic advising provides an opportunity for students to develop a meaningful education plan compatible with their life goals. Students can also meet with advisors to discuss a variety of academic concerns and identify solutions. Students experiencing academic difficulty work with advisors to learn strategies for overcoming the obstacles to success.
- Change of Program (COP) advising for students transferring into the College of Liberal Arts from other schools and colleges within Temple. Students seeking to declare their primary major in the College of Liberal Arts must contact the CLA Center for Academic Advising to be added to a "Change of Program" Canvas course which covers important information about academic advising and degree requirements. Upon successful completion of the course, students will receive a Change of Program form to finalize the process.
- Approving special requests including: academic forgiveness; course repeats; re-enrollment at the University; permission to take courses elsewhere (p. 1858); registration overload (p. 1836); credit/no-credit (p. 1848) option for free electives; and other questions regarding University or College policies (p. 1835). (Click the links to be directed to more information on specific policies.)

All academic advisors are trained to evaluate information carefully to give students the best possible advice. **Primary responsibility for course selection and degree completion rests with the student.** Every student must be aware of the requirements of their degree and should collaborate with an advisor regularly to ensure timely completion of their program.

Department-Based Advisors

All departments in the College of Liberal Arts have designated faculty advisors, undergraduate chairs, or embedded professional advisors, with whom students can discuss the requirements of their major, minor, and/or certificate programs.

Student Grievance Procedures

Title IX of the Educational Amendments Act of 1972 requires that each college or university establish due process for the resolution of academic grievances. This is to protect students from prejudiced and capricious academic evaluation. All undergraduate students enrolled in the College of Liberal Arts have a right to appeal grades which they deem unfair and unreasonable. The student must provide evidence indicating a mistake, fraud, or bad faith on the part of an instructor. Students will not be allowed to grieve a grade unless it is accompanied by such evidence.

Students should first contact their instructor to discuss the grade(s) in question, and if the matter cannot be resolved at that level, students are then urged to talk with the chairperson for the department in which this course was given. Chairperson information is available in this publication. A student must initiate the first stage of an academic grievance by the dates in the College of Liberal Arts Grievance Procedure, available at <https://liberalarts.temple.edu/students/resources>.

For more information, students should contact the college's Undergraduate Grievance Officer, Amanda Gibson, at gibson@temple.edu or 215-204-8504.

Non-Academic Grievances

Students may have grievances that are not academic in nature. Such grievances should be directed to other offices on campus, which may include the Office of the Dean of Students, the Equal Opportunity Compliance office, Office of University Housing and Residential Life, and other units on campus. Students unsure as to where to proceed with a non-academic grievance should consult either with the Office of the Dean of Students or the college's Center for Academic Advising and Professional Development.

Pre-Law Advising

Pre-Law Advisors

Beth Lawson
CLA Academic Advising
elizabeth.lawson@temple.edu

Paul Crowe
Department of Philosophy
pcrowe@temple.edu

Preparation for the Study of Law

All law schools accept the degree of Bachelor of Arts as fulfillment of their requirements for admission. The Pre-Legal Education Committee of the Association of American Law Schools and the Temple University School of Law stress the importance of a well-rounded education. Liberal arts majors are considered excellent preparation for law school. Although Temple University does not have a specific major in Pre-Law, we do offer specialized advising for students interested in applying to law school, as well as majors in challenging disciplines that will help students hone their critical thinking, analytical and communication skills. Since the legal profession makes extensive use of both the written and spoken English language as professional tools, the law student should have extensive preparation in English in undergraduate courses. Because a large part of a lawyer's work requires problem solving and sound judgment, students should take courses that help develop creative power in thinking. The study of law, furthermore, rests upon a broad knowledge of western civilization, including its political, economic, and social institutions; hence, the student preparing for law should schedule courses which afford this broad background. Some law schools also recommend two semesters of accounting. After selecting a field of concentration, the student schedules courses in consultation with both the advisor in the area of concentration and with the pre-law advisor in the Center for Academic Advising and Professional Development of the College of Liberal Arts.

Courses of Special Interest to Pre-Law Students

While no specific undergraduate courses or majors are required for admission to accredited law schools, pre-law students are advised to select courses and programs of study that are intellectually challenging, while helping to develop necessary skills and knowledge.

To develop the communications skills of reading and comprehension, expository writing, and speaking:

Code	Title	Credit Hours
CSCD 1108	Introduction to Linguistics	3
AOD 2214	Conflict Processes	3
ENG 2006	Non-Fiction Writing	3
ENG 2009	Writing the Research Essay	3
English 2000+ Upper-level literature courses		3
CSI 1111	Introduction to Public Speaking (formerly STRC 1111)	3
CSI 1113	Persuasion (formerly STRC 2112)	3

To develop analytical reasoning skills:

Code	Title	Credit Hours
PHIL 1055	Critical Thinking	3
PHIL 1066	Introduction to Logic	3
PHIL 1196	Introduction to Philosophy	3
PHIL 2121	Introduction to Ethical Theory	3
CSI 3601	Misperceptions and Misinformation (formerly STRC 3336)	3
Computer Science and Mathematics		
Natural Science		

Courses that are "law-related" because they either require reading of law cases or concern the study of particular legal issues are listed below for the convenience of interested students. Law school admissions officials prefer that pre-law students take very few such courses, believing that the teaching of law more appropriately belongs in the province of the law school. It may be useful, however, for students who are uncertain about attending law school to test their level of interest by selecting one or more of the following courses in the College of Liberal Arts:

Code	Title	Credit Hours
AMST 3033	Courtroom in American Society	3
CJ 2501	Introduction to Criminal Law	3
CJ 3201	The American Jury System	3
CJ 3502	Criminal Procedure: Prosecution & Adjudication	3
GSWS 4004	Women and Criminal Justice	3
HIST 2105	Race and the U.S. Constitution	3
PHIL 1062	Morality and the Law	3
PHIL 2154	Political Philosophy	3
PHIL 3243	Philosophy of Law	3

POLS 3121	American Constitutional Principles I	3
POLS 3123	American Constitutional Principles II: Civil Rights in America	3
POLS 3411	Classical Political Philosophy	3
SOC 3243	Social Movements and Conflict	3

Since most law schools require applicants to submit the score earned on the Law School Aptitude Test, administered periodically by the Law School Admissions Service, students planning to study law should consult the pre-law advisor prior to the senior year to determine whether the school to which they plan to apply will require such a test and to determine the dates when such examinations are given. Prospective law students should consult the pre-law advisor about requirements for admission to law school, law school scholarship assistance, and opportunities in the legal profession. To satisfy statutory requirements, early in their senior year, prospective law students should consult the pre-law advisor concerning the legal requirements for practicing law in the state in which the student desires to study and practice.

Phi Alpha Delta Law Fraternity, International

Students interested in College of Liberal Arts pre-law studies are encouraged to join Phi Alpha Delta. Its pre-law program assists "undergraduate students to make an 'informed choice' in selecting law as a career, deciding which law school to attend, and in preparing for the rigors of law school."

Phi Alpha Delta was formed "to advance the ideals of liberty and equal justice under law; to stimulate excellence in scholarship; to inspire the virtues of compassion and courage; to foster integrity and professional competence; to promote the welfare of its members; and to encourage their moral, intellectual, and cultural advancement." For more information about Phi Alpha Delta and College of Liberal Arts pre-law society, please contact Paul Crowe, pre-law advisor, at 215-204-8591 or pcrowe@temple.edu.

Faculty

Go to the College of Liberal Arts' Departments and Programs site, click on the individual department for a list of faculty in that department. See also <https://directory.temple.edu/>.

Casarae Abdul-Ghani, Assistant Professor, Department of English, College of Liberal Arts; PhD, Purdue University.

Zain Abdullah, Associate Professor, Department of Religion, College of Liberal Arts; PhD, The New School for Social Research.

Elizabeth Adams, Instructor, Department of Criminal Justice, College of Liberal Arts; PhD, Michigan State University.

Hiram Aldarondo, Associate Professor, Department of Spanish and Portuguese, College of Liberal Arts; PhD, University of Chicago.

Lauren B. Alloy, Laura H. Carnell Professor, Department of Psychology and Neuroscience, College of Liberal Arts; PhD, University of Pennsylvania.

Cate Almon, Associate Professor of Instruction, Department of First Year Writing Program, College of Liberal Arts; EdD, Temple University.

Rebecca T. Alpert, Professor Emerita, Department of Religion, College of Liberal Arts; PhD, Temple University.

Eli Alshanetsky, Assistant Professor, Department of Philosophy, College of Liberal Arts; PhD, New York University.

Michael Altimore, Professor of Instruction, Department of Sociology, College of Liberal Arts; PhD, University of Iowa.

Elizabeth Alvarez, Associate Professor of Instruction, Department of Religion, College of Liberal Arts; PhD, University of Chicago Divinity School.

Nilgün Anadolu-Okur, Professor, Department of Africology and African American Studies, College of Liberal Arts; PhD, Hacettepe University.

Reynaldo Anderson, Associate Professor, Department of Africology and African American Studies, College of Liberal Arts; PhD, University of Nebraska-Lincoln.

Max Andrucki, Associate Professor of Instruction, Department of Geography and Urban Studies, College of Liberal Arts; PhD, University of Leeds.

Molefi Kete Asante, Professor, Department of Africology and African American Studies, College of Liberal Arts; PhD, University of California Los Angeles.

Philip Atkins, Associate Professor of Instruction, Department of Philosophy, College of Liberal Arts; PhD, University of California Santa Barbara.

Melissa Auerbach, Assistant Professor of Instruction, Department of Psychology and Neuroscience, College of Liberal Arts; PhD, State University of New York at Stony Brook.

Kathleen Auerhahn, Associate Professor, Department of Criminal Justice, College of Liberal Arts; PhD, University of California Riverside.

James D. Bachmeier, Associate Professor, Department of Sociology, College of Liberal Arts; PhD, University of California Irvine.

Marcia B. Bailey, Associate Professor of Instruction, Department of Intellectual Heritage Program, College of Liberal Arts; PhD, Colgate Rochester Crozer Divinity.

Chloé Bakalar, Assistant Professor, Department of Political Science, College of Liberal Arts; PhD, University of Pennsylvania.

Christina Baker, Assistant Professor, Department of Spanish and Portuguese, College of Liberal Arts; PhD, University of Wisconsin-Madison.

Debra Bangasser, Associate Professor, Department of Psychology and Neuroscience, College of Liberal Arts; PhD, Rutgers University.

Alison Baren, Assistant Professor of Instruction, Department of Psychology and Neuroscience, College of Liberal Arts; PhD, Graduate Center, City University of New York.

Austin B. Bean, Assistant Professor, Department of Economics, College of Liberal Arts; PhD, University of Texas at Austin.

Steven R. Belenko, Professor, Department of Criminal Justice, College of Liberal Arts; PhD, Columbia University.

Jamal Benin, Assistant Professor of Instruction, Department of Intellectual Heritage Program, College of Liberal Arts; PhD, Temple University.

Stefania Benini, Assistant Professor of Instruction, Department of French, German, Italian and Slavic, College of Liberal Arts; PhD, Stanford University.

Daniel W. Berman, Professor, Department of Greek and Roman Classics, College of Liberal Arts; PhD, Yale University.

Lila Corwin Berman, Professor, Department of History, College of Liberal Arts; PhD, Yale University.

Susan Bertolino, Instructor, Department of Intellectual Heritage Program, College of Liberal Arts; MA, University of Chicago.

Abhit Bhandari, Assistant Professor, Department of Political Science, College of Liberal Arts; PhD, Columbia University.

Marcus Bingenheimer, Associate Professor, Department of Religion, College of Liberal Arts; Dr.Phil., Wurzburg University.

Erwin A. Blackstone, Professor, Department of Economics, College of Liberal Arts; PhD, University of Michigan.

Khalid Y. Blankinship, Professor, Department of Religion, College of Liberal Arts; PhD, University of Washington.

Michael L. Bognanno, Professor, Department of Economics, College of Liberal Arts; PhD, Cornell University.

Aryeh I. Botwinick, Professor, Department of Religion, College of Liberal Arts; PhD, Princeton University.

Lucy Bregman, Professor Emerita, Department of Religion, College of Liberal Arts; PhD, University of Chicago Divinity School.

Mary K. Brennan, Assistant Professor of Instruction, Department of Philosophy, College of Liberal Arts; PhD, Temple University.

Lisa A. Briand, Associate Professor, Department of Psychology and Neuroscience, College of Liberal Arts; PhD, University of Michigan.

Seth C. Bruggeman, Associate Professor, Department of History, College of Liberal Arts; PhD, College of William and Mary.

Gregory Byala, Associate Professor of Instruction, Department of First Year Writing Program, College of Liberal Arts; PhD, Yale University.

César Cabezas, Assistant Professor, Department of Philosophy, College of Liberal Arts; PhD, Columbia University.

Nicholaos Catsis, Assistant Professor of Instruction, Department of Political Science, College of Liberal Arts; PhD, Temple University.

Lee-Ann Chae, Assistant Professor, Department of Philosophy, College of Liberal Arts; PhD, University of California Los Angeles.

Sanjoy Chakravorty, Professor, Department of Geography and Urban Studies, College of Liberal Arts; PhD, University of Southern California.

Colin Chamberlain, Associate Professor, Department of Philosophy, College of Liberal Arts; PhD, Harvard University.

Isabelle Chang, Assistant Professor of Instruction, Department of Psychology and Neuroscience, College of Liberal Arts; PhD, Temple University.

Jason M. Chein, Professor, Department of Psychology and Neuroscience, College of Liberal Arts; PhD, University of Pittsburgh.

Eunice Y. Chen, Associate Professor, Department of Psychology and Neuroscience, College of Liberal Arts; PhD, University of Sydney.

Eugene Chislenko, Assistant Professor, Department of Philosophy, College of Liberal Arts; PhD, University of California Berkeley.

Fletcher Chmara-Huff, Assistant Professor of Instruction, Department of Geography and Urban Studies, College of Liberal Arts; PhD, The Ohio State University.

Yongjin Choi, Assistant Professor of Instruction, Department of Economics, College of Liberal Arts; PhD, University of North Carolina at Chapel Hill.

- Elise Chor*, Assistant Professor, Department of Political Science, College of Liberal Arts; PhD, University of Chicago.
- Bettye Collier-Thomas*, Professor, Department of History, College of Liberal Arts; PhD, George Washington University.
- Gretchen A. Condran*, Associate Professor Emerita, Department of Sociology, College of Liberal Arts; PhD, University of Pennsylvania.
- Whitley Cooke*, Professor of Instruction, Department of First Year Writing Program, College of Liberal Arts; PhD, University of Oklahoma.
- Norma Corrales-Martin*, Associate Professor of Instruction, Department of Spanish and Portuguese, College of Liberal Arts; PhD, Ohio University.
- Nyron Crawford*, Assistant Professor, Department of Political Science, College of Liberal Arts; PhD, The Ohio State University.
- Paul Crowe*, Professor of Instruction, Department of Philosophy, College of Liberal Arts; PhD, Catholic University of Louvain.
- Beth K. Curran*, Professor of Instruction, Department of French, German, Italian and Slavic, College of Liberal Arts; PhD, Rutgers University.
- Amanda Czerniawski*, Professor of Instruction, Department of Sociology, College of Liberal Arts; PhD, Columbia University.
- Khila Dahal*, Assistant Professor of Instruction, Department of Geography and Urban Studies, College of Liberal Arts; PhD, Texas State University.
- Shreyasee Das*, Assistant Professor of Instruction, Department of Economics, College of Liberal Arts; PhD, University of Houston.
- Heath Fogg Davis*, Professor, Department of Political Science, College of Liberal Arts; PhD, Princeton University.
- Richard E. Deeg*, Professor, Department of Political Science, College of Liberal Arts; PhD, Massachusetts Institute of Technology.
- Kevin J. Delaney*, Professor, Department of Sociology, College of Liberal Arts; PhD, State University of New York Stony Brook.
- James Michael DeLise*, Associate Professor of Instruction, Department of Intellectual Heritage Program, College of Liberal Arts; PhD, Temple University.
- John A. Dern*, Professor of Instruction, Department of Intellectual Heritage Program, College of Liberal Arts; PhD, Lehigh University.
- Dimitrios I. Diamantaras*, Associate Professor, Department of Economics, College of Liberal Arts; PhD, University of Rochester.
- Nah D. Dove*, Assistant Professor, Department of Africology and African American Studies, College of Liberal Arts; PhD, State University of New York.
- Deborah A. G. Drabick*, Associate Professor, Department of Psychology and Neuroscience, College of Liberal Arts; PhD, State University of New York at Stony Brook.
- Douglas Duckworth*, Professor, Department of Religion, College of Liberal Arts; PhD, University of Virginia.
- Amelia Duffy-Tumasz*, Assistant Professor of Instruction, Department of Geography and Urban Studies, College of Liberal Arts; PhD, Rutgers University-New Brunswick.
- Jaime Duran*, Associate Professor of Instruction, Department of Spanish and Portuguese, College of Liberal Arts; PhD, Temple University.
- Lauren Ellman*, Professor, Department of Psychology and Neuroscience, College of Liberal Arts; PhD, University of California Los Angeles.
- Jamie J. Fader*, Associate Professor, Department of Criminal Justice, College of Liberal Arts; PhD, University of Pennsylvania.
- Mohsen Fardmanesh*, Associate Professor, Department of Economics, College of Liberal Arts; PhD, Yale University.
- Lauren A. Farmer*, Assistant Professor of Instruction, Department of Political Science, College of Liberal Arts; PhD, Temple University.
- Paul Farnsworth*, Professor, Department of Anthropology, College of Liberal Arts; PhD, University of California Los Angeles.
- Robert L. Fauber Jr.*, Associate Professor, Department of Psychology and Neuroscience, College of Liberal Arts; PhD, University of Georgia.
- Robert Faunce*, Assistant Professor of Instruction, Department of First Year Writing Program, College of Liberal Arts; PhD, Graduate Center, City University of New York.
- Barbara Ferman*, Professor, Department of Political Science, College of Liberal Arts; PhD, Brandeis University.
- Kenneth Finkel*, Professor of Instruction, Department of History, College of Liberal Arts; MA, Temple University.
- K. Orfeo Fioretos*, Professor, Department of Political Science, College of Liberal Arts; PhD, Columbia University.
- Alexa Firat*, Assistant Professor of Instruction, Department of Asian and Middle Eastern Languages and Studies, College of Liberal Arts; PhD, University of Pennsylvania.

- Ariane Fischer*, Professor of Instruction, Department of Intellectual Heritage Program, College of Liberal Arts; PhD, George Washington University.
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- Fernando Fonseca Pacheco*, Assistant Professor of Instruction, Department of Spanish and Portuguese, College of Liberal Arts; PhD, The Pennsylvania State University.
- Talissa Ford*, Associate Professor, Department of English, College of Liberal Arts; PhD, University of California Berkeley.
- Joseph S. Foster*, Assistant Professor of Instruction, Department of Intellectual Heritage Program, College of Liberal Arts; PhD, Temple University.
- Amy L. Friedman*, Professor of Instruction, Department of First Year Writing Program, College of Liberal Arts; PhD, University of London.
- Joseph Friedman*, Professor, Department of Economics, College of Liberal Arts; PhD, University of California Berkeley.
- Justin I. Fugo*, Assistant Professor of Instruction, Department of Intellectual Heritage Program, College of Liberal Arts; PhD, Temple University.
- Yukari Fujiwara*, Instructor, Department of Asian and Middle Eastern Languages and Studies, College of Liberal Arts; MA, Eastern Michigan University.
- Akim Gabriel*, Instructor, Department of French, German, Italian and Slavic, College of Liberal Arts; MA, Temple University.
- Carmelo A. Galati*, Associate Professor of Instruction, Department of French, German, Italian and Slavic, College of Liberal Arts; PhD, Rutgers University.
- Bradley S. Gardner*, Associate Professor of Instruction, Department of Geography and Urban Studies, College of Liberal Arts; PhD, City University of New York.
- Timothy Garelick*, Assistant Professor of Instruction, Department of Psychology and Neuroscience, College of Liberal Arts; PhD, Lehigh University.
- Paul B. Garrett*, Associate Professor, Department of Anthropology, College of Liberal Arts; PhD, New York University.
- James R. Getz*, Associate Professor of Instruction, Department of Intellectual Heritage Program, College of Liberal Arts; PhD, Brandeis University.
- Maurizio Giammarco*, Associate Professor of Instruction, Department of Intellectual Heritage Program, College of Liberal Arts; PhD, Temple University.
- Melissa R. Gilbert*, Professor, Department of Geography and Urban Studies, College of Liberal Arts; PhD, Clark University.
- Tania Giovannetti*, Professor, Department of Psychology and Neuroscience, College of Liberal Arts; PhD, Drexel University.
- Joseph Giuffre*, Associate Professor of Instruction, Department of Intellectual Heritage Program, College of Liberal Arts; PhD, Rutgers University.
- Kristin Gjesdal*, Professor, Department of Philosophy, College of Liberal Arts; PhD, University of Oslo.
- Travis F. Glasson*, Associate Professor, Department of History, College of Liberal Arts; PhD, Columbia University.
- Petra Goedde*, Professor, Department of History, College of Liberal Arts; PhD, Northwestern University.
- Eli C. Goldblatt*, Professor Emeritus, Department of English, College of Liberal Arts; PhD, University of Wisconsin-Madison.
- Sara Goldrick-Rab*, Professor, Department of Sociology, College of Liberal Arts; PhD, University of Pennsylvania.
- Cynthia M. Gooch*, Professor of Instruction, Department of Psychology and Neuroscience, College of Liberal Arts; PhD, Princeton University.
- Alex Gottesman*, Associate Professor, Department of Greek and Roman Classics, College of Liberal Arts; PhD, University of Chicago.
- Declan Gould*, Assistant Professor of Instruction, Department of Intellectual Heritage Program, College of Liberal Arts; PhD, State University of New York at Buffalo.
- Kimberly Ann Goyette*, Professor, Department of Sociology, College of Liberal Arts; PhD, University of Michigan.
- Cristina Gragnani*, Associate Professor, Department of French, German, Italian and Slavic, College of Liberal Arts; PhD, Harvard University.
- Matthew H. Graham*, Assistant Professor, Department of Political Science, College of Liberal Arts; PhD, Yale University.
- Peter Gran*, Professor, Department of History, College of Liberal Arts; PhD, University of Chicago.
- Jason Gravel*, Assistant Professor, Department of Criminal Justice, College of Liberal Arts; PhD, University of California Irvine.
- Douglas Green*, Assistant Professor of Instruction, Department of Criminal Justice, College of Liberal Arts; PhD, John Jay College of Criminal Justice.

- Douglas Greenfield*, Professor of Instruction, Department of Intellectual Heritage Program, College of Liberal Arts; PhD, Columbia University.
- Elizabeth Groff*, Professor, Department of Criminal Justice, College of Liberal Arts; PhD, University of Maryland.
- Rachael Groner*, Professor of Instruction, Department of First Year Writing Program, College of Liberal Arts; PhD, Purdue University.
- Lisa Grunberger*, Associate Professor of Instruction, Department of First Year Writing Program, College of Liberal Arts; PhD, University of Chicago Divinity School.
- Alexandra Guisinger*, Associate Professor, Department of Political Science, College of Liberal Arts; PhD, Yale University.
- Keith D. Gumery*, Associate Professor of Instruction, Department of First Year Writing Program, College of Liberal Arts; PhD, Temple University.
- Elizabeth Gunderson*, Associate Professor, Department of Psychology and Neuroscience, College of Liberal Arts; PhD, University of Chicago.
- Victor Gutierrez-Velez*, Assistant Professor, Department of Geography and Urban Studies, College of Liberal Arts; PhD, Columbia University.
- Lee Hachadoorian*, Assistant Professor of Instruction, Department of Geography and Urban Studies, College of Liberal Arts; PhD, City University of New York.
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Africology and African American Studies BA

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Mission

Temple University's Department of Africology and African American Studies provides students with a textured intellectual experience through the systematic Afrocentric study of the thought, behavior and practices of African people globally. Inasmuch as our faculty and students pursue knowledge from the perspective of African people as both agents and subjects of experience, we also remain open to plural understandings emanating from the multicultural society in which we live, and the rapidly shrinking world beyond. Students engage in critical discourse about issues of race, ethnicity, gender, sexuality, class and culture across a great expanse of time and geographical space. Our classes interrogate African frames of reference, from the classical to the contemporary periods, tracing continuities and transformations from Africa to numerous diasporic communities worldwide.

We commit ourselves to the shaping and evolution of our discipline, and to positive change in our communities. Through enhanced mentoring and cooperative pedagogy, we cultivate the academic excellence, social responsibility and political engagement necessary for subsequent generations of scholars to carry this work into the future.

Curriculum

The curriculum for the **Bachelor of Arts in Africology and African American Studies** stresses the skills necessary to think critically, write clearly, argue persuasively and solve problems effectively. Students are exposed to theory and research in a variety of subject areas and are encouraged to engage in active research and service beyond the classroom.

Campus Location: Main

Program Code: LA-AAAS-BA

Career Opportunities

Our alumni have entered careers in primary and secondary education and administration, social work and administration, research design, law enforcement, city government, and have also worked with museums and other cultural and artistic institutions. Several Africology and African American

Studies alumni are active in local and national entertainment in roles that include music production, film making, acting and script writing. Many others have earned graduate degrees in a variety of areas, including Africology, law, the health-related professions such as medicine and nursing, public administration, and the social sciences, including political science, history, psychology, sociology and anthropology.

Awards and Honors

The department offers three internal awards for graduating seniors: two privately-sponsored awards for outstanding academic performance and one departmental award for outstanding service. The Department of Africology and African American Studies supervises the Temple in Ghana program, which allows students to study for six weeks during the summer at the University of Ghana in Accra.

Distinction in Major

Africology and African American Studies majors may graduate with distinction in the major if they have earned a GPA of 3.3.

Contact Information

Department e-mail: liberal-arts-africology-african-american-studies@temple.edu

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Learn more about the Bachelor of Arts in Africology and African American Studies.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The African American Studies major requires AAAS 2296 Introduction to Africology and AAAS 4096 Senior Seminar.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 83) section of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including:
 - 90 credits in CLA/CST courses;
 - 45 credits of which must be at the upper level (numbered 2000-4999).
 - For **Social Science majors**, 6 upper level credits (numbered 2000-4999) must be taken in Humanities or Natural/Mathematical Sciences. This includes the following departments in the College of Liberal Arts: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish as well as the Department of Art History in the Tyler School of Art and Architecture, or any department in the College of Science and Technology.
 - A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
 - Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Professional Development Requirement**

- All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements**
 - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
 - All students must complete at least one course from the GenEd Global/World Society category; and
 - All Bachelor of Arts students must complete one of the following options:
 - Third semester of a foreign language;
 - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
 - Take one Global Studies course from the list on the CLA College Requirements (p. 940) page;
 - Study Abroad at an approved program; or
 - Take a second General Education Global/World Society course.
- **Notes on Foreign Language Study**
 - The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
 - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
 - See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (33 credits)

Code	Title	Credit Hours
Specifically Required Courses		
AAAS 2296	Introduction to Africology	3
AAAS 2201	African Civilization	3
AAAS 2242	Afrocentricity	3
AAAS 2255	Introduction to Research Methods (Fall only)	3
AAAS 4096	Senior Seminar (Spring only)	3
Four Electives in AAAS numbered 2000-4999		12
Two electives in AAAS numbered 1000-4999		6
Total Credit Hours		33

Suggested Academic Plan

Bachelor of Arts in Africology and African American Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ}		4
Foreign Language 1001 - first level		4
GenEd Breadth Course		3
Credit Hours		15
Spring		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Foreign Language 1002 - second level		4
GenEd Breadth Course		3

GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
AAAS 2296	Introduction to Africology	3
Africology and African American Studies 1000-4999 Elective		3
Africology and African American Studies 2000-4999 Elective		3
One 0800-4999 Elective in Any School or College		2
Select one of the following:		3
Foreign Language - third level		
GenEd Global/World Society Course		
Internationally-Focused Course from Approved List		
Credit Hours		17
Spring		
AAAS 2242	Afrocentricity	3
AAAS 2201	African Civilization	3
GenEd Breadth Course		3-4
GenEd Breadth Course		3
CLA/CST 0800-4999 Elective		2
CLA 1002	Professional Development for Liberal Arts Majors	1
Credit Hours		15
Year 3		
Fall		
CLA/CST 2000+ Humanities/CST Course		3
Africology and African American Studies 2000+ Elective		3
Africology and African American Studies 2000+ Elective		3
CLA/CST 0800-4999 Elective		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
Africology and African American Studies 1000-4999 Elective		3
Africology and African American Studies 2000+ Elective		3
CLA/CST 2000+ Humanities/CST Course		3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Year 4		
Fall		
AAAS 2255	Introduction to Research Methods (offered during fall semester only)	3
CLA/CST 2000+ Course		3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Spring		
AAAS 4096	Senior Seminar	3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Electives		6

One 0800-4999 Elective in Any School or College	3
Credit Hours	15
Total Credit Hours	123

Africology and African American Studies Minor

Overview

The **Minor in Africology and African American Studies** is offered by the Department of Africology and African American Studies. This department provides students with a textured intellectual experience through the systematic Afrocentric study of the thought, behavior and practices of African people globally.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements and Suggested Order of Completion

Code	Title	Credit Hours
Required Courses		
AAAS 2201	African Civilization	3
AAAS 2242	Afrocentricity	3
AAAS 2296	Introduction to Africology	3
Electives		
Select three (3) additional AAAS courses, two of which must be at or above the 2000 level. ¹		9
Total Credit Hours		18

1

Make these selections based on the content areas in which you desire greater familiarity (e.g., Africology and African American Studies in culture, literature, social issues, psychology, etc.). One of these two upper-level courses may be a related course outside the Africology and African American Studies department; however, students must seek written approval from the undergraduate director prior to enrolling in outside courses that they want to apply toward the Africology and African American Studies minor.

American Studies BA

Overview

The **Bachelor of Arts in American Studies**, offered by the American Studies Program, is a broad-based interdisciplinary program that explores the rich complexity of American culture and American lives. Courses in the major focus on national myths and everyday realities, race and ethnicity, work, technology, media and popular culture, architecture and city planning, and the production and consumption of art forms like photography, film, dance, and music. In American Studies, though, we do not treat these topics as discrete categories, but instead explore their relationships to each other. For instance, we look at ideas about race and class embedded in national symbols and ideas. Through a variety of courses and in a mix of different categories, American Studies provides students with a deep understanding of the many forces and ideas shaping America over a long sweep of time in any number of places, the East, the West, in the heartland, and at the borders.

The program also offers student internship opportunities and other hands-on kinds of learning at a variety of cultural institutions in Philadelphia and the Delaware Valley. American Studies courses are challenging and thought-provoking and many of them are cross-listed with the Temple University Honors Program. The major program stresses development of reading, writing and analytical skills that are necessary for successful careers in a range of professional fields.

American Studies majors go on to graduate school in the humanities and social sciences, law school, and medical school. They also may take jobs in schools, non-profit organizations, museums, libraries, business, social services, public relations, and the media.

Campus Location: Main

Program Code: LA-AMST-BA

Distinction in Major

American Studies majors may graduate with distinction in the major if they have a GPA of at least 3.5 in the major and a cumulative GPA of at least 3.0.

Contact Information

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tjc@temple.edu

Learn more about the Bachelor of Arts in American Studies.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are: AMST 2098, and AMST 4097 (or AMST 4098 with permission).
- Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 83) section of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including:
 - 90 credits in CLA/CST courses;
 - 45 credits of which must be at the upper level (numbered 2000-4999).
 - For **Social Science majors**, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art and Architecture, or any department in the College of Science and Technology.
 - A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
 - Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Professional Development Requirement**
 - All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements:**
 - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
 - All students must complete at least one course from the GenEd Global/World Society category; and
 - All Bachelor of Arts students must complete one of the following options:
 - Third semester of a foreign language;
 - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
 - Take one Global Studies course from the list on the CLA College Requirements (p. 940) page;
 - Study Abroad at an approved program; or
 - Take a second General Education Global/World Society course.
- **Notes on Foreign Language Study**

- The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
- Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
- See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (39 credits)

Code	Title	Credit Hours
Core Courses		
Must complete five courses, one from each group below:		
American Biography and Work		3
AMST 1042	Work in America	
American Culture		3
AMST 2011	The Arts in America	
AMST 2012	American Things: Introduction to Material Culture	
AMST 2022	Museums and American Culture	
AMST 2120/2900	Topics in American Culture ¹	
AMST 3011	Photography in America	
AMST 3012	Film and American Society	
Place in American Life		3
AMST 2001	Tourism in America	
AMST 2021	Philadelphia Neighborhoods	
AMST 2051/2951	American Places: Home, City, Region	
AMST 2120/2900	Topics in American Culture ¹	
AMST 3022	Architecture, Urban Design, and American Culture	
AMST 3051	American Frontiers	
AMST 3061	Media and American Popular Culture	
Diversity in America		3
Select one course in consultation with your advisor.		
Change in America		3
AMST 2031	Radicalism in the United States	
AMST 2041	Technology and American Culture	
AMST 2065	Global America	
AMST 2120/2900	Topics in American Culture ¹	
AMST 3031/3931	Political Protest and Culture in the '60s	
AMST 3032	Literature and Political Change	
AMST 3033	Courtroom in American Society	
AMST 3041	Contemporary Trends in the American Workplace	
AMST 3075	Literature of American Slavery	
Additional Courses		
Select three American Studies 2000-4999 Electives ²		9
Three American-Focused Electives from Related Disciplines, numbered 1000+. ³		9
Writing Intensive Courses		
AMST 2098	Reading Culture	3
AMST 4097	Senior Seminar in American Studies ⁴	3
or AMST 4098	Senior Independent Study	
Total Credit Hours		39

1

Specific subjects change each semester. See class schedule for information on a particular offering. AMST 2120 may meet one or more of the above requirements with permission of the director.

2

These can include choices from the American Studies core courses as well as choices from all other American Studies courses.

3

Students must take at least three courses outside of the major selected in consultation with the American Studies director and congruent with an American Studies focus. We recommend that at least 6 of these credits be in American history or literature.

4

Students must take the Senior Seminar in their final year of study (usually offered in Fall semester). Only in rare circumstances and with special permission can students satisfy the capstone by taking AMST 4098.

Suggested Academic Plan

Bachelor of Arts in American Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4
Foreign Language 1001 - first level		4
GenEd Breadth Course		3
Credit Hours		15
Spring		
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
Foreign Language 1002 - second level		4
GenEd Breadth Course		3
GenEd Breadth Course		3
AMST 1042	Work in America	3
Credit Hours		16
Year 2		
Fall		
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
GenEd Breadth Course		3
AMST 2098	Reading Culture	3
American Studies 2000+ American Culture Course from approved list		3
Select one of the following:		3
Foreign Language - third level		
GenEd Global/World Society course		
Internationally Focused Course from approved list		
Credit Hours		15
Spring		
GenEd Breadth Course		3-4
GenEd Breadth Course		3
GenEd Breadth Course		3
American Studies 2000+ Diversity in America - Consult Advisor for options		3
American Studies 2000+ Place in American Life Course from approved list		3

CLA 1002	Professional Development for Liberal Arts Majors	1
Credit Hours		16
Year 3		
Fall		
CLA/CST 2000+ Humanities/CST Course		3
American Studies 2000+ Change in America Course from approved list		3
American Studies 2000-4999 American Studies Elective		3
American-Focused Elective 1000+ from Related Discipline ¹		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Spring		
CLA/CST 2000+ Humanities/CST Course		3
American Studies 2000-4999 Elective		3
American Studies 2000-4999 Elective		3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		2
One 0800-4999 Elective in Any School or College		2
Credit Hours		16
Year 4		
Fall		
American-Focused Elective 1000+ from Related Discipline ¹		3
AMST 4097 or AMST 4098	Senior Seminar in American Studies ² or Senior Independent Study	3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Spring		
American-Focused Elective 1000+ from Related Discipline ¹		3
CLA/CST 2000+ Course		3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		3
One 0800-4999 Elective in Any School or College		3
Credit Hours		15
Total Credit Hours		123

1

Choose this course with the American Studies Director.

2

Students must take AMST 4097 (usually offered in fall semester) in their final year of study. Only in rare circumstances and with special permission can students satisfy the capstone by taking AMST 4098.

American Studies Minor

Overview

The **Minor in American Studies** is offered by the American Studies Program, which is a broad-based interdisciplinary program that explores the rich complexity of American culture and American lives. Courses in the minor focus on national myths and everyday realities, race and ethnicity, work, technology, media and popular culture, architecture and city planning, and the production and consumption of art forms like photography, film, dance, and music. In American Studies, though, we do not treat these topics as discrete categories, but instead explore their relationships to each other. For instance, we look at ideas about race and class embedded in national symbols and ideas. Through a variety of courses and in a mix of different categories, American Studies provides students with a deep understanding of the many forces and ideas shaping America over a long sweep of time in any number of places, the East, the West, in the heartland, and at the borders.

An American Studies minor is particularly useful in journalism, business, education and those fields that are served by creating thinking that draw inspiration from more than one area.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Contact Information

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Jessica Roney, Undergraduate Chair
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TJ Cusack, Manager of Administration
910 Gladfelter Hall
215-204-9209
tjc@temple.edu

Requirements

Code	Title	Credit Hours
Select six American Studies courses, at least three of which should be taken from the American Studies Core Areas listed below:		18
American Biography and Work		
AMST 1042	Work in America	
AMST 1901	Honors American Lives	
American Culture		
AMST 2011	The Arts in America	
AMST 2012	American Things: Introduction to Material Culture	
AMST 2022	Museums and American Culture	
AMST 2120	Topics in American Culture ¹	
or AMST 2900	Honors Topics in American Culture	
AMST 3011	Photography in America	
AMST 3012	Film and American Society	
AMST 3061	Media and American Popular Culture	
Place in American Life		
AMST 2001	Tourism in America	
AMST 2021	Philadelphia Neighborhoods	
AMST 2051	American Places: Home, City, Region	
or AMST 2951	Honors American Places: Home, City, Region	
AMST 2120	Topics in American Culture ¹	
or AMST 2900	Honors Topics in American Culture	
AMST 3022	Architecture, Urban Design, and American Culture	
AMST 3051	American Frontiers	
Diversity in America - See Advisor for Options		
Change in America		
AMST 2031	Radicalism in the United States	
AMST 2041	Technology and American Culture	
AMST 2065	Global America	
AMST 2120	Topics in American Culture ¹	
or AMST 2900	Honors Topics in American Culture	
AMST 3031	Political Protest and Culture in the '60s	
or AMST 3931	Honors Political Protest and Culture in the 60's	

AMST 3032	Literature and Political Change
AMST 3033	Courtroom in American Society
AMST 3041	Contemporary Trends in the American Workplace
AMST 3075	Literature of American Slavery

¹
Specific subjects change each semester. See class schedule for information on a particular offering.

Ancient Mediterranean Studies Minor

Overview

The **Minor in Ancient Mediterranean Studies** is offered by the Department of Greek and Roman Classics. Classics is an interdisciplinary field of study which encompasses multiple disciplines of the liberal arts: languages, history, literature, art and philosophy. Majors and minors in the Greek and Roman Classics department are encouraged to study a semester at Temple's Rome Campus.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

Students are required to complete 18-20 credits, depending on language proficiency.

Code	Title	Credit Hours
Select two courses in Ancient Greek or two courses in Latin or demonstrate proficiency through placement testing. ¹		6-8
GRKA 1001	Ancient Greek 1	
GRKA 1002	Ancient Greek 2	
LAT 1001	Latin 1	
LAT 1002	Latin 2	
Select one of the following:		3
GRC 2011	Classical Greek and Roman Mythology	
GRC 3296		
GRC 3396		
Select two of the following: ²		6
GRC 3596	Ancient City: Periclean Athens	
GRC 3696	Ancient City: Hellenistic Alexandria	
GRC 3002	Ancient City: Augustan Rome	
or GRC 3796	Ancient City: Augustan Rome	
GRC 3003	Ancient City: Byzantium	
or GRC 3896		
GRC 3897	Ancient City: Jerusalem	
Greek & Roman Classic Elective - One additional course at or above 2000 ³		3
Total Credit Hours		18-20

¹
Students who demonstrate proficiency in Ancient Greek or Latin will need to take two additional courses. Students may opt to take either advanced courses in the language or additional electives. See faculty advisor for assistance in course selection.

²
Cycle of five cities offered: Jerusalem, Augustan Rome, Byzantium, Periclean Athens, Hellenistic Alexandria.

The elective can be from this department or from another department, such as Anthropology, Art History, Religion, History, or Philosophy, as approved by Greek & Roman Classics department advisors.

Anthropology BA

Overview

The **Bachelor of Arts in Anthropology** is offered by the Department of Anthropology. Anthropology is the study of human origins, development, and diversity. Anthropologists explore the ways in which people understand and adapt to living in a variety of settings, ranging from urban environments to rural villages, all over the world and across time. Anthropologists are interested in investigating such questions as: What does it mean to be human? What are the historical, social, political, economic, and environmental pressures that have helped shape the experiences of particular groups of people? How do human beings interact with the physical environment? Does the language that one speaks affect the ways in which one thinks and experiences the world?

The Anthropology major at Temple is organized according to two thematic areas of anthropology: "Evolution and Human Environments" and "Mobility and Global Inequality." These two areas allow us to offer students the tools they will need to work and thrive in an increasingly multicultural and multilingual globalized world. Laboratory facilities, internships, fieldwork, and experiential learning courses provide students with practical experiences.

The Anthropology major is intended to give students a foundation in the discipline of anthropology. Each thematic area of anthropology at Temple requires the development of a number of skills, including: formulating hypotheses; developing research programs and proposals; applying theories to the interpretation of artifacts and other data; and gathering ethnographic information through participant-observation. There is sufficient flexibility in the requirements for the Anthropology major so that a student with a specific interest can focus their program of study in that area—or not, if a more general program is of interest.

With its focus on human diversity and its emphasis on cultural relativism, the Anthropology major well prepares students for the issues they are likely to encounter in today's workplaces. At Temple we offer a number of courses on such topics as the Anthropology of Policy, Medical Anthropology, and Anthropology of the Family, which prepare students for careers in public administration, social work, health policy, and other aspects of public policy-related work, in addition to professional careers in fields such as business, law and medicine. Anthropology students are also well-prepared to participate in activities which call for cultural sensitivity and an understanding of cultural differences, such as the teaching of English as a foreign language and other work with immigrant communities or work in the global marketplace. A variety of courses on archaeology prepare students for careers in the field of cultural resources management and historic preservation.

Campus Location: Main

Program Code: LA-ANTH-BA

Distinction in Major

Anthropology majors may graduate with distinction in the major if they have earned a GPA of 3.5 or higher.

Contact Information

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Learn more about the Bachelor of Arts in Anthropology.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. All Anthropology majors take one writing-intensive methods course selected from: ANTH 3196, ANTH 3396, ANTH 3596, or ANTH 3796, and a capstone writing intensive course, ANTH 4097.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 83) section of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including:
 - 90 credits in CLA/CST courses;
 - 45 credits of which must be at the upper level (numbered 2000-4999).
 - For **Social Science majors**, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art and Architecture, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Professional Development Requirement**
 - All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements:**
 - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
 - All students must complete at least one course from the GenEd Global/World Society category; and
 - All Bachelor of Arts students must complete one of the following options:
 - Third semester of a foreign language;
 - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
 - Take one Global Studies course from the list on the CLA College Requirements (p. 940) page;
 - Study Abroad at an approved program; or
 - Take a second General Education Global/World Society course.
- **Notes on Foreign Language Study**
 - The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
 - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
 - See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (33 credits)

Code	Title	Credit Hours
Required Gateway to the Major Courses		
ANTH 2001	Evolution and Human Environments	3
ANTH 2002	Mobility and Global Inequality	3
Methods Course		
Select one of the following:		
ANTH 3196	Methods in Environmental Archaeology	3
ANTH 3396	Fieldwork and Ethnographic Methods	3
ANTH 3596	Research Methods in Culture and Communication	3

ANTH 3796	Methods in the Study of Evolution	
Capstone Course		
ANTH 4097	Capstone in Mobility and Global Inequality	3
Anthropology Electives ^{1,2}		
Select seven electives numbered 1000-4999		21
Total Credit Hours		33

1

It is anticipated that at least six of the electives in Anthropology will be taken at the 2000 level or higher so as to double-count against the minimum requirement of 45 upper level credits to allow students maximum flexibility in their program.

2

Electives may not have been used to satisfy other requirements of the major.

Suggested Academic Plan

Bachelor of Arts in Anthropology

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4
Foreign Language 1001 - first level		4
Anthropology 1000-4999 Elective ¹		3
Credit Hours		15
Spring		
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
Foreign Language 1002 - second level		4
GenEd Breadth Course		3
GenEd Breadth Course		3
CLA/CST 0800+ Elective		3
Credit Hours		16
Year 2		
Fall		
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
GenEd Breadth Course		3
GenEd Breadth Course		3
ANTH 2001	Evolution and Human Environments	3
Select one of the following:		3
Foreign Language - third level		
GenEd Global/World Society Course		
Internationally Focused Course From Approved List		
Credit Hours		15
Spring		
GenEd Breadth Course		3
GenEd Breadth Course		3
CLA/CST 0800+ Elective		3
CLA 1002	Professional Development for Liberal Arts Majors	1
ANTH 2002	Mobility and Global Inequality	3

Anthropology 1000-4999 Elective ¹	3
Credit Hours	16
Year 3	
Fall	
CLA/CST 2000+ Humanities/CST Course	3
Anthropology 1000-4999 Elective ¹	3
Anthropology 1000-4999 Elective ¹	3
CLA/CST 2000+ Course	3
GenEd Breadth Course	3
Credit Hours	15
Spring	
CLA/CST 2000+ Humanities/CST Course	3
Anthropology - Select one Methods Course from the following:	3
ANTH 3196 Methods in Environmental Archaeology	
ANTH 3396 Fieldwork and Ethnographic Methods	
ANTH 3596 Research Methods in Culture and Communication	
ANTH 3796 Methods in the Study of Evolution	
Anthropology 1000-4999 Elective ¹	3
CLA/CST 0800+ Electives	6
Credit Hours	15
Year 4	
Fall	
Anthropology 1000-4999 Elective ¹	3
CLA/CST 2000+ Elective	3
CLA/CST 2000+ Elective	3
CLA/CST 0800+ Electives	7
Credit Hours	16
Spring	
ANTH 4097 Capstone in Mobility and Global Inequality	3
Anthropology 1000-4999 Elective ¹	3
CLA/CST 0800+ Elective	3
CLA/CST 0800+ Elective	3
One 0800+ Elective in any School or College	3
Credit Hours	15
Total Credit Hours	123

1

Anthropology Electives: It is anticipated that at least six of the electives in Anthropology will be taken at the 2000 level or higher so as to double-count against the minimum requirement of 45 upper level credits to allow students maximum flexibility in their program.

Anthropology Minor

Overview

The **Minor in Anthropology**, offered by the Department of Anthropology, is designed for undergraduate students who want to learn about general anthropology, but cannot commit to a full academic major. Students in the Anthropology minor gain a well-rounded education and form writing and research skills, as well as a capacity to speak about human communities and social change in complex and informed ways, that help them stand out in the job market.

The Anthropology minor is not open to Anthropology majors.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

Code	Title	Credit Hours
Fundamentals		
ANTH 2001	Evolution and Human Environments	3
ANTH 2002	Mobility and Global Inequality	3
Electives		
Select one elective in Anthropology numbered 1000+		3
Select three electives in Anthropology numbered 2000+		9
Total Credit Hours		18

Arabic Certificate

Overview

A **Certificate in Arabic**, offered by the Department of Asian and Middle Eastern Languages and Studies, focuses on acquiring language skills and developing a strong foundation for the effective use of Arabic socially and professionally. This program should be of particular interest to students considering careers in international business, government service, or other professions where foreign language proficiency is important. This program has two tracks: one for students who enter Temple University with little or no previous background in Arabic; and one for students who enter Temple University with a previous background in Arabic.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Program Code: LA-ARBC-CR2+

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Learn more about the undergraduate certificate in Arabic.

Requirements

The curriculum consists of six developmentally-sequenced semesters of instruction in Arabic. Students with no background in Arabic will begin the six-course sequence with ARBC 1001 and will complete the certificate with a total of 20 credits. Students who enter the program with a placement above ARBC 1001 will need to complete the six-course requirement by taking either or both ARBC 4183 and ARBC 4283, and will complete the certificate with 18-19 credits. A grade of C- or higher must be earned in all required courses to qualify for the certificate.

Code	Title	Credit Hours
ARBC 1001	Arabic Elements I ¹	4
ARBC 1002	Arabic Elements II ¹	4
ARBC 2001	Arabic Intermediate I	3
ARBC 2002	Arabic Intermediate II	3
ARBC 3001	Arabic Advanced I	3
ARBC 3002	Arabic Advanced II	3
Total Credit Hours		20

¹

Students who place above ARBC 1001 will need to complete the six-course requirement by taking either or both ARBC 4183 and ARBC 4283.

Arabic Minor

Overview

The **Minor in Arabic**, which is offered by the Department of Asian and Middle Eastern Languages and Studies, emphasizes language study while also recognizing the importance of learning about areas of the world where Arabic is spoken through work in fields such as literature, history, anthropology and religion. This program will be of particular use to students interested in careers in education, business, government or other professions where Arabic language proficiency is important.

The minor requires a minimum of three Arabic language courses and three specified content courses. A minimum grade of C- must be earned in all courses used for the minor. Students who place out of one or more Arabic language courses must replace those requirements with electives approved by their Arabic faculty advisor.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

Code	Title	Credit Hours
ARBC 2002	Arabic Intermediate II	3
ARBC 3001	Arabic Advanced I	3
ARBC 3002	Arabic Advanced II	3
Select two of the following: ¹		6
ARBC 2012	Modern Arabic Literature in Translation	
ARBC 2021	Contemporary Arab Society in Film (in Translation)	
ARBC 0868	World Society in Literature & Film	
Elective - Select in consultation with the Arabic faculty advisor.		3
Total Credit Hours		18

1

With advisor approval, one elective may be selected from other courses in Arabic or another department with an exclusive focus on Arabic culture, literature, and/or film.

Asian Business and Society Certificate

Overview

The **Certificate in Asian Business and Society** requires a minimum of 15 credits, but may require more if the Language requirement is not satisfied by examination of oral/aural and reading skills in any Asian language approved by the Asian Studies head advisor.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Program Code: LA-ASBS-CR2+

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

This certificate requires a minimum of 15 credits, but may require more if the Language requirement is not satisfied by examination of oral/aural and reading skills in any Asian language approved by the Asian Studies head advisor.

Code	Title	Credit Hours
Required Courses		
ASST 2001	Practical Asian Society and Culture	3
IB 2501 or ASST 2511	Fundamentals of Asian Business ¹ Introduction to Asian Business	3
Economics Course		
Select one of the following:		3
ECON 3563	International Trade	
ECON 3564	International Monetary Economics	
ECON 3596	Energy, Ecology, and Economy	
Asian Studies Country Elective		
See Academic Advising Center for list of approved electives. ²		3
Asian Studies Writing Intensive Elective		
See Academic Advising Center for list of approved courses. ²		3
Language		
Select one of the following (second semester): ³		4
HIN 1002	Hindi Elements II	
CHI 1002	Chinese Elements II	
JPNS 1002	Japanese Elements II	
KRN 1002	Korean Elements II	

1

IB 2501 and ASST 2511 are cross-listed.

2

The country of the Asian Studies Country Elective and the Asian Studies Writing-Intensive Elective must match the country of the language studied. For example, if the language requirement is met with Chinese, then courses on China must be chosen for both the Country and Writing-Intensive Electives.

3

The language requirement may also be satisfied by examination of speaking, listening and interpreting, and reading skills in any Asian language approved by the Asian Studies faculty advisor.

Asian Studies BA

Overview

The Department of Asian and Middle Eastern Languages and Studies offers majors in Asian Studies and Chinese, minors in Arabic, Asian Studies, Chinese, and Japanese, as well as certificates in Arabic, Chinese and Japanese. The department also offers instruction in Hebrew, Hindi and Korean. These programs are designed to provide the language skills and cultural knowledge needed for a number of professions and careers.

Every semester the department offers several courses on topics such as literature, film and culture that are taught in English and utilize translated materials. These courses provide rigorous academic training for those interested in pursuing graduate studies and professional degrees. The popular minor and certificate programs complement most majors at the university.

The **Bachelor of Arts in Asian Studies** prepares students for careers that require linguistic proficiency and cultural knowledge. Students are required to take at least four semesters of Chinese, Japanese or Korean. Language courses are incorporated into a program of study comprising required and elective Asia-focused content courses in several disciplines, such as literature, religion, history, political science, sociology and anthropology. Careers that require or benefit from Asia-related expertise include government, education and business. The Asian Studies degree also prepares students for graduate programs in the humanities and social sciences as well as for professional schools in areas such as law and business.

Asian Studies majors are strongly encouraged to spend a semester or academic year studying abroad in a university program that combines language classes with courses focusing on culture and history—and to participate in the daily life of the host country.

Students may not combine the Asian Studies major with any of the following curricula: minor in Chinese, minor in Japanese, and may not double-major with Global Studies Global Cultures track. Students may double-major in Asian Studies and either the Economic Development or the Security tracks in the Global Studies major.

Campus Location: Main and Japan

Program Code: LA-ASST-BA

Distinction in Major

Asian Studies majors may graduate with distinction in the major if they have a GPA of at least 3.5 in the major and a cumulative GPA of at least 3.0.

Study Abroad at Temple University Japan

Temple University's campus in Tokyo, Japan (TUJ) can provide students with experience abroad while taking their coursework. If you have an interest in studying at TUJ consult the Office of Education Abroad and Overseas Campuses and the TUJ web site.

Student Organization

The East West Club offers lectures, films, and career development programs, as well as fun and fellowship through extracurricular activities.

Contact Information

Main Campus

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Temple Japan Campus

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Learn more about the Bachelor of Arts in Asian Studies.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses that will fulfill this requirement are ASST 2196 and ASST 4096.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 83) section of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including:
 - 90 credits in CLA/CST courses;
 - 45 credits of which must be at the upper level (numbered 2000-4999).
 - For **Social Science majors**, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art and Architecture, or any department in the College of Science and Technology.

- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Professional Development Requirement**
 - All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements:**
 - The language requirement of the Asian Studies major exceeds the minimum requirements of the College of Liberal Arts; no additional coursework is required.
 - **Notes on Foreign Language Study**
 - The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
 - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
 - See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (minimum 30 credits plus 12-14 credits of language study)

Code	Title	Credit Hours
Foundation Courses		
Select two of the following:		6
ASST 2501 or HIST 2501	Introduction to East Asia: China	
ASST 2502 or HIST 2502	Introduction to East Asia: Japan	
Asian Literature Requirement		
Select one of the following:		3
ASST 2111	Japanese Literature: From Classical to Contemporary	
JPNS 2111	Japanese Literature: From Classical to Contemporary	
ASST 2112	Chinese Literature: From Classical to Contemporary	
CHI 2112	Chinese Literature: From Classical to Contemporary	
Asian Religions Requirement		
Select one of the following:		3
ASST 2102	Introduction to Buddhism	
REL 2102	Introduction to Buddhism	
ASST 2201	Chinese Religions	
REL 2201	Chinese Religions - Confucius to Mao	
ASST 3301	Japanese Religions	
REL 3301	Japanese Religions	
Asian Language Requirement		
All students will take four semesters of an Asian Language (Chinese, Japanese, or Korean) ¹		12-14
Required Writing Intensive Courses		
ASST 2196	Writing in the City	3
ASST 4096	Seminar in Asian Studies	3
Asian Studies Electives		
One course in Asian Studies 1000 level (or higher)		3
Three courses in Asian Studies 2000-4999		9
Total Credit Hours		42-44

1

Asian Language Requirement: The language requirement may be satisfied by coursework (not proficiency) in an Asian language. Heritage speakers will satisfy the four-course requirement by taking advanced courses in their language or by taking a different Asian language.

Suggested Academic Plan

Bachelor of Arts in Asian Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ}		4
GenEd Breadth Course		3
Select one of the following (first level):		4
CHI 1001	Chinese Elements I	
JPNS 1001	Japanese Elements I	
KRN 1001	Korean Elements I	
Credit Hours		15
Spring		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Select one of the following (second level):		4
CHI 1002	Chinese Elements II	
JPNS 1002	Japanese Elements II	
KRN 1002	Korean Elements II	
Credit Hours		16
Year 2		
Fall		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
GenEd Breadth Course		3
CLA 1002	Professional Development for Liberal Arts Majors	1
ASST 2501 or HIST 2501	Introduction to East Asia: China or Introduction to East Asia: China	3
Select one of the following (third level):		3
CHI 2001	Chinese Intermediate I	
JPNS 2001	Intermediate Japanese I	
KRN 2001	Korean Intermediate I	
Credit Hours		16
Spring		
GenEd Breadth Course		3-4
Asian Studies 1000-4999 Elective ¹		3
CLA/CST 2000+ Course		3
ASST 2502 or HIST 2502	Introduction to East Asia: Japan or Introduction to East Asia: Japan	3
Select one of the following (fourth level):		3
CHI 2002	Chinese Intermediate II	

JPNS 2002	Intermediate Japanese II	
KRN 2002	Korean Intermediate II	
Credit Hours		15
Year 3		
Fall		
CLA/CST 2000+ Humanities/CST Course		3
CLA/CST 2000+ Course		3
Select one of the following Asian Literature courses:		3
ASST 2111 or JPNS 2111	Japanese Literature: From Classical to Contemporary or Japanese Literature: From Classical to Contemporary	
ASST 2112 or CHI 2112	Chinese Literature: From Classical to Contemporary or Chinese Literature: From Classical to Contemporary	
CLA/CST 2000+ Course		3
Asian Studies Elective 1000-4999		3
Credit Hours		15
Spring		
CLA/CST 2000+ Humanities/CST Course		3
Asian Studies 2000-4999 Elective		3
CLA/CST 2000+ Course		3
ASST 2196	Writing in the City	3
Select one of the following Asian Religions courses:		3
ASST 2102 or REL 2102	Introduction to Buddhism or Introduction to Buddhism	
ASST 2201 or REL 2201	Chinese Religions or Chinese Religions - Confucius to Mao	
ASST 3301 or REL 3301	Japanese Religions or Japanese Religions	
Credit Hours		15
Year 4		
Fall		
Asian Studies 2000-4999 Elective		3
CLA/CST 2000+ Course		3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		2
0800-4999 Electives in Any School or College		5
Credit Hours		16
Spring		
Asian Studies 2000-4999 Elective		3
ASST 4096	Seminar in Asian Studies	3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		3
One 0800-4999 Elective in Any School or College		3
Credit Hours		15
Total Credit Hours		123

Asian Studies Minor

Overview

The **Minor in Asian Studies**, offered by the Department of Asian and Middle Eastern Languages and Studies, helps prepare students for careers that require linguistic proficiency and cultural knowledge.

Students are required to take at least two semesters of Chinese, Japanese or Korean. Language courses are incorporated into a program of study comprising required and elective Asia-focus content courses in several disciplines, such as literature, religion, history, political science, sociology and anthropology.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Locations: Main and Japan

Contact Information

Main Campus

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Temple Japan Campus

Sachiko Horiguchi, PhD, Asian Studies Coordinator
shorigu@tuj.temple.edu

Requirements

Code	Title	Credit Hours
Foundation Courses		
ASST 2501 or HIST 2501	Introduction to East Asia: China	3
ASST 2502 or HIST 2502	Introduction to East Asia: Japan	3
Asian Literature Requirement		
Select one of the following:		3
ASST 2111	Japanese Literature: From Classical to Contemporary	
JPNS 2111	Japanese Literature: From Classical to Contemporary	
ASST 2112	Chinese Literature: From Classical to Contemporary	
CHI 2112	Chinese Literature: From Classical to Contemporary	
Asian Religions Requirement		
Select one of the following:		3
ASST 2102	Introduction to Buddhism	
REL 2102	Introduction to Buddhism	
ASST 2201	Chinese Religions	
REL 2201	Chinese Religions - Confucius to Mao	
ASST 3301	Japanese Religions	
REL 3301	Japanese Religions	
Language		
Take two courses in an Asian Language (Chinese, Japanese, Korean)		6-8
Asian Studies Electives		
Select one Asian Studies elective numbered 1000-4999		3
Select one Asian Studies elective numbered 2000-4999		3
Total Credit Hours		24-26

Biomedical Anthropology Minor

Overview

The **Minor in Biomedical Anthropology** is offered by the Department of Anthropology.

Students considering medical school or study in other health professions might find the minor in Biomedical Anthropology of particular interest given the recent shifts in the Medical College Admission Test (MCAT) to evaluate the social and cultural competence of applicants. All students receive a foundation in Biological Anthropology and select electives according to their interests and professional goals.

The Biomedical Anthropology minor is not open to Anthropology majors.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

Code	Title	Credit Hours
ANTH 2705	Introduction to Evolutionary Anthropology	3
Select five of the following:		15
ANTH 2001	Evolution and Human Environments	
ANTH 2319	Anthropology of Food	
ANTH 2332	Medical Anthropology	
ANTH 2396		
ANTH 2763	Anthropological Genetics	
ANTH 2765	Human Osteology	
ANTH 3743	Human Biology of Modern Populations	
ANTH 3746	Human Reproduction: Evolutionary Perspectives	
ANTH 3747	Human Growth and Development	
ANTH 3772	Evolutionary Medicine	
ANTH 3774	Environmental Physiology and Health	
Total Credit Hours		18

Chinese BA

Overview

The **Bachelor of Arts in Chinese** is offered by the Department of Asian and Middle Eastern Languages and Studies. The department also offers programs leading to an undergraduate minor or certificate in Chinese. Our programs are designed to provide the language skills and cultural knowledge needed for a number of professions and careers.

Every semester the department offers several courses on topics such as literature, film and culture which are taught in English and utilize translated materials. These provide rigorous academic training for those interested in pursuing graduate studies and professional degrees. The popular minor and certificate programs complement most majors at the university, including Asian Studies and Global Studies.

Students who major in Chinese develop strong language skills along with an in-depth disciplinary knowledge acquired in courses on Chinese literature, film, and other aspects of China's culture and society. Those who begin their study of Chinese early in their university careers can attain a high level of proficiency in spoken and written Chinese by the time they graduate. A comprehensive array of content courses enables them to achieve the cultural knowledge and insights needed to engage in effective communication in Chinese speech communities.

All students majoring in Chinese are strongly encouraged to study for at least one semester abroad in an intensive language program to build their language skills while enriching their knowledge of Chinese culture. Other options for intensive language study that students have are university-based summer Chinese language programs (in China or the U.S.) and/or a full year of language study abroad.

The Bachelor of Arts in Chinese prepares students for post-graduation careers that require or benefit from China-related expertise in government, nongovernmental organizations and business. The degree also prepares students for graduate programs in the humanities and social sciences as well as for professional schools in areas like law and business.

Campus Location: Main

Program Code: LA-CHI-BA

Distinction in Major

Students who have achieved a 3.75 GPA in Chinese courses as well as in their cumulative average will have their transcript noted with "Distinction in Major".

Contact Information

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Learn more about the Bachelor of Arts in Chinese.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are CHI 4296 and CHI 4297.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 83) section of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including:
 - 90 credits in CLA/CST courses;
 - 45 credits of which must be at the upper level (numbered 2000-4999).
 - **Distribution Requirement for Humanities majors:** Six upper level credits must be earned in the Social Science, Science, and/or interdisciplinary subject areas. Select from the following CLA departments and programs: Africology & African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Gender, Sexuality, and Women's Studies, Geography and Urban Studies, Global Studies, History, Jewish Studies, Latin American Studies, Lesbian, Gay, Bisexual, and Transgender Studies, Liberal Arts, Neuroscience (CLA), Political Science, Psychology, and Sociology, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in all CLA/CST coursework, and in the major department.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Professional Development Requirement**
 - All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Several of our larger departments have alternatives for their program; these alternative options may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements:**
 - The requirements for the major in Chinese exceed the CLA minimum for this requirement.
 - **Notes on Foreign Language Study**

- The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
- Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
- See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements: Ten courses in Chinese (30 credits)

The Chinese major is 10 courses/30 credits after the prerequisites of CHI 1001, CHI 1002, CHI 2001, and CHI 2002 (or equivalent in transfer or experience) with a minimum grade of C- or equivalent placement.

Course levels are incremental in skills and content. Language courses must be taken sequentially (Chinese culture, film, and literature courses taught in English can be taken concurrently with language courses).

Code	Title	Credit Hours
CHI 3001	Chinese Advanced I	3
CHI 3002	Chinese Advanced II	3
CHI 4001	Chinese Culture and Civilization	3
CHI 4296	Chinese Composition	3
CHI 4297	Chinese Capstone Seminar	3
Four Chinese 2000+ Electives (Upper Level Electives in Literature, Film, and Descriptive Linguistics) ¹		12
One Chinese 3000+ Elective (Advanced Elective in Literature, Film, and Descriptive Linguistics)		3
Total Credit Hours		30

1

One of the electives must focus on the Premodern period.

Suggested Academic Plan

Bachelor of Arts in Chinese

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ}		4
CHI 1001	Chinese Elements I	4
GenEd Breadth Course		3
Credit Hours		15
Spring		
CHI 1002	Chinese Elements II	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3

CHI 2001	Chinese Intermediate I	3
CHI 2000+ Elective (Literature, Film, Descriptive Linguistics - premodern)		3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Spring		
CHI 2002	Chinese Intermediate II	3
CHI 2000+ Elective (Literature, Film, or Descriptive Linguistics)		3
CLA 1002	Professional Development for Liberal Arts Majors	1
GenEd Breadth Course		3
GenEd Breadth Course		3
CLA/CST 0800-4999 Elective		2
Credit Hours		15
Year 3		
Fall		
CHI 3001	Chinese Advanced I	3
CLA/CST 0800-4999 Elective		3
CHI 2000+ Elective (Literature, Film, or Descriptive Linguistics)		3
CLA/CST 2000+ Social Science/CST Course		3
GenEd Breadth Course		3
One 0800-4999 Elective in Any School or College		2
Credit Hours		17
Spring		
CHI 3002	Chinese Advanced II	3
CHI 3000+ Elective (Literature, Film, or Descriptive Linguistics)		3
CLA/CST 2000+ Course		3
CLA/CST 2000+ Social Science/CST Course		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Year 4		
Fall		
CHI 4001	Chinese Culture and Civilization	3
CHI 4296	Chinese Composition	3
CLA/CST 2000+ Course		3
CLA/CST 2000+ Course		3
One 0800-4999 Elective in Any School or College		3
Credit Hours		15
Spring		
CHI 4297	Chinese Capstone Seminar (Literature, Film, or Descriptive Linguistics)	3
CHI 2000+ Elective (Literature, Film, or Descriptive Linguistics)		3
CLA/CST 0800-4999 Elective		3
0800-4999 Elective in Any School or College		6
Credit Hours		15
Total Credit Hours		123

Chinese Certificate

Overview

A **Certificate in Chinese**, offered by the Department of Asian and Middle Eastern Languages and Studies, focuses on learning language skills and developing a strong foundation for the effective use of Chinese socially and professionally. This program should be of particular interest to students considering careers in international business, government service or other professions where foreign language proficiency is important. This program also contributes to meeting the diverse language needs of students with personal or academic interests in China and its culture.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Program Code: LA-CHI-CR2+

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Learn more about the undergraduate certificate in Chinese.

Requirements

A grade of C- or higher must be earned in all required courses.

Code	Title	Credit Hours
CHI 1001	Chinese Elements I	4
CHI 1002	Chinese Elements II	4
CHI 2001	Chinese Intermediate I	3
CHI 2002	Chinese Intermediate II	3
CHI 3001	Chinese Advanced I	3
CHI 3002	Chinese Advanced II	3
Total Credit Hours		20

Chinese Minor

Overview

The **Minor in Chinese**, offered by the Department of Asian and Middle Eastern Languages and Studies, requires 6 courses: three Chinese-language courses and three China-focused content courses. Students who place out of CHI 2002, CHI 3001, and/or CHI 3002 may substitute Chinese electives. See the Department of Asian and Middle Eastern Languages and Studies for more information on placement and appropriate substitutions.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

The minor can only be taken as part of an undergraduate degree program. An average of 2.0 in all Chinese courses as well as a minimum grade of C- must be earned in all courses used for the minor. The specific courses required for this minor are listed below.

Code	Title	Credit Hours
Required Courses		
CHI 2002	Chinese Intermediate II	3
CHI 3001	Chinese Advanced I	3
CHI 3002	Chinese Advanced II	3
Electives		
Select two of the following:		6
ASST 3000	Special Topics in Asian Studies II	
ASST 3030	Special Topics III (focused on Chinese literature or film) ¹	
CHI 2011 or ASST 2014	Pre-Modern Chinese Literature	
CHI 2022	Contemporary Chinese Urban Film and Fiction in Translation	

or ASST 2022	Contemporary Chinese Urban Film and Fiction in Translation	
CHI 2112	Chinese Literature: From Classical to Contemporary	
or ASST 2112	Chinese Literature: From Classical to Contemporary	
CHI 3000	Chinese Special Topics I	
CHI 3031	Women in Chinese Literature	
or ASST 3031	Women in Chinese Literature	
Select one other elective ²		3
Total Credit Hours		18

1

ASST 3030 may only count if the content is focused exclusively on Chinese literature or film.

2

One elective from another CLA department may be approved by an advisor (the course must be focused exclusively on China).

Classical Languages and Literature Minor

Overview

The **Minor in Classical Languages and Literature** is offered by the Department of Greek and Roman Classics. Classics is an interdisciplinary field of study which encompasses multiple disciplines of the liberal arts: languages, history, literature, art and philosophy. Majors and minors in the Greek and Roman Classics department are encouraged to study a semester at Temple's Rome Campus.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

Code	Title	Credit Hours
Classical Language Requirement		
4 courses in one or both languages depending on Latin placement		12-14
GRKA 1001	Ancient Greek 1	
GRKA 1002	Ancient Greek 2	
GRKA 2001	Ancient Greek 3	
GRKA 2002	Ancient Greek 4	
and/or		
LAT 1001	Latin 1	
LAT 1002	Latin 2	
LAT 2001	Latin 3	
LAT 2002	Latin 4	
LAT 3096	Readings in Latin Literature I	
LAT 3002	Readings in Latin Literature II	
Minor Electives		
Select two courses in GRC numbered 2000-4999		6
Courses must be selected from Ancient Greek, Latin, Greek and Roman Classics or courses on aspects of the ancient Greek and Roman world offered in other Temple University departments such as Art History, History, Religion, and Philosophy with approval of the Classics faculty advisor.		
Total Credit Hours		18-20

Classics BA with Classical Civilizations Concentration

Overview

The **Bachelor of Arts in Classics** is offered by the Department of Greek and Roman Classics. Students **must select one of the following concentrations**:

- Classical Civilizations
- Classical Languages and Literature.

The Department also offers the minor in Ancient Mediterranean Studies and the minor in Classical Languages and Literature. Students in these programs study the cultures and languages of two major civilizations of the ancient Mediterranean world. Classics is an interdisciplinary field of study which encompasses multiple disciplines of the liberal arts: languages, history, literature, art and philosophy.

Campus Location: Main

Program Code: LA-CLAS-BA

Career Preparation

Classics offers a sound liberal arts background that prepares students for any career. Classics majors have held senior positions in government, law and public service organizations, have founded and headed companies and organizations, and have worked as correspondents and journalists. Recent Temple Classics majors have gone on to law school, veterinary school, graduate school, and business and teaching careers. To help prepare for careers, the Department of Greek and Roman Classics offers funding for internships that provide no remuneration.

Study Abroad

Classics majors and minors are encouraged to study a semester at Temple's Rome Campus. Majors are eligible to apply for funding for summer study in the Mediterranean through the Rudolph Masciantonio Traveling Summer Scholarship.

Undergraduate Associations

The organization for majors and minors is the Temple Classics Club, and there is a chapter of the national honorary society for Classics, Eta Sigma Phi, on campus.

Distinction in Major

Distinction in Major requires a senior thesis and a minimum GPA of 3.5 in Greek, Latin, or Greek and Roman Classics courses.

Contact Information

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Learn more about the Bachelor of Arts in Classics.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. See below for a list of the specific courses required for your major.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 83) section of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999).
- **Distribution Requirement for Humanities majors:** Six upper level credits must be earned in the Social Science, Science, and/or interdisciplinary subject areas. Select from the following CLA departments and programs: Africology & African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Gender, Sexuality, and Women's Studies, Geography and Urban Studies, Global Studies, History, Jewish Studies, Latin American Studies, Lesbian, Gay, Bisexual, and Transgender Studies, Liberal Arts, Neuroscience (CLA), Political Science, Psychology, and Sociology, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Professional Development Requirement**
 - All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements:**
 - All students must complete the second level of a foreign language;
 - All students must complete at least one course from the GenEd Global/World Society category; and
 - All students must complete one of the following options:
 - Third level of a foreign language;
 - Demonstrated proficiency in a foreign language;
 - A second General Education Global/World Society course;
 - Study Abroad at an approved program; or
 - Take one Global Studies course from the list on the CLA College Requirements (p. 940) page.
- **General Electives** are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (a minimum of 35 credits in Ancient Greek, Latin, Greek and Roman Classics and related course work)

Code	Title	Credit Hours
Required Courses		
GRC 2101	The Greeks	3
GRC 2102	The Romans	3
Language Courses		
Select two courses in Ancient Greek or two courses in Latin language:		7-8
GRKA 1001	Ancient Greek 1	
GRKA 1002	Ancient Greek 2	
LAT 1001	Latin 1	
LAT 1002	Latin 2	
Writing Intensive Courses		
Select two of the following:		6
GRC 3596	Ancient City: Periclean Athens	

GRC 3696	Ancient City: Hellenistic Alexandria	
GRC 3796	Ancient City: Augustan Rome	
GRC 3897	Ancient City: Jerusalem	
Art History Course		
Select one of the following:		4
ARTH 2105	Roman Art and Archaeology	
ARTH 2111		
ARTH 2135	Art and Culture in Ancient Rome	
ARTH 2215	Holy Image, Glittering Mosaic: The Art of the Byzantine Empire	
ARTH 2129	Greek and Roman Sculpture	
ARTH 2196	Greek and Roman Sculpture	
ARTH 2216	Early Medieval Visual Culture	
Greek & Roman Classic Courses		
Select three of the following:		9
GRC 2002	Gender in Classical Antiquity	
GRC 2011	Classical Greek and Roman Mythology	
GRC 3000	Topics in Classical Culture	
GRC 3311	Ancient Greek Historians	
GRC 3312	Ancient Roman Historians	
GRC 3496	Writing Seminar	
Select one course in a related department with consultation of your faculty advisor. This elective may be taken in Anthropology, Art History, History, Philosophy or Religion.		3
Total Credit Hours		35

Suggested Academic Plan

Bachelor of Arts in Classics: Classical Civilizations Concentration

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4
GenEd Breadth Course		3
Select one of the following:		4
GRKA 1001	Ancient Greek 1	
LAT 1001	Latin 1	
Credit Hours		15
Spring		
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Select one of the following:		4
GRKA 1002	Ancient Greek 2	
LAT 1002	Latin 2	
Credit Hours		16
Year 2		
Fall		
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	

GenEd Breadth Course		3
GenEd Breadth Course		3
GRC 2101	The Greeks	3
Select one of the following:		3
Ancient Greek/Latin III		
GenEd Global/World Society Course		
Internationally Focused Course From Approved List		
Credit Hours		15
Spring		
GRC 2102	The Romans	3
Greek & Roman Classic 1000+ Elective From the Approved List		3
CLA 1002	Professional Development for Liberal Arts Majors	1
GenEd Breadth Course		3
CLA/CST 0800-4999 Elective		3
CLA/CST 2000+ Course		3
Credit Hours		16
Year 3		
Fall		
CLA/CST 2000+ Social Science/CST Course		3
Greek & Roman Classic 1000+ Elective From the Approved List		3
Greek & Roman Classic Writing-Intensive 3000+ Course From the Approved List		3
Art History 2000+ Course From Approved List		4
CLA/CST 0800-4999 Elective		3
Credit Hours		16
Spring		
CLA/CST 2000+ Social Science/CST Course		3
Greek & Roman Classic 2000+ Elective From the Approved List		3
Greek & Roman Classic Writing-Intensive 3000+ Course From the Approved List		3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Year 4		
Fall		
Greek & Roman Classic Elective (Consult With Faculty Advisor for Approval)		3
CLA/CST 2000+ Course		3
CLA/CST 2000+ Course		3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Spring		
CLA/CST 2000+ Course		3
CLA/CST 2000+ Course		3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		3
One 0800-4999 Elective in Any School or College		3
Credit Hours		15
Total Credit Hours		123

Classics BA with Classical Languages and Literature Concentration

Overview

The **Bachelor of Arts in Classics** is offered by the Department of Greek and Roman Classics. Students **must select one of the following concentrations**:

- Classical Civilizations
- Classical Languages and Literature.

The Department also offers the minor in Ancient Mediterranean Studies and the minor in Classical Languages and Literature. Students in these programs study the cultures and languages of two major civilizations of the ancient Mediterranean world. Classics is an interdisciplinary field of study which encompasses multiple disciplines of the liberal arts: languages, history, literature, art and philosophy.

Campus Location: Main

Program Code: LA-CLAS-BA

Career Preparation

Classics offers a sound liberal arts background that prepares students for any career. Classics majors have held senior positions in government, law and public service organizations, have founded and headed companies and organizations, and have worked as correspondents and journalists. Recent Temple Classics majors have gone on to law school, veterinary school, graduate school, and business and teaching careers. To help prepare for careers, the Department of Greek and Roman Classics offers funding for internships that provide no remuneration.

Study Abroad

Classics majors and minors are encouraged to study a semester at Temple's Rome Campus. Majors are eligible to apply for funding for summer study in the Mediterranean through the Rudolph Masciantonio Traveling Summer Scholarship.

Undergraduate Associations

The organization for majors and minors is the Temple Classics Club, and there is a chapter of the national honorary society for Classics, Eta Sigma Phi, on campus.

4+1 BA/MEd Accelerated Program for High School Latin Teachers (with the College of Education and Human Development)

The accelerated +1 program offers students following the concentration in Classical Languages and Literature in the College of Liberal Arts the exciting opportunity to complete their undergraduate degree and a Master of Education in Secondary Education with one year of study beyond the BA. Students take several graduate-level courses while still an undergraduate student. The MEd meets the Pennsylvania Department of Education's program requirements for Teacher Certification as a Latin teacher. See the College of Education and Human Development for more details.

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Learn more about the Bachelor of Arts in Classics.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. See below for a list of the specific courses required for your major.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 83) section of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999).
- **Distribution Requirement for Humanities majors:** Six upper level credits must be earned in the Social Science, Science, and/or interdisciplinary subject areas. Select from the following CLA departments and programs: Africology & African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Gender, Sexuality, and Women's Studies, Geography and Urban Studies, Global Studies, History, Jewish Studies, Latin American Studies, Lesbian, Gay, Bisexual, and Transgender Studies, Liberal Arts, Neuroscience (CLA), Political Science, Psychology, and Sociology, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Professional Development Requirement**
 - All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements:**
 - All students must complete the second level of a foreign language;
 - All students must complete at least one course from the GenEd Global/World Society category; and
 - All students must complete one of the following options:
 - Third level of a foreign language;
 - Demonstrated proficiency in a foreign language;
 - A second General Education Global/World Society course;
 - Study Abroad at an approved program; or
 - Take one Global Studies course from the list on the CLA College Requirements (p. 940) page.
- **General Electives** are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (a minimum of 35 credits in Ancient Greek, Latin, Greek and Roman Classics and related course work)

Code	Title	Credit Hours
Required Courses		
Seven of the following: ^{1,2}		23
GRKA 1001	Ancient Greek 1	
GRKA 1002	Ancient Greek 2	
GRKA 2001	Ancient Greek 3	
GRKA 2002	Ancient Greek 4	
GRKA 3002	Readings in Greek Literature II	
LAT 1001	Latin 1	
LAT 1002	Latin 2	

LAT 2001	Latin 3	
LAT 2002	Latin 4	
LAT 3002	Readings in Latin Literature II	
One of the following Writing Capstone Seminars:		3
GRKA 3096	Readings in Greek Literature I	
LAT 3096	Readings in Latin Literature I	
One course in mythology:		3
GRC 2011	Classical Greek and Roman Mythology	
One Writing Intensive elective in Greek and Roman Classics		3
GRC 3496	Writing Seminar	
GRC 3696	Ancient City: Hellenistic Alexandria	
GRC 3796	Ancient City: Augustan Rome	
GRC 3897	Ancient City: Jerusalem	
Major Elective		3
One Greek and Roman Classics elective that does not overlap with any of the above requirements.		
Total Credit Hours		35

1

Select two courses in Greek (Ancient) and/or Latin languages. If exempt from beginning Greek (Ancient) and/or Latin courses through placement, substitute additional electives until a total of seven language courses is completed.

2

May include advanced courses in Greek (Ancient) and/or Latin. Or may include related courses in other departments, per departmental approval.

Suggested Academic Plan

Bachelor of Arts in Classics: Classical Languages and Literature Concentration

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4
GenEd Breadth Course		3
Select one of the following:		4
GRKA 1001	Ancient Greek 1	
LAT 1001	Latin 1	
Credit Hours		15
Spring		
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Select one of the following:		4
GRKA 1002	Ancient Greek 2	
LAT 1002	Latin 2	
Credit Hours		16
Year 2		
Fall		
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
GenEd Breadth Course		3

GenEd Breadth Course		3
CLA/CST 2000+ Course		3
One 0800-4999 Elective in Any School or College		2
Select one of the following:		3
GRKA 2001	Ancient Greek 3	
LAT 2001	Latin 3	
Credit Hours		17
Spring		
CLA 1002	Professional Development for Liberal Arts Majors	1
Select one of the following:		3
GRKA 2002	Ancient Greek 4	
LAT 2002	Latin 4	
GenEd Breadth Course		3
CLA/CST 0800-4999 Elective		2
CLA/CST 2000+ Course		3
CLA/CST 2000+ Course		3
Credit Hours		15
Year 3		
Fall		
CLA/CST 2000+ Social Science/CST Course		3
Greek & Roman Classics 1003-4999 Elective		3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		3
Select one of the following:		3
GRKA 3002	Readings in Greek Literature II	
LAT 3002	Readings in Latin Literature II	
Credit Hours		15
Spring		
CLA/CST 2000+ Social Science/CST Course		3
Greek (Ancient) or Latin Language 1000+ Course		3
Greek & Roman Classics Writing Intensive elective		3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Year 4		
Fall		
Greek (Ancient) or Latin Language 1000+ Course		3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		3
One 0800-4999 Elective in Any School or College		3
Select one of the following:		3
GRKA 3096	Readings in Greek Literature I	
LAT 3096	Readings in Latin Literature I	
Credit Hours		15
Spring		
CLA/CST 2000+ Course		3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		3
One 0800-4999 Elective in Any School or College		3

GRC 2011	Classical Greek and Roman Mythology	3
	Credit Hours	15
	Total Credit Hours	123

Clinical and Health Psychology Minor

Overview

The **Minor in Clinical and Health Psychology**, offered by the Department of Psychology and Neuroscience, consists of 21 credits. The minor introduces students to the specialties in psychology that focus on understanding health and illness through the study of the interplay among psychology, biology and environment. This minor is designed for students who do not major in psychology but have interests in psychology, public health and other health-related careers (e.g., nursing, speech therapy). Pre-med students will find this minor helpful in preparing for the MCAT exam, which was modified to include psychology topics.

Students outside of the Psychology major may declare this minor. Psychology majors are **not** permitted to declare the Clinical and Health Psychology minor but are permitted to take its courses as electives in their major.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

Seven courses are required.

Code	Title	Credit Hours
PSY 1001	Introduction to Psychology	3
PSY 1003	Statistics for Psychology	3
PSY 1004	Critical Thinking in Psychology	3
PSY 2201	Foundations of Psychopathology	3
PSY 2601	Foundations of Health Psychology ¹	3
Select two of the following advanced-level courses:		6
PSY 3600	Advanced Topics in Health Psychology	
PSY 3601	Social Health Psychology	
PSY 3602	Clinical Neuropsychology	
PSY 3603	Clinical Applications of Health Psychology	
PSY 3303	Psychological Testing: Measuring IQ, Thoughts, Feelings, and Attitudes	
PSY 3223	Child Psychopathology and Treatment	
PSY 3221	Clinical Psychology: Research and Practice	
PSY 3200	Topics: Clinical	
PSY 3561	Psychopharmacology	
PSY 3306	Neuroscience of Development and Aging	
Total Credit Hours		21

1

For students in the College of Public Health, SBS 2103 Health Psychology and Human Behavior (formerly HRPR 2103) may be used as a substitution for PSY 2601. All other students should take PSY 2601. Students may only receive credits for one of these two courses.

Cognitive Neuroscience Minor

Overview

Cognitive Neuroscience is an interdisciplinary field with a focus on a fundamental mystery of science: how the mind arises from the brain. The **Minor in Cognitive Neuroscience**, offered by the Department of Psychology and Neuroscience, will strengthen the academic record of students who plan

to apply for graduate programs. For example, in Psychology this minor will strengthen applicants' records for specializations such as Behavioral Neuroscience, Clinical Neuropsychology, Cognitive Psychology, or Psychophysiology. Students might also go into General Neuroscience or Cognitive Science. Pre-med students with a Cognitive Neuroscience minor would present distinctive profiles to medical school admissions offices.

Students in the College of Liberal Arts (including Psychology majors) as well as students in other colleges, schools, and departments may choose to minor in Cognitive Neuroscience. Only the following courses can be double-counted for the Psychology major and the Cognitive Neuroscience minor:

- PSY 1001 Introduction to Psychology
- PSY 1003 Statistics for Psychology
- PSY 1004 Critical Thinking in Psychology

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

Students must complete successfully the following courses with a grade of C- or better:

Code	Title	Credit Hours
Required Courses		
PSY 1001	Introduction to Psychology	3
PSY 1003	Statistics for Psychology ¹	3
PSY 1004	Critical Thinking in Psychology ¹	3
NSCI 1051	Fundamentals of Neuroscience	3
PSY 2502	Foundations of Cognitive Neuroscience ¹	3
Cognitive Neuroscience Elective Courses		
Select two of the following:		6
CSCD 2049	Language and the Brain	
CSCD 2219	¹	
NSCI 2001	Functional Neuroanatomy ¹	
NSCI 2121	Development/Plasticity/Repair ¹	
NSCI 2222	The Neurobiology of Disease ¹	
NSCI 3005	Affective Neuroscience ¹	
or PSY 3005	Affective Neuroscience	
NSCI 3087	Techniques in Neuroscience ¹	
PHIL 2144	Introduction to the Philosophy of Mind	
or PHIL 4244	Philosophy of Mind	
PSY 2501	Foundations of Behavioral Neuroscience ¹	
PSY 2101	Foundations of Cognitive Psychology ¹	
PSY 3002	Evolutionary and Comparative Psychology ¹	
PSY 3100	Topics: Brain, Behavior and Cognition ¹	
PSY 3131	Problem Solving and Creative Thinking	
PSY 3132	Human Memory ¹	
PSY 3172	The Science of Sleep ¹	
PSY 3305	Cognitive and Language Development ¹	
PSY 3306	Neuroscience of Development and Aging ¹	
PSY 3411	Social Cognition ¹	
PSY 3561	Psychopharmacology ¹	
PSY 3566	Neurobiology of Learning and Memory ¹	
PSY 3602	Clinical Neuropsychology ¹	
PSY 4182	Independent Study in Cognitive Neuroscience I	

PSY 4282

Independent Study in Cognitive Neuroscience II ¹**Total Credit Hours****21**

1

Check for prerequisites

Creative Writing Minor

Overview

The **Minor in Creative Writing**, offered by the Department of English, is designed to draw both majors and non-majors who are interested in cultivating their creative writing in a structured, focused program. Student focus on either fiction or poetry in a core sequence of three creative writing courses as well as electives in other creative writing genres or literature.

Upon completion of the minor, students will have collected a portfolio of creative writing in multiple genres suitable for application to graduate programs, internship opportunities, or for publication in literary journals or as a manuscript.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

Code	Title	Credit Hours
A. Workshop Sequence		
Complete three courses within one of the following genre sequences (poetry or fiction):		9
Poetry Sequence		
ENG 2003	Creative Writing: Poetry	
ENG 3003	Intermediate Poetry Writing	
ENG 3103	Advanced Poetry Workshop	
Fiction Sequence		
ENG 2004	Creative Writing: Fiction	
ENG 3004	Intermediate Fiction Workshop	
ENG 3104	Advanced Fiction Workshop	
B. Workshop in Second Genre		
Select one course in a genre other than your chosen sequence:		3
ENG 2003	Creative Writing: Poetry	
ENG 2004	Creative Writing: Fiction	
ENG 2005	Creative Writing: Plays	
ENG 2006	Non-Fiction Writing	
ENG 3003	Intermediate Poetry Writing	
ENG 3004	Intermediate Fiction Workshop	
ENG 3005	Advanced Creative Writing: Plays	
ENG 3401	Intermediate Writing: Non-Fiction	
C. Literature Course in Chosen Genre ¹		
Select one literature course in your chosen genre:		3
Poetry		
ENG 2511	Modern Poetry	
ENG 3511	Modern British and American Poetry	
ENG 3521	Contemporary Poetry	
Fiction		
ENG 2111	The Short Story	

ENG 2112	Children's Literature and Folklore
ENG 2113	Popular Fiction
ENG 2115	Young Adult Literature
ENG 2116	Disability and Literature
ENG 2512	The Modern Novel
ENG 2513	Modern Drama
ENG 2521	Contemporary Literature
ENG 3232	English Novel to 1832
ENG 3252	Victorian Novel
ENG 3261	Modern British Fiction
ENG 3331	Modern American Fiction
ENG 3332	Contemporary American Fiction
ENG 3513	Modern World Fiction
ENG 3522	Contemporary World Fiction in English
ENG 3523	Contemporary Drama
Variable; course genre will be designated each semester ²	
ENG 2206	The City in Literature
ENG 2714	Writing for the Arts
ENG 3101	Themes and Genres in Women's Literature
ENG 3241	English Romanticism
ENG 3321	American Romanticism
ENG 3322	American Realism and Naturalism
ENG 3411	Studies in African-American Literary Genre
ENG 3412	The Harlem Renaissance

D. Elective in Creative Writing or Literature

Select one elective from the following list of Creative Writing courses or an additional Literature course from list C above: 3

ENG 0826	Creative Acts
or ENG 0926	Honors Creative Acts
ENG 2005	Creative Writing: Plays
ENG 2006	Non-Fiction Writing
ENG 2022	Beyond the Field: Sports and Storytelling
ENG 3005	Advanced Creative Writing: Plays
ENG 3401	Intermediate Writing: Non-Fiction
ENG 3085	Career Internship (when the internship complements the minor)
ENG 3813	Writers at Work

An additional workshop (not previously taken) in fiction, poetry or playwriting from the Workshop in Second Genre requirement listed above.

Total Credit Hours

18

1

Additional courses may be substituted, pending approval of the director of undergraduate studies.

2

Genre designations for these courses are subject to change each semester. Check with the undergraduate advisor for specific genre designations prior to registering for these courses.

Criminal Justice BA

Overview

The **Bachelor of Arts in Criminal Justice** is offered by the Department of Criminal Justice. The mission of the Criminal Justice program is to foster a comprehensive understanding of the nature of crime and the effectiveness and fairness of society's efforts to prevent and control it. Students engage in a multi-disciplinary approach to the study of crime, offenders and victims, and the agencies, goals, laws, policies and processes of the criminal justice system. The Criminal Justice major emphasizes critical thinking about the kinds of questions and problems that shape developments in research, practice, policy and reform, and the skills utilized by scholars and professionals in the field.

Students majoring in Criminal Justice who pursue the Cybersecurity and Human Behavior certificate are permitted to count up to two Criminal Justice courses towards both programs.

Campus Location: Main

Program Code: LA-CJ-BA

Careers

Majoring in criminal justice helps to prepare students for careers as practitioners, researchers and academics in a variety of public and private sector professions in both adult and juvenile systems of justice, at the federal, state and local levels of government. Graduates obtain positions with many different public and private criminal justice-related agencies, including local, state and federal law enforcement; district attorney offices; public defender offices; juvenile and adult probation agencies; city, county and federal courts; crime victims advocacy agencies; organizations providing rehabilitation and reentry services; and social justice organizations.

Criminal Justice students learn the core liberal arts skills in oral and written communication, problem-solving, and critical thinking, also preparing them for career paths outside the traditional criminal justice occupations or for post-graduate education. Graduates move on to doctoral and master's degree programs in criminology and criminal justice, law school, social work, forensic psychology, business school, public policy, and a wide variety of other advanced degrees.

The department hosts an annual career fair every spring for Criminal Justice majors where representatives from over 40 local, state, federal, and private criminal and social justice related organizations gather to recruit Temple students for competitive internships and post-graduation careers.

Internship and Experiential Learning

Students are encouraged to enroll in our specialized internship program, earning 3 credits for CJ 4075 Criminal Justice Internship Seminar (which can be used toward the electives in the major) and 1–9 credits in CJ 4085 Criminal Justice Internship (which count towards the 123 credits required for graduation but may not be used to fulfill any requirements of the Criminal Justice major). This program runs in the Fall, Spring and Summer (over the two summer sessions). Interested students should contact the CJ advisor, Kimberly Campanese (kimberly.campanese@temple.edu), for more information.

Many other courses in the department include experiential learning components. CJ 2701 Inside-Out Prison Exchange is part of an award-winning national and international program that originated here at Temple University's Criminal Justice Department. Students travel weekly to a local prison where they take a class with a select group of inmates. In other classes, students often take field trips, hear from guest speakers, and engage in hands-on research and policy-relevant projects.

Criminal Justice 4+1 Accelerated BA/MA Program

High-achieving undergraduates will be invited by the faculty of the Criminal Justice Department to apply for the 4+1 BA/MA accelerated program. Students admitted to this program begin taking graduate courses, along with their undergraduate curriculum, in their last three undergraduate semesters. After completing their Bachelor of Arts degree, they then complete the remaining requirements of a Master of Arts in Criminal Justice in the 5th year. Twelve credits of graduate work may count for both the Bachelor's and Master's degree programs; these are used as Criminal Justice major electives in the undergraduate degree. Eligible students will have a minimum 3.5 overall GPA and will be able to complete their Bachelor's degree in three semesters by the time they are admitted to the 4+1 program in the spring of their Junior year. Students must have completed or be enrolled in the following courses to be considered for this program: CJ 1001, CJ 2401, CJ 2597 and CJ 2602.

Eligible students will receive notification at the end of their Sophomore year, and applications will be accepted until September 30th of their Junior year.

Student Organization

The Criminal Justice Society hosts speakers from a variety of criminal justice related organizations, hosts information sessions on applying to graduate school and law school, and performs voluntary community service projects both within and outside the Temple community. Membership is open to all students majoring or minoring in Criminal Justice. For more information, contact the Criminal Justice Society advisor, Cheryl Irons (cirons@temple.edu).

Distinction in Major

Criminal Justice majors may graduate with distinction in the major if they have earned a GPA of 3.5 in the major and a cumulative GPA of at least 3.25.

Contact Information

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[Learn more about the Bachelor of Arts in Criminal Justice.](#)

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are CJ 2597 and CJ 4097.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 83) section of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including:
 - 90 credits in CLA/CST courses;
 - 45 credits of which must be at the upper level (numbered 2000-4999).
 - For **Social Science majors**, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art and Architecture, or any department in the College of Science and Technology.
 - A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
 - Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Professional Development Requirement**
 - All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the general course option for any CLA major and Criminal Justice offers CJ 1002 Professional Development in Criminal Justice. Several other departments have alternatives to these courses which may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements:**
 - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
 - All students must complete at least one course from the GenEd Global/World Society category; and
 - All Bachelor of Arts students must complete one of the following options:
 - Third semester of a foreign language;
 - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
 - Take one Global Studies course from the list on the CLA College Requirements (p. 940) page;
 - Study Abroad at an approved program; or
 - Take a second General Education Global/World Society course.
- **Notes on Foreign Language Study**
 - The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
 - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)

- See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (36 credits)

Code	Title	Credit Hours
Specifically Required Courses		
CJ 1001	Introduction to Criminal Justice	3
CJ 2401	Nature of Crime	3
CJ 2501	Introduction to Criminal Law	3
CJ 2597	Criminal Justice Research Methods	3
CJ 2602	Criminal Justice Statistics	3
CJ 4097	CJ Capstone Seminar	3
Electives in Major ¹		
Select three Criminal Justice electives numbered 2000-4999		9
Select three Criminal Justice electives numbered 3000-4999		9
Total Credit Hours		36

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A student may count CJ 4075 toward the Criminal Justice major electives. CJ 4085 does not count toward the major electives but up to 12 credits may count as free electives.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Criminal Justice

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ}		4
Foreign Language 1001 - first level		4
GenEd Breadth Course		3
Credit Hours		15
Spring		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Foreign Language 1002 - second level		4
CJ 1001	Introduction to Criminal Justice	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
CJ 2401	Nature of Crime	3
CJ 2597	Criminal Justice Research Methods	3
GenEd Breadth Course		3

Select one of the following:		3
Foreign Language - third level		
GenEd Global/World Society Course		
Internationally-Focused Course From Approved List		
	Credit Hours	15
Spring		
GenEd Breadth Course		3
GenEd Breadth Course		3
CJ 1002	Professional Development in Criminal Justice	1
CJ 2501	Introduction to Criminal Law	3
CJ 2602	Criminal Justice Statistics	3
CLA/CST 0800-4999 Elective		2
	Credit Hours	15
Year 3		
Fall		
Criminal Justice 2000+ Course		3
Criminal Justice 2000+ Course		3
CLA/CST 2000+ Elective		3
CLA/CST 2000+ Humanities/CST Course		3
CLA/CST 0800-4999 Elective		3
	Credit Hours	15
Spring		
GenEd Breadth Course		3
Criminal Justice 2000+ Course		3
Criminal Justice 3000+ Course		3
CLA/CST 2000+ Humanities/CST Course		3
CLA/CST 0800-4999 Elective		4
	Credit Hours	16
Year 4		
Fall		
Criminal Justice 3000+ Course		3
Criminal Justice 3000+ Course		3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
	Credit Hours	15
Spring		
CJ 4097	CJ Capstone Seminar	3
CLA/CST 2000+ Elective		3
CLA/CST 0800-4999 Elective		4
Electives at Any Level in Any School or College		6
	Credit Hours	16
	Total Credit Hours	123

Criminal Justice Minor

Overview

The **Minor in Criminal Justice** is offered by the Department of Criminal Justice. The mission of the Criminal Justice program is to foster a comprehensive understanding of the nature of crime and the effectiveness and fairness of society's efforts to prevent and control it.

Students minoring in Criminal Justice who pursue the Cybersecurity and Human Behavior certificate are permitted to count one Criminal Justice course towards both programs.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Student Organization

The Criminal Justice Society hosts speakers from a variety of criminal justice related organizations, hosts information sessions on applying to graduate school and law school, and performs voluntary community service projects both within and outside the Temple community. Membership is open to all students majoring or minoring in Criminal Justice. For more information, contact the Criminal Justice Society advisor, Cheryl Irons, cirons@temple.edu.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

Code	Title	Credit Hours
CJ 1001	Introduction to Criminal Justice	3
CJ 2401	Nature of Crime	3
CJ 2501	Introduction to Criminal Law	3
Two Criminal Justice courses numbered 2000-4999		6
One Criminal Justice course numbered 3000-4999		3
Total Credit Hours		18

Cybersecurity and Human Behavior Certificate

Overview

The five-course **Certificate in Cybersecurity and Human Behavior**, offered by the Department of Criminal Justice, focuses on the human and social elements of cyberattacks and cybersecurity. In addition to obtaining a broad understanding of cybercrime and cyber-investigations, students will learn how technology has impacted various other crimes, such as organized crime, terrorism, hate crimes and white-collar crime. Through the core and elective courses, students will be introduced to criminological concepts, such as theories of criminal behavior, organizational structures and group dynamics, decision-making and adaptation, and to law enforcement and legal responses to cyberattacks.

The certificate will emphasize experiential learning and the development of critical thinking, writing and oral communication skills, which will prepare students to be strong contributors to the cybersecurity discourse and community. Completing the certificate enhances student's candidacy for positions in cybersecurity by demonstrating understanding of the relevance of the human factor in cyberattacks and cybersecurity.

This program is open to any matriculated undergraduate students. Students majoring in Criminal Justice who pursue the Cybersecurity and Human Behavior certificate are permitted to count up to two Criminal Justice courses towards both programs. Students minoring in Criminal Justice who pursue the Cybersecurity and Human Behavior certificate are permitted to count one Criminal Justice course towards both programs.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Program Code: LA-CYHB-CERT

Contact Information

215-204-1375

<https://liberalarts.temple.edu/academics/departments-and-programs/criminal-justice>

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Learn more about the undergraduate certificate in Cybersecurity and Human Behavior.

Requirements

Code	Title	Credit Hours
Required Courses		
CJ 3007	Cybercrime	3
CJ 3506	Cyber-Investigations, Digital Forensics, and the Law	3
Electives		
Select three of the following:		9
CJ 3401	White Collar Crime	
CJ 3403	Organized Crime	
CJ 3405	Terrorism, Transnational Crime and Global Security	
CJ 3504	Hate Crimes	
POLS 2232	Cyberpolitics	
Total Credit Hours		15

Economics BA

Overview

The **Bachelor of Arts in Economics**, offered by the Department of Economics, exposes students to the economist's way of thinking about social problems and behavior. The major helps a student understand the economic aspect of current events and public policy and is excellent preparation for careers in law and business.

Campus Locations: Main and Japan

Program Code: LA-ECON-BA

Accelerated Degree Program

Students who wish to earn a BA and an MA in Economics may do so in a combined +1 accelerated program. Students begin graduate study during their undergraduate program and are able to count some electives towards both degrees. This program is only open to students who will complete both degrees in a total of five years or less. See the Economics faculty advisor if you are considering this option.

Honors Society and Majors' Association

The student honorary fraternity is Omicron Delta Epsilon. Along with the more general student organization, The Economics Society, it provides opportunities for students to network with other students and with practicing economists in learning more about economics and finding internships and employment opportunities.

Workplace Preparation

Students may participate in an internship, gaining valuable work experience which can enhance their job market prospects upon graduation. By completing an academic research project under the guidance of a faculty member, student interns may earn credit for ECON 2585.

Cooperative Education Option

Through this program, students may earn income while gaining valuable work experience which can enhance their job market prospects upon graduation. By completing an academic research project under the guidance of a faculty member, co-op students will earn credit for ECON 3581.

Contact Information

Main Campus

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Temple Japan Campus

Hady George Kahy, PhD, Economics Coordinator
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Learn more about the Bachelor of Arts in Economics.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are ECON 3598 and one of the following: ECON 3596, ECON 3597, ECON 3696, ECON 3697, or ECON 3698.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 83) section of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including:
 - 90 credits in CLA/CST courses;
 - 45 credits of which must be at the upper level (numbered 2000-4999).
 - For **Social Science majors**, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art and Architecture, or any department in the College of Science and Technology.
 - A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
 - Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Professional Development Requirement**
 - All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements:**
 - All students must complete or test out of the first and second levels of a foreign language, these are numbered 1001 and 1002;
 - All students must complete at least one course from the GenEd Global/World Society category; and
 - All Bachelor of Arts students must complete one of the following options:
 - Third semester of a foreign language;
 - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
 - Take one Global Studies course from the list on the CLA College Requirements (p. 940) page;
 - Study Abroad at an approved program; or
 - Take a second General Education Global/World Society course.
- **Notes on Foreign Language Study**
 - The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
 - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honors society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
 - See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (37 credits)

Code	Title	Credit Hours
Required Courses		
ECON 1101 or ECON 1901	Macroeconomic Principles ¹ Honors Macroeconomic Principles	3
ECON 1102 or ECON 1902	Microeconomic Principles ¹ Honors Microeconomic Principles	3
STAT 2103	Statistical Business Analytics	4
ECON 3501 or ECON 3701	Intermediate Microeconomic Analysis Intermediate Microeconomic Analysis with Calculus	3
ECON 3502 or ECON 3702	Intermediate Macroeconomic Analysis Intermediate Macroeconomic Analysis with Calculus	3
ECON 3503 or ECON 3703	Introduction to Econometrics Econometric Theory	3
ECON 3563 or ECON 3564	International Trade International Monetary Economics	3
Writing-intensive elective		
Select one of the following:		3
ECON 3596	Energy, Ecology, and Economy	
ECON 3597	Health Economics	
ECON 3696	Behavioral Economics	
ECON 3697	The Economics of Sports	
ECON 3698	Economic Inequality	
Capstone Course		
ECON 3598	Economics Writing Seminar	3
Major Electives		
Three electives in Economics at the 3000 level or above		9
Total Credit Hours		37

¹

These courses are prerequisites for most of the Economics 2000-3999 courses. Check specific course descriptions for details.

Note: Students preparing for graduate study in economics or in an economics-related area are strongly encouraged to take ECON 3701, ECON 3702, ECON 3703, and ECON 3504 as well as courses in calculus and linear algebra in the Mathematics department.

Suggested Academic Plan

Bachelor of Arts in Economics

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ}		4
Foreign Language 1001 - first level		4
GenEd Breadth Course		3
Credit Hours		15

Spring		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Foreign Language 1002 - second level		4
GenEd Breadth Course		3
GenEd Breadth Course		3
ECON 1101 or ECON 1901	Macroeconomic Principles or Honors Macroeconomic Principles	3
Credit Hours		16
Year 2		
Fall		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
GenEd Breadth Course		3
ECON 1102 or ECON 1902	Microeconomic Principles or Honors Microeconomic Principles	3
Select one of the following:		3
Foreign Language - third level		
GenEd Global/World Society Course		
Internationally Focused Course From Approved List		
Credit Hours		15
Spring		
GenEd Breadth Course		3
GenEd Breadth Course		3
ECON 3501 or ECON 3701	Intermediate Microeconomic Analysis or Intermediate Microeconomic Analysis with Calculus	3
CLA/CST 2000+ Course		3
CLA/CST 2000+ Course		3
CLA 1002	Professional Development for Liberal Arts Majors	1
Credit Hours		16
Year 3		
Fall		
One 2000+ Humanities/CST Course		3
ECON 3502 or ECON 3702	Intermediate Macroeconomic Analysis or Intermediate Macroeconomic Analysis with Calculus	3
STAT 2103	Statistical Business Analytics ¹	4
CLA/CST 0800+ Elective		3
Economics Elective 3000+		3
Credit Hours		16
Spring		
One 2000+ Humanities/CST Course		3
One 2000+ CLA/CST Course		3
ECON 3503 or ECON 3703	Introduction to Econometrics or Econometric Theory	3
CLA/CST 0800+ Elective		3
Select one of the following:		3
ECON 3563	International Trade	
ECON 3564	International Monetary Economics	
Credit Hours		15
Year 4		
Fall		
One 3000+ Economics Elective		3

CLA/CST 2000+ Elective		3
CLA/CST 0800+ Elective		3
CLA/CST 0800+ Elective		3
Select one of the following:		3
ECON 3596	Energy, Ecology, and Economy	
ECON 3597	Health Economics	
ECON 3696	Behavioral Economics	
ECON 3697	The Economics of Sports	
ECON 3698	Economic Inequality	
Credit Hours		15
Spring		
One 3000+ Economics Elective		3
ECON 3598	Economics Writing Seminar (Capstone)	3
CLA/CST 0800+ Elective		3
CLA/CST 0800+ Elective		2
One 0800+ Elective in Any School or College		4
Credit Hours		15
Total Credit Hours		123

1

STAT 2103 has MATH and/or STAT course prerequisites. Please see the course description and plan accordingly.

Economics Minor

Overview

The **Minor in Economics** is offered by the Department of Economics. Students are exposed to the economist's way of thinking about social problems and behavior.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Locations: Main and Japan

Contact Information

Main Campus

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Temple Japan Campus

Hady George Kahy, PhD, Economics Coordinator
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Requirements

(For Liberal Arts and all other colleges allowing a minor in Economics)

Code	Title	Credit Hours
ECON 1101 or ECON 1901	Macroeconomic Principles Honors Macroeconomic Principles	3
ECON 1102 or ECON 1902	Microeconomic Principles Honors Microeconomic Principles	3
ECON 3501 or ECON 3502 or ECON 3701 or ECON 3702	Intermediate Microeconomic Analysis Intermediate Macroeconomic Analysis Intermediate Microeconomic Analysis with Calculus Intermediate Macroeconomic Analysis with Calculus	3

Three electives in Economics at the 3000-level or above ¹

9

Total Credit Hours**18**

1

If both ECON 3501 (or ECON 3701) and ECON 3502 (or ECON 3702) are taken, the second course counts as one of these electives.

English BA

Overview

The Department of English offers the Bachelor of Arts in English, the minor in English, and the minor in Creative Writing.

Powerful, persuasive writing, sharp analytic skills, and creative, flexible thinking are essential abilities for tomorrow's leaders and professionals. The **Bachelor of Arts in English** program cultivates these abilities through the study of the literatures, language and cultures of the United States, Britain, the English-speaking world and beyond. Our classes prepare students to engage the world knowledgeably and effectively so that they may go on to lead rich lives as professionals, members of their communities and global citizens.

Literature, the practice of writing and the analysis of language develop attentiveness and mental agility by presenting us with complex perspectives on social and artistic movements, historical events, cultural phenomena and communication patterns. A focus on English can not only lead to advanced study in English literature and other academic fields, but can also prepare students to enter arts and public administration, business, law and politics, where their skills stand to make a difference. English majors become critical and reflective readers, aware of the history and development of writing in English.

Students in English are also strong, inventive writers; able to analyze problems, do careful and innovative research, argue and evaluate the arguments of others. The emphasis on writing prepares English majors and minors for careers in publishing and journalism, public relations, business, industry, management, marketing, social services and government. English is a strong pre-professional major for medicine, library science and teaching, from the elementary to the post-secondary level.

Campus Location: Main

Program Code: LA-ENG-BA

Distinction in Major

Students need at least a 3.65 GPA in English courses to earn distinction in major.

Accelerated Programs

The 4+1 Accelerated BA in English/MA in English is open to Temple English majors and is designed to allow students to graduate with both a master's degree and a bachelor's degree in English within five years of matriculating at Temple University. The program is designed for high-achieving English majors who have excelled in the first three years of their undergraduate studies, and who seek out the credential of a master's degree as an aid in teaching, publishing or writing positions, or in acquiring a competitive edge in applying to PhD programs. Students apply during their junior year.

An additional opportunity is available to complete the Bachelor of Arts in English and either a Master of Education in Middle Grades Education or a Master of Education in Secondary Education with one year of study beyond the BA. Students take several graduate level courses while still an undergraduate student.

- BA in English/MEd in Middle Grades Education with a Concentration in Language Arts
- BA in English/MEd in Middle Grades Education with a Concentration in Science and Language Arts
- BA in English/MEd in Secondary Education with a Concentration in English Education

Contact Information

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Learn more about the Bachelor of Arts in English.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. For the English major, these courses are ENG 2096 and a 4000 level Capstone Seminar.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 83) section of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including:
 - 90 credits in CLA/CST courses;
 - 45 credits of which must be at the upper level (numbered 2000-4999).
 - **Distribution Requirement for Humanities majors:** Six upper level credits must be earned in the Social Science, Science, and/or interdisciplinary subject areas. Select from the following CLA departments and programs: Africology & African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Gender, Sexuality, and Women's Studies, Geography and Urban Studies, Global Studies, History, Jewish Studies, Latin American Studies, Lesbian, Gay, Bisexual, and Transgender Studies, Liberal Arts, Neuroscience (CLA), Political Science, Psychology, and Sociology, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in all CLA/CST coursework, and in the major department.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Professional Development Requirement**
 - All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors or ENG 1801 Career Seminar would be an appropriate choice for this major. Several of our larger departments have alternatives for their program, these alternative options may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements:**
 - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
 - All students must complete at least one course from the GenEd Global/World Society category; and
 - All Bachelor of Arts students must complete one of the following options:
 - Third semester of a foreign language;
 - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
 - Take one Global Studies course from the list on the CLA College Requirements (p. 940) page;
 - Study Abroad at an approved program; or
 - Take a second General Education Global/World Society course.
- **Notes on Foreign Language Study**
 - The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
 - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)

- See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Curriculum Overlap Policy: Students may combine the English major with the minor in Creative Writing but only two courses may be used for both programs of study.

Major Requirements (36 credits/12 courses)

Code	Title	Credit Hours
ENG 2096	Introduction to English	3
Two survey courses from the following:		6
ENG 2402	African-American Literature II	
ENG 2501	Introduction to British Writing	
ENG 2502	Introduction to American Writing	
ENG 2503	Introduction to Global Writing	
Two English 2000+ Electives		6
One English 3000+ course focused on pre-1900 literature		3
Five other English 3000+ Electives ¹		15
One English 4000+ course - Senior Capstone Course ²		3
Total Credit Hours		36

1

This total does not include the Pre-1900 course above.

2

Indicates writing capstone for the major.

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in English

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4
Foreign Language 1001 - first level		4
GenEd Breadth Course		3
Credit Hours		15
Spring		
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
Foreign Language 1002 - second level		4
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	

GenEd Breadth Course		3
ENG 2096	Introduction to English	3
Select one of the following survey courses:		3
ENG 2402	African-American Literature II	
ENG 2501	Introduction to British Writing	
ENG 2502	Introduction to American Writing	
ENG 2503	Introduction to Global Writing	
ENG 1801	Career Seminar ¹	1
Select one of the following:		3
Foreign Language - third level		
GenEd Global/World Society Course		
Internationally-Focused Course From Approved List		
Credit Hours		16
Spring		
GenEd Breadth Course		3
GenEd Breadth Course		3
English 2000+ Course		3
English 2000+ Course		3
Select one of the following survey courses:		3
ENG 2402	African-American Literature II	
ENG 2501	Introduction to British Writing	
ENG 2502	Introduction to American Writing	
ENG 2503	Introduction to Global Writing	
Credit Hours		15
Year 3		
Fall		
English 3000+ Course		3
English 3000+ Course		3
English 3000+ Course		3
CLA/CST 2000+ Social Science/CST Course		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Spring		
English 3000+ Course		3
English 3000+ Course		3
CLA/CST 2000+ Social Science/CST Course		3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Year 4		
Fall		
English 3000+ Course (pre-1900 literature)		3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Spring		
English 4000+ Capstone Course ²		3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		2
CLA/CST 0800-4999 Elective		3

0800-4999 Electives in Any School or College	5
Credit Hours	16
Total Credit Hours	123

1

CLA 1002 can substitute for ENG 1801.

2

Register with the English Department.

English Minor

Overview

The **Minor in English** is offered by the Department of English. Our classes prepare students to engage the world knowledgeably and effectively so that they may go on to lead rich lives as professionals, members of their communities and global citizens.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

Code	Title	Credit Hours
ENG 2001	Interpreting Literature	3
Select one of the following survey courses:		3
ENG 2501	Introduction to British Writing	
ENG 2502	Introduction to American Writing	
ENG 2503	Introduction to Global Writing	
Electives in English		
Four courses in English numbered 2000-4999. ¹		12
Total Credit Hours		18

1

No more than two of which are in writing (creative, technical, or business)

Environmental Studies BA

Overview

The Department of Geography and Urban Studies offers a Bachelor of Arts in Environmental Studies, a minor in Environmental Studies and a certificate in Geographic Information Systems (GIS). Many of our students choose to complete a double major, a minor in a complementary discipline, and/or the GIS certificate.

The **Bachelor of Arts in Environmental Studies** focuses on the department's four themes of globalization, sustainability, social justice and geographic methods that are increasingly central to understanding the serious environmental challenges we face. Environmental Studies students learn geographic theory and methods that examine the complexity of human-environmental interactions; the increasing interconnectedness of the global economy, environment, culture and politics; and the importance of place and context in people's daily lives.

Additionally, the Environmental Studies program introduces students to environmental processes, contemporary environmental issues and policies, geospatial technologies including Geographic Information Systems (GIS), and qualitative and quantitative social science research methods.

The Environmental Studies gateway courses are designed to develop the theoretical and methodological frameworks and tools necessary to understand the relationships between people and their environment as they interact through local and global connections. In required courses and electives, students examine environmental policy and the role of political institutions; the geography of natural resources; environmental decision-making; natural hazards and risk assessment; environmental ethics and legal issues; health and the environment; environmental justice; food access; etc. The electives give students the opportunity to develop an area of emphasis around their particular interests. Students focus on an individualized research project in

their Senior Research Seminar. Each student's program is developed with a departmental advisor to suit individual interests and is designed to maximize educational and career opportunities. We encourage Environmental Studies students to incorporate a semester abroad and/or an internship into their plan of study.

The objective of the Bachelor of Arts in Environmental Studies is to provide students with an understanding of:

- How space, place, and scale shape the interaction between environment and society;
- Critical thinking skills developed through examining a range of analytical approaches to investigate geographic, urban, and environmental processes;
- Contemporary explanatory frameworks in Geography and Urban Studies such as political ecology, feminist and poststructuralist theory, and development theory;
- The application of information technology skills to analyze spatial and temporal information, processes, and patterns through integrative research experiences;
- Practical considerations of community and environmental organizational settings at the local and regional scales.

The Environmental Studies major examines the nature, causes and consequences of human interactions with the environment. Students in Environmental Studies are equipped with the intellectual and methodological tools to understand and address the crucial environmental issues of our time: sustainability, health, climate change, food access, natural resource consumption, and environmental justice.

Themes

The department has identified several informal areas of concentration to assist students in making course selections. These do not constitute formal tracks but rather provide guidelines for developing a personalized curriculum. Students can focus on the following themes:

- Globalization
- Social Justice
- Urban Sustainability
- Geographic Methods

Campus Location: Main

Program Code: LA-ENST-BA

Distinction in Major

Environmental Studies majors may graduate with distinction in major with a 3.5 in Environmental Studies coursework and a 3.0 GPA overall.

Career Preparation

Environmental Studies graduates are especially competitive in the job market because of their technical and critical thinking skills, a sense of the complexity of interactions between humans and the environment, and their ability to synthesize information at a variety of scales. Students have the opportunity to gain technical skills in spatial statistics, Geographic Information Systems (GIS), cartographic production and design, and qualitative methods that are highly valued by employers. Our graduates find employment with nonprofits (domestic and international), planning or government agencies, consulting firms, and citizens' organizations. Many also go on to graduate programs in geography, planning, environmental studies, law and other fields. The Department of Labor expects that employment for geographers, planners and other geographic professions will grow at a rate of twenty percent or more for the next decade.

Double-Counting Across Curricula

Many students elect to take a combination of the Environmental Studies major or minor and the Geography and Urban Studies major or minor, as they are complementary programs.

The ONLY courses that can double-count between the Environmental Studies and the Geography and Urban Studies majors are: ENST 3161 Spatial Statistics/GUS 3161 Spatial Statistics; ENST 2097 Research Design in Environmental Studies/GUS 2197 Research Design in Geography and Urban Studies; ENST 3062 Fundamentals of Geographic Information Systems/GUS 3062 Fundamentals of Geographic Information Systems. When used for the major in either program, these courses may not be used to fulfill the minor elective requirements of the other program. Note: GUS 4198 Senior Seminar in Geography and Urban Studies and ENST 4198 Senior Research Seminar are NOT cross-listed seminars. Anyone pursuing a double major in Geography and Urban Studies and Environmental Studies must take both capstone courses.

Students are not permitted to combine a major or minor in Environmental Studies and a major or minor in Environmental Science in the College of Science and Technology.

Internships

We encourage students to apply their skills and knowledge in a credit-bearing internship that utilizes their academic training. Assignments at planning, social service, environmental and other agencies, as well as at firms that specialize in mapping and geographic data analysis, have helped in securing

employment opportunities after graduation. The internship is complemented by a seminar in which students reflect on their experiences. Contact Dr. Max Andrucki for more information on this opportunity.

Contact Information

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Learn more about the Bachelor of Arts in Environmental Studies.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are ENST 2097 and ENST 4198.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 83) of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including:
 - 90 credits in CLA/CST courses;
 - 45 credits of which must be at the upper level (numbered 2000-4999).
 - For **Social Science majors**, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art and Architecture, or any department in the College of Science and Technology.
 - A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
 - Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Professional Development Requirement**
 - All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements:**
 - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
 - All students must complete at least one course from the GenEd Global/World Society category; and
 - All Bachelor of Arts students must complete one of the following options:

- Third semester of a foreign language;
 - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
 - Take one Global Studies course from the list on the CLA College Requirements (p. 940) page;
 - Study Abroad at an approved program; or
 - Take a second General Education Global/World Society course.
- **Notes on Foreign Language Study**
 - The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
 - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
 - See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (40-41 credits in Environmental Studies and related coursework)

Code	Title	Credit Hours
Gateway courses		
ENST 2001	Environment and Society	3
ENST 2002	Physical Geography	4
Research Methods courses		
ENST 2097	Research Design in Environmental Studies	3
ENST 3062	Fundamentals of Geographic Information Systems	3
ENST 3161	Spatial Statistics	3
Research Methods elective		
Select one of the following:		3
ENST 3061	Fundamentals of Cartography	
ENST 3063	Environmental Remote Sensing	
ENST 3064	Qualitative Methods	
ENST 3068	Environmental Impact Assessment	
ENST 4066	Environmental GIS	
Advanced Environmental Studies courses:		
ENST 3004	Geography of Natural Resources	3
ENST 4198	Senior Research Seminar	3
Electives		
Select three upper-level courses in ENST numbered 2003-4999. ¹		9
Select one ENST course numbered 0800-4999 ²		3
Select one course numbered 2003-4999 in ENST or from the approved electives list below.		3-4
Total Credit Hours		40-41

1

No electives may double-count between the Environmental Studies major and either the Geography & Urban Studies major or minor.

2

One General Education course taken in Environmental Studies may count towards the major.

Environmental Studies Approved (non-ENST) Electives List

Students may use one elective from the list below toward the Environmental Studies Major to fulfill the Approved Elective requirement. This requirement can also be fulfilled with any ENST elective numbered 2003+.

Note: Upper-level Science and Liberal Arts courses from this list can be used to satisfy the CLA 45 credit upper-level distribution requirement, but not all courses below are offered within the College of Liberal Arts or College of Science and Technology. Please consult with a CLA Academic Advisor.

Code	Title	Credit Hours
ANTH 2705	Introduction to Evolutionary Anthropology	4
ANTH 3774	Environmental Physiology and Health	3
BIOL 2227	Principles of Ecology	3
BIOL 3244	Experimental Marine Biology	4
BIOL 3245	Marine Ecology	4
BIOL 3316	Tropical Marine Biology	4
BIOL 3336	Freshwater Ecology	4
BIOL 4327	Biological Impacts of Global Climate Change	3
BOT 1112	Plant Ecology ¹	3
CEE 4531	Life Cycle Assessment and Carbon Footprinting	3
CTRP 2114	Urban Form and Design	3
CTRP 2213	Environmental Planning	3
CTRP 3256	Sustainable Community Design and Development	3
ECON 3513	Economics of State and Local Governments	3
ECON 3512	Public Finance	3
EES 2096	Climate Change: Oceans To Atmosphere	4
EES 2021	Sedimentary Environments	4
EES 2061	Introduction to Geochemistry	4
EES 3011	Remote Sensing and GIS	4
EES 3021	Groundwater Hydrology	4
ENVH 2102	Environmental Health	3
ENVT 4761	Environmental Regulations	3
HORT 2114	Soils	3
HORT 2334	Food Crops I	3
HORT 2353	Food Crops II	3
HORT 2552	Trees in the Urban Landscape	2
HORT 2575	Introduction to Public Horticulture	3
HORT 3514	Landscape Restoration	3
JRN 3253	Health and Environmental Writing	3
LARC 2144	Landscape Architecture Design Studio II	6
LARC 2496	Landscape Traditions	3
LARC 2758	Summer Field Ecology	3

1

Note: Only one course numbered below 1999 can count for the electives requirement.

Suggested Academic Plan

Bachelor of Arts in Environmental Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4
Foreign Language 1001 - first level		4
GenEd Breadth Course		3
Credit Hours		15
Spring		
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	

Foreign Language 1002 - second level		4
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
CLA/CST 0800-4999 Elective		3
ENST 2001	Environment and Society	3
GenEd Breadth Course		3
Select one of the following:		3
Foreign Language - third level		
GenEd World Society Course		
Internationally Focused Course From Approved List		
Credit Hours		15
Spring		
ENST 2002	Physical Geography	4
ENST 2097	Research Design in Environmental Studies	3
CLA 1002	Professional Development for Liberal Arts Majors	1
GenEd Breadth Course		3
CLA/CST 0800-4999 Elective		4
Credit Hours		15
Year 3		
Fall		
ENST 3062	Fundamentals of Geographic Information Systems	3
ENST 3004	Geography of Natural Resources	3
ENST Major Elective 0800-4999		3
GenEd Breadth		3
CLA/CST 2000+ Humanities/CST Course		3
One 0800-4999 Elective in Any School or College		2
Credit Hours		17
Spring		
ENST 3161	Spatial Statistics	3
ENST Research Methods Course (from list)		3
ENST Major Elective 2003-4999		3
CLA/CST 2000+ Humanities/CST Course		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Year 4		
Fall		
CLA/CST 2000+ Electives		5
ENST Major Electives 2003-4999		6
ENST Major Elective 2003-4999 or Elective from Approved List (see major description)		3
Credit Hours		14
Spring		
ENST 4198	Senior Research Seminar	3
CLA/CST 0800-4999 Electives		13
Credit Hours		16
Total Credit Hours		123

Environmental Studies Minor

Overview

The **Minor in Environmental Studies** is offered by the Department of Geography and Urban Studies. The minor focuses on the department's four themes of globalization, sustainability, social justice and geographic methods that are increasingly central to understanding the serious environmental challenges we face.

The Environmental Studies minor examines the nature, causes, and consequences of human interactions with the environment. Students in Environmental Studies are equipped with the intellectual and methodological tools to understand and address the crucial environmental issues of our time: sustainability, health, climate change, food access, natural resource consumption, and environmental justice.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

The minor in Environmental Studies is 6 courses (minimum of 18 credits). Students are required to take one of the Gateway courses, either ENST 2001 or ENST 2002. Students also take 5 elective courses: one at any level and four at the upper level (2000+), which they can use to focus on their own particular interests.

Code	Title	Credit Hours
Gateway Course		
Select one of the following:		3-4
ENST 2001	Environment and Society	
ENST 2002	Physical Geography	
Electives ¹		
Select 5 courses as per the following criteria:		15
Select one Environmental Studies course - any level		
Select four upper level Environmental Studies courses		
Total Credit Hours		18-19

1

No electives may double-count between the Environmental Studies minor and either the Geography & Urban Studies major or minor.

Ethics Certificate

Overview

The 12-credit **Certificate in Ethics** is offered by the Department of Philosophy and is open to Temple undergraduate students in all majors. The Ethics certificate offers important training for those preparing for leadership positions in professional communities. Career options are regularly discussed in the Undergraduate Philosophy Club and featured on the Philosophy Department web site.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Program Code: LA-ETHC-CERT

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Learn more about the undergraduate certificate in Ethics.

Requirements

Code	Title	Credit Hours
PHIL 2121 or PHIL 2921	Introduction to Ethical Theory Honors Introduction to Ethical Theory	3
Select two courses in applied/professional ethics from the following:		6
PHIL 2157	Environmental Ethics	
PHIL 3249 or PHIL 3949	Ethics in Medicine Honors Ethics in Medicine	
BA 1103 or BA 1903	Legal and Ethical Reasoning in Business Honors Legal and Ethical Reasoning in Business	
Any approved course in applied/professional ethics from across the University		
Select one of the following:		3
PHIL 3222	Contemporary Ethical Theory	
PHIL 3225	Good & Bad, Right & Wrong	
PHIL 3226	Classics in Moral Philosophy	
Another approved course in applied/professional ethics		
Total Credit Hours		12

French BA

Overview

The **Bachelor of Arts in French**, offered by the Department of French, German, Italian and Slavic, helps students develop skills in reading, writing and oral communication while providing them with a rich understanding of the literature, cinema, history and traditions of one or more Francophone cultures. In all classes, students focus on communication and communities, comparisons and connection, and culture. As they improve their linguistic skills and study various forms of cultural production from other nations, French majors also strengthen their ability to analyze and interpret in a way that contributes to their education above and beyond courses they take for the major. Through study at Temple, often enhanced by study abroad, French majors gain insight into their own identities and assumptions in relation to others. Majors complete the program with an ability to communicate, a grounding in literary tradition, and an awareness of cultural differences that has become increasingly important in the contemporary world.

The French major is a good preparation for a career that requires analytical thinking and communication skills in general, which includes the domains of education, business, government service, travel and tourism. It is a good major or second major for students planning to attend law or medical school. Studies have shown that learning a foreign language helps raise scores on the LSAT, GRE and MCAT exams. This course of study also proves valuable to anyone who plans to work for a multinational corporation.

The French courses are often small, allowing students to get to know each other and their professors well. The program helps prepare students enrolled in the College of Education and Human Development for careers teaching French and provides the opportunity to students enrolled in the Fox School of Business and Management to acquire a certificate in French with a special course on French in the business world.

Campus Location: Main

Program Code: LA-FREN-BA

Distinction in Major

To be considered for Distinction in Major, students must:

- Complete the requirements for the concentration in French with a GPA of at least 3.50;
- Be recommended to the chair of the department by the French faculty advisor after consultation with the French faculty;
- Have an overall GPA of at least 3.25.

Study Abroad

Students declaring a major or minor in the department are encouraged to study abroad. Temple University has a summer program at the Sorbonne in Paris. Credits earned through the Temple Sorbonne Program may be used toward the French major, minor, certificate and for satisfaction of the GenEd World Society requirement.

Accelerated Program

Students have the opportunity to pursue the following 4+1 program: BA in French/MEd in Secondary Education with a Concentration in World/Foreign Languages Education.

Contact Information

Department Office
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Learn more about the Bachelor of Arts in French.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are FREN 2096 and FREN 3096.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 83) section of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including:
 - 90 credits in CLA/CST courses;
 - 45 credits of which must be at the upper level (numbered 2000-4999).
 - **Distribution Requirement for Humanities majors:** Six upper level credits must be earned in the Social Science, Science, and/or interdisciplinary subject areas. Select from the following CLA departments and programs: Africology & African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Gender, Sexuality, and Women's Studies, Geography and Urban Studies, Global Studies, History, Jewish Studies, Latin American Studies, Lesbian, Gay, Bisexual, and Transgender Studies, Liberal Arts, Neuroscience (CLA), Political Science, Psychology, and Sociology, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in all CLA/CST coursework, and in the major department.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Professional Development Requirement**
 - All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements:**
 - The requirements for the major in French exceed the CLA minimum for this requirement.
 - **Notes on Foreign Language Study**

- The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
- Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
- See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements: Ten courses in French (30 credits)

Prerequisites: FREN 1001, FREN 1002, and FREN 1003 with a minimum grade of C or equivalent placement.

Course levels are incremental in skills and content. Courses must be taken sequentially or in some instances may be taken concurrently. Students who initially place beyond FREN 1003 may begin with FREN 2001 or a course beyond 2001, as appropriate.

Code	Title	Credit Hours
FREN 2001	Intermediate	3
FREN 2041	Reading I	3
FREN 2096	Composition I (WI)	3
FREN 3096	Composition II (WI)	3
FREN 3101	Survey of French Literature I	3
FREN 3102	Survey of French Literature II	3
Two French 4000-level courses		6
One French elective numbered 2002-4999		3
One French elective numbered 3000-4999		3
Total Credit Hours		30

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in French

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ}		4
FREN 1001	Introduction to French I	4
GenEd Breadth Course		3
Credit Hours		15
Spring		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
FREN 1002	Introduction to French II	4
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
FREN 1003	Introduction to French III	3

IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
CLA 1002	Professional Development for Liberal Arts Majors	1
GenEd Breadth Course		3
GenEd Breadth Course		3
CLA/CST 0800-4999 Elective		2
One 0800-4999 Elective in Any School or College		2
Credit Hours		17
Spring		
GenEd Breadth Course		3
FREN 2001	Intermediate	3
CLA/CST 0800-4999 Elective		3
CLA/CST 2000+ Course		3
CLA/CST 2000+ Course		3
Credit Hours		15
Year 3		
Fall		
CLA/CST 2000+ Social Science/CST Course		3
FREN 2041	Reading I	3
FREN 2096	Composition I	3
One 2002-4999 French Elective		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Spring		
CLA/CST 2000+ Social Science/CST Course		3
FREN 3096	Composition II	3
FREN 3101	Survey of French Literature I	3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Year 4		
Fall		
One French course at the 3000 level or higher		3
FREN 3102	Survey of French Literature II	3
CLA/CST 2000-4999 Course		3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Spring		
One French course at the 4000 level		3
One French course at the 4000 level		3
CLA/CST 0800-4999 Elective		3
One 0800-4999 Elective in Any School or College		3
One 0800-4999 Elective in Any School or College		3
Credit Hours		15
Total Credit Hours		123

French Certificate

Overview

The 20-credit **Certificate in French**, offered by the Department of French, German, Italian and Slavic, introduces undergraduates to the French language and Francophone cultures. As students progress through the various levels of language courses, they'll learn the fundamentals of grammar

and vocabulary, and will work to develop sophisticated conversational skills. These skills will allow students to speak, read and write confidently in French for the purposes of their professional or personal pursuits, in the U.S. and abroad.

Students declaring a major or minor in the department are encouraged to study abroad. Temple University has a summer program at the Sorbonne in Paris. Credits earned through the Temple Sorbonne Program may be used toward the French major, minor or certificate and for satisfaction of the GenEd World Society requirement.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Program Code: LA-FREN-CR2+

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Learn more about the undergraduate certificate in French.

Requirements

Six courses beginning with FREN 1001, including FREN 2501 and an upper-level course (beyond FREN 2001).

Code	Title	Credit Hours
FREN 1001	Introduction to French I	4
FREN 1002	Introduction to French II	4
FREN 1003	Introduction to French III	3
FREN 2001	Intermediate	3
FREN 2501	French for Business I	3
Select one of the following:		3
FREN 2021	Conversation I	
FREN 2041	Reading I	
FREN 2096	Composition I	
Total Credit Hours		20

French Minor

Overview

The **Minor in French** is offered by the Department of French, German, Italian and Slavic. Students declaring a major or minor in the department are encouraged to study abroad. Temple University has a summer program at the Sorbonne in Paris. Credits earned through the Temple Sorbonne Program may be used toward the French major, minor, certificate and for satisfaction of the GenEd World Society requirement.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

Prerequisites: FREN 1001 with a minimum grade of C or equivalent placement.

Code	Title	Credit Hours
FREN 1002	Introduction to French II	4
FREN 1003	Introduction to French III	3
FREN 2001	Intermediate	3

Select a minimum of two of the following:	6
FREN 2021	Conversation I
FREN 2041	Reading I
FREN 2096	Composition I
FREN 2501	French for Business I
Select a minimum of one of the following:	3
FREN 3001	Advanced Grammar
FREN 3021	Conversation II
FREN 3096	Composition II
FREN 3101	Survey of French Literature I
FREN 3102	Survey of French Literature II
FREN 3201	Culture and Civilization I

Total Credit Hours
19

Gender, Sexuality and Women's Studies BA

Overview

The Gender, Sexuality and Women's Studies Program within the College of Liberal Arts offers an undergraduate major, minor and certificate in Gender, Sexuality and Women's Studies (GSWS) as well as a minor in Lesbian, Gay, Bisexual and Transgender Studies. The program offers a cohesive framework of inquiry into gender and sexuality issues in the U.S. and around the world. The curriculum for the **Bachelor of Arts in Gender, Sexuality and Women's Studies** highlights the ways in which gender and sexuality relate to other social categories, such as race, class, disability, nationality and ethnicity. As an interdisciplinary field, Gender, Sexuality and Women's Studies takes into account social, historical, economic, political and cultural variables in its study of women's experience, the workings of gender as both an analytical category and identity, and the functioning of sexuality in social life. The field pays particular attention to inequality and discrimination based on gender, sexuality and gender identity. Gender, Sexuality and Women's Studies also seeks to transform traditional fields of study by incorporating new methodologies, data, theories and frameworks developed by feminist scholars.

The Gender, Sexuality and Women's Studies Program offers students an interdisciplinary curriculum taught by faculty from various departments and other schools and colleges across the university. Students learn to apply the methods and theories of social scientists, historians, philosophers, film and literary critics, and legal analysts to the study of women's experiences, as well as gender, sexuality and trans identities. They explore a growing body of feminist theories that revise our understanding of gender, society and culture.

Campus Location: Main

Program Code: LA-GSWS-BA

Special Programs

Gender, Sexuality and Women's Studies majors are required to take a Fieldwork course involving an internship which gives them the opportunity to get hands-on professional experience.

We encourage students to take advantage of university study abroad programs. Please contact the director for more information.

Accelerated Degree Programs

Gender, Sexuality and Women's Studies majors have several options for a 4+1 accelerated BA + master's degree program:

- BA in GSWS / MA in Sociology
- BA in GSWS / MEd in Advocacy and Organizational Development
- BA in GSWS / MEd in Urban Education
- BA in GSWS / MPP in Public Policy

For more information on these programs see the Accelerated Programs (p. 1792) section of this *Bulletin* as well as the program's web site.

Advising Policy

We encourage students to take Foundations in Women's Studies (GSWS 1301), Critical Race Feminist Theory (GSWS 2051), Feminist Theory (GSWS 3097) and Field Work (GSWS 4389) before taking the Research Seminar (GSWS 4396).

Double-Counting of Credits

Students combining a minor in Lesbian, Gay, Bisexual and Transgender Studies and a major, minor, or certificate in GSWS may double-count for both programs only Field Work (GSWS 4389 or LGBT 4489) and Queer Lives (GSWS 2405 or LGBT 2405).

Distinction in Major

Gender, Sexuality and Women's Studies students may graduate with a distinction in the major if they have a GPA of 3.5 or better in the major, a cumulative GPA of 3.0 or better, and successfully completed an honors thesis (minimum 3 credits) under the supervision of a faculty member from Gender, Sexuality and Women's Studies.

Awards

The Gender, Sexuality and Women's Studies Program has the following five annual undergraduate awards that honor academic and creative excellence in our students:

- Barbara Brownstein Prize
- Sonia Sanchez Scholarship
- Lucia Beck Weiss and Howard J. Weiss Prize
- Audre Lorde Prize
- Certificate of Excellence

Professional Development

After graduation, Gender, Sexuality and Women's Studies students enter professional schools in law, medicine and business; take graduate degrees in the humanities and social sciences; and pursue careers in health, counseling, teaching, public advocacy and many other fields.

Contact Information

Department Office
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Learn more about the Bachelor of Arts in Gender, Sexuality and Women's Studies.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are GSWS 3097 or ENG 3097, and GSWS 4396.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 83) of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including:
 - 90 credits in CLA/CST courses;
 - 45 credits of which must be at the upper level (numbered 2000-4999).
 - For **Social Science majors**, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art and Architecture, or any department in the College of Science and Technology.

- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Professional Development Requirement**
 - All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements:**
 - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
 - All students must complete at least one course from the GenEd Global/World Society category; and
 - All Bachelor of Arts students must complete one of the following options:
 - Third semester of a foreign language;
 - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
 - Take one Global Studies course from the list on the CLA College Requirements (p. 940) page;
 - Study Abroad at an approved program; or
 - Take a second General Education Global/World Society course.
- **Notes on Foreign Language Study**
 - The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
 - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
 - See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (36 credits in Gender, Sexuality and Women's Studies)

Code	Title	Credit Hours
Introductory Gender, Sexuality and Women's Studies courses		
GSWS 1301	Foundations in Women's Studies	3
Gender, Sexuality and Women's Studies elective numbered 1000-1999		3
GSWS 3097 or ENG 3097	Feminist Theory	3
GSWS 3551	Critical Race Feminist Theory	3
Elective Courses		
Select two courses in Gender, Sexuality and Women's Studies at any level (numbered 0800-4999)		6
Select two courses in Gender, Sexuality and Women's Studies numbered 2000-4999		6
Select one elective from the GSWS Sexuality Electives List		3
Select one elective from the GSWS Race Electives List		3
Two-course sequence ¹		
GSWS 4389	Field Work	3
GSWS 4396	Research Seminar	3
Sexuality Electives		
AMST 2003	The American Sexual Past	
GSWS 2002	Gender in the Cinema	
GSWS 2405	Queer Lives	
HIST 2109	Sexuality and Gender in American History	
LGBT 2002	Religion and Human Sexuality	
LGBT 2400	Topics in LGBT Studies	
LGBT 2405	Queer Lives	
POLS 3124	Politics of Sexual Orientation and Gender Identity	
SOC 2572	Sex & Society	

GSWS Race and Diversity Electives

AAAS 2134	The Literature of American Slavery
AAAS 2151	History of Blacks in Cinema
AAAS 2205	Black Politics in America
AAAS 2251	Mass Media and the Black Community
AAAS 3205	The Black Woman
AAAS 3257	Black Social and Political Thought
AAAS 3268	Critical Readings in African American History
AAAS 3296	The Black Family
AAAS 4221	The Black Child: Development and Socialization
AAAS 4146	Women Writers in Black Literature
AAAS 4248	Dimensions of Racism
AMST 3071	African American Experiences
ANTH 2361	Peoples of Latin America
ANTH 2362	Peoples and Cultures of the Caribbean
ANTH 2364	People and Cultures of the Middle East and North Africa
ANTH 2367	Peoples of South Asia
ASST 2107	Asian American Experiences
ASST 3636	Asian Women in Transition
ENG 2114	Social Justice and Literature
ENG 2402	African-American Literature II
ENG 2601	Introduction to Postcolonial Literatures
ENG 2822	Language and Race
ENG 3411	Studies in African-American Literary Genre
ENG 3412	The Harlem Renaissance
ENG 3413	African-American Literary Criticism
ENG 3414	Blacks/Literature/Drama/Media
ENG 3610	Topics in Postcolonial Literature
ENG 3611	Postcolonial Theory
GUS 2073	African Development
GUS 2074	East and South Asia
GUS 3013	African Americans in Philadelphia
HIST 2103	African American History to 1865
HIST 2104	African American History 1865-Present
HIST 2105	Race and the U.S. Constitution
HIST 2514	Introduction to Latin America
HIST 2107	Asian American History
HIST 2515	Civilization and Modernity in the Caribbean
HIST 2611	Third World Issues through Film
HIST 2516	Modern Islamic History
HIST 2702	Imperialism, Race, and Empire
HIST 2703	African Diaspora
HIST 2705	Anti-Semitism/Holocaust/Racism
HIST 2806	Colonial North Africa in European History
HIST 3217	African American Church and Black Liberation
HIST 3221	Jewish Experience in America
HIST 3511	Southern Africa: A History
HIST 3521	The Chinese Revolution
HIST 3522	Contemporary China
HIST 3531	Modern India
HIST 3542	Women and Society in Japan
HIST 3551	History of Vietnam

HIST 3561	History of Brazil
HIST 3563	Puerto Rican History
HIST 3564	Caliban's World: Cultural Politics in the 20th Century Americas
HIST 3571	Israel: History, Politics and Society
HIST 3572	Modern Middle East
HIST 3675	Third World Women's Lives
HIST 3751	Colonialism and Decolonization
LAS 2020	Topics in Latino Studies
LAS 2030	Topics in Caribbean Studies
LAS 2101	Latin America through Film and Fiction
LAS 2362	Peoples and Cultures of the Caribbean
LAS 3101	Latino Identity in the United States
LAS 3601	"Other Voices" in Latin American Literature
LAS 3801	African Culture in Brazil
POLS 3441	African American Political Theory
SOC 2179	Racial and Ethnic Stratification
SOC 3223	East to America: The Sociology of Asian Americans
SOC 3242	Constructing Race and Ethnicity
SOC 3249	Social Inequality

Total Credit Hours**36**

1

The final requirement for the major is a two-course sequence. This sequence should be taken during the major's last three semesters of enrollment. Students will select a field assignment (internship) with the assistance of the advising coordinator. This sequence is designed for students to learn how to write a research paper.

Suggested Academic Plan

Bachelor of Arts in Gender, Sexuality and Women's Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course	^{GQ}	4
Foreign Language 1001 - first level		4
GenEd Breadth Course		3
Credit Hours		15
Spring		
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
Foreign Language 1002 - second level		4
GenEd Breadth Course		3
GenEd Breadth Course		3
GSWS 1301	Foundations in Women's Studies	3
Credit Hours		16
Year 2		
Fall		
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
GenEd Breadth Course		3
GenEd Breadth Course		3
Gender, Sexuality and Women's Studies Elective - any level		3

One 0800-4999 Elective in Any School or College	2
Select one of the following:	3
Foreign Language - third level	
GenEd Global/World Society Course	
Internationally-Focused Course From Approved List	
Credit Hours	17
Spring	
Gender, Sexuality and Women's Studies Elective - 1000-1999	3
GSWS 3097 Feminist Theory	3
or ENG 3097 or Feminist Theory	
CLA 1002 Professional Development for Liberal Arts Majors	1
GenEd Breadth Course	3
GenEd Breadth Course	3
CLA/CST 0800-4999 Elective	2
Credit Hours	15
Year 3	
Fall	
GSWS 3551 Critical Race Feminist Theory	3
Gender, Sexuality and Women's Studies Elective - any level	3
CLA/CST 2000+ Course	3
CLA/CST 2000+ Humanities/CST Course	3
CLA/CST 0800-4999 Elective	3
Credit Hours	15
Spring	
Course from the GSWS Race Electives List	3
Course from the GSWS Sexuality Electives List	3
CLA/CST 2000+ Humanities/CST Course	3
CLA/CST 2000+ Course	3
One Elective numbered 0800-4999 in Any School or College	3
Credit Hours	15
Year 4	
Fall	
GSWS 4389 Field Work ¹	3
One 2000+ Gender, Sexuality and Women's Studies Elective	3
CLA/CST 2000+ Course	3
CLA/CST 2000+ Course	3
CLA/CST 0800-4999 Elective	3
Credit Hours	15
Spring	
GSWS 4396 Research Seminar (Capstone Course) ¹	3
One 2000+ Gender, Sexuality and Women's Studies Elective	3
CLA/CST 2000+ Course	3
CLA/CST 0800-4999 Elective	3
One 0800-4999 Elective in Any School or College	3
Credit Hours	15
Total Credit Hours	123

1

These courses may not be offered every semester. Please see advisor for offerings.

Gender, Sexuality and Women's Studies Certificate

Overview

The 12-credit **Certificate in Gender, Sexuality and Women's Studies** (GSWS) explores the cultural, economic and political factors that form the daily experiences of women and queer communities. Through the curriculum, students will engage in critical studies of gender and sexuality and their intersection with ability, class, gender and race in the U.S. Students will deepen their critical and analytical thinking skills with rigorous reading and writing coursework, and study the central institutions of gender, including family, sexuality and love, the ideology of femininity, and more.

This certificate is designed for students whose major is outside the College of Liberal Arts who want to pursue a Gender, Sexuality and Women's Studies-oriented career.

Students combining a minor in Lesbian, Gay, Bisexual and Transgender (LGBT) Studies and a major, minor or certificate in GSWS may double-count for both programs only Field Work (GSWS 4389 or LGBT 4489) and Queer Lives (GSWS 2405 or LGBT 2405).

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Program Code: LA-GSWS-CERT

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Learn more about the undergraduate certificate in Gender, Sexuality and Women's Studies.

Requirements

Code	Title	Credit Hours
GSWS 1076 or GSWS 1096	Introduction to Gender Studies Introduction to Women's Studies	3
GSWS 4389	Field Work	3
Two electives in Gender, Sexuality and Women's Studies ¹		6
Total Credit Hours		12

1

At least one of these two courses must be at the upper level.

Gender, Sexuality and Women's Studies Minor

Overview

The **Minor in Gender, Sexuality and Women's Studies** is housed within the Gender, Sexuality, and Women's Studies Program, which offers students an interdisciplinary curriculum taught by faculty from various departments and other schools and colleges across the university. Students learn to apply the methods and theories of social scientists, historians, philosophers, film and literary critics, and legal analysts to the study of women's experiences, as well as gender, sexuality and trans identities.

The Gender, Sexuality and Women's Studies minor can be taken by students in the College of Liberal Arts or by students in other colleges.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Double-Counting of Credits

Students combining a minor in Lesbian, Gay, Bisexual and Transgender Studies and a major, minor, or certificate in Gender, Sexuality and Women's Studies may double-count for both programs only Field Work (GSWS 4389 or LGBT 4489) and Queer Lives (GSWS 2405 or LGBT 2405).

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

Code	Title	Credit Hours
GSWS 1301	Foundations in Women's Studies	3
Four electives in Gender, Sexuality and Women's Studies ¹		12
One elective selected from the Race & Diversity list ²		3
One elective from the Sexuality list ²		3
Total Credit Hours		21

1

At least two of the four electives must be taken at the upper level (GSWS 2000-4999).

2

For a list of the Sexuality and Race & Diversity electives, please go to the major requirements page (p. 1027) for the BA in Gender, Sexuality and Women's Studies. Other courses may be substituted with permission of the faculty advisor.

General Program AA

Overview

The **Associate in Arts in General Program** is awarded by the College of Liberal Arts and is available only at Temple University, Japan Campus. Students should check the Requirements tab for specific details or contact the TUJ Academic Advising Center.

Campus Location: Japan

Program Code: LA-GENP-AA

Contact Information

Johnathan McCaskill, JD, Major Coordinator
johnathan.mc.caskill@tuj.temple.edu

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Requirements

University and College of Liberal Arts (CLA) Requirements

- The Associate in Arts (AA) degree requires a minimum of 62 credits distributed according to University policy, with at least a 2.0 cumulative GPA.
- Students must complete the General Education (p. 83) curriculum.
- Students must maintain a GPA of 2.0 in all of CLA courses (please consult with the academic advisor for details).
- AA candidates must complete a minimum of 45 credit hours within CLA disciplines.
- AA candidates may count a maximum of 17 non-CLA credits toward the AA degree.
- A maximum of 9 credit hours of the preparatory course works (numbered 0700 - 0799) may be applied to the AA degree.

Program Requirements (minimum 12 credits, in addition to General Education and CLA requirements)

Code	Title	Credit Hours
Upper Level Humanities		
Select two upper level courses (numbered 2000 or higher) from the College of Liberal Arts. Please consult with the academic advisor for details.		6
Upper Level Social Science		
Select two upper level courses (numbered 2000 or higher) from the College of Liberal Arts. Consult with the academic advisor for details.		6
Writing Intensive		
The Associate of Arts degree candidates are required to complete at least one Writing Intensive course.		3

If one of the courses taken in the Humanities or Social Science requirements above is Writing Intensive, the course can also count toward this requirement.

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Associate in Arts in General Program

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
GenEd Quantitative Literacy Course ^{GQ}		4
GenEd Breadth Course		3
Foreign Language 1001 - first level		4
Credit Hours		15
Spring		
IH 0851	Intellectual Heritage I: The Good Life	3
Foreign Language 1002 - second level		4
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
IH 0852	Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3-4
CLA 2000+ Upper Level Course (Humanities)		3
CLA 2000+ Upper Level Course (Social Science)		3
Select one of the following:		3-4
Foreign Language - third level		
GenEd Global/World Society Course		
Internationally-Focused Course from Approved List		
Credit Hours		15-17
Spring		
GenEd Breadth Course		3
GenEd Breadth Course		3
CLA 2000+ Upper Level Course (Humanities) ¹		3
CLA 2000+ Upper Level Course (Social Science) ¹		3
One 0800-4999 Elective in any School or College		4
Credit Hours		16
Total Credit Hours		62-64

1

One of these CLA Upper Level Courses must be Writing Intensive (WI).

General Program BA

Overview

The **Bachelor of Arts in General Program** is awarded by the College of Liberal Arts and is available only at Temple University, Japan Campus. With the BA in General Program, students design an interdisciplinary major in the Humanities (art history, Chinese, English, Japanese, Korean, philosophy, religion) or the Social Sciences (American studies, Asian studies, economics, history, political science, psychology) in consultation with the major coordinator and the Academic Advising Center.

A General Program major allows students to benefit from all the academic fields available at the Japan campus and to create an area of study that embraces an intellectual theme, such as environmental and population control, human rights, war and peace, or moral and ethical responsibilities.

Campus Location: Japan

Program Code: LA-GENP-BA

Contact Information

Johnathan McCaskill, JD, Major Coordinator
johnathan.mc.caskill@tj.temple.edu

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements for the Degree

1. University and College of Liberal Arts (CLA) Requirements

- All Temple students must take a minimum of two writing-intensive courses as part of the major.
- Students must complete the General Education (p. 83) curriculum.
- Students must follow CLA requirements as specified in the CLA College Requirements (p. 940) section of the Undergraduate Bulletin.

2. Major Requirements (minimum 45 credits)

Code	Title	Credit Hours
Major Concentration ¹		
	Select five (5) courses in one discipline from either the Social Science or Humanities division within the College of Liberal Arts.	15
	At least three (3) of these five (5) courses must be upper level (2000+).	
	Consult with the academic advisor for details.	
	Major Concentration Course (upper level)	
	Major Concentration Course (upper level)	
	Major Concentration Course (upper level)	
	Major Concentration Course (any level)	
	Major Concentration Course (any level)	
Interdisciplinary Electives ¹		
	Select seven (7) courses from either the Social Science or Humanities division to which the Major Concentration belongs.	21
	Courses selected for this requirement area must be from at least (3) different disciplines, other than the Major Concentration, within the selected division.	
	Consult with the academic advisor for details.	
	Interdisciplinary Elective	
	Interdisciplinary Elective	
	Interdisciplinary Elective	
	Interdisciplinary Elective	
	Interdisciplinary Elective	
	Interdisciplinary Elective	
	Interdisciplinary Elective	
Opposite Division Electives		
	Select three (3) courses from the division opposite from the selected concentration.	9
	All three (3) courses selected for this requirement area must be upper level (2000+).	
	Consult with the academic advisor for details.	
	Opposite Division Elective (upper level)	
	Opposite Division Elective (upper level)	
	Opposite Division Elective (upper level)	

Total Credit Hours **45**

¹
Of the total twelve (12) courses selected for the Major Concentration and Interdisciplinary Electives requirements, at least seven (7) courses must be Upper Level including two (2) writing intensive.

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in General Program

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
GenEd Quantitative Literacy Course ^{GQ}		4
GenEd Breadth Course		3
Foreign Language 1001 (first level)		4
Credit Hours		15
Spring		
IH 0851	Intellectual Heritage I: The Good Life	3
Foreign Language 1002 (second level)		4
GenEd Breadth Course		3
Major Elective 1xxx (Track Concentration Department)		3
Major Elective 1xxx (Track Non-Concentration Department)		3
Credit Hours		16
Year 2		
Fall		
IH 0852	Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Major Elective 1xxx (Track Concentration Department)		3
Select one of the following:		3-4
Foreign Language (third level)		
GenEd World Society Course		
Internationally Focused Course from Approved List		
Credit Hours		16
Spring		
GenEd Breadth Course		3-4
GenEd Breadth Course		3
GenEd Breadth Course		3
Major Elective 2000+ (Track Non-Concentration Department 2)		3
One Elective in any School or College		3-4
Credit Hours		16
Year 3		
Fall		
One CLA/CST 2000+ course		3
Major Elective 2000+ (Track Non-Concentration Department 3)		3
Major Elective 2000+ (Track Concentration Department)		3
One CLA/CST 2000+ course		3
One CLA/CST 0800-4999 Course		3
Credit Hours		15
Spring		
One CLA/CST 2000+ course		3
Major Elective 2000+ (Track Non-Concentration Department X)		3
Major Elective 2000+ (Track Concentration Department)		3
One CLA/CST 2000+ course		3

Major Elective 2000+ (Outside Track, SS for HU or HU for SS)	3
Credit Hours	15
Year 4	
Fall	
Major Elective 2000+ (Track Non-Concentration Department X)	3
Major Elective 2000+/96/97/98 (Track Concentration Department WI)	3
Major Elective 2000+ (Outside track, SS for HU or HU for SS)	3
One CLA/CST 0800-4999 Elective	3
One CLA/CST 0800-4999 Elective	3
Credit Hours	15
Spring	
Major Elective 2000+/96/97/98 (Track Non-Concentration Department X WI)	3
Major Elective 2000+ (Track Non-Concentration Department X)	3
One 2000+ CLA/CST course	3
Major Elective 2000+ (Outside Track, SS for HU or HU for SS)	3
One Elective 0800-4999 in any School or College	3
Credit Hours	15
Total Credit Hours	123

Geographic Information Systems Certificate

Overview

Geographic Information Systems (GIS) is a powerful analytical software tool that combines data and maps to solve complex problems at different scales. GIS is a rapidly growing field with applications in a wide range of fields and in public, private and governmental sectors of the economy. Areas that use GIS include health, social and natural sciences, planning, government, engineering, design, communications and business, among others. GIS skills are increasingly in demand by employers and, according to the Department of Labor, the industry has a high annual growth rate of 35 percent.

The four-course **Certificate in Geographic Information Systems**, offered by the Department of Geography and Urban Studies (GUS), teaches advanced location science and technology that meet the increased demand for well-trained professional practitioners. Our courses introduce students to a variety of cutting-edge spatial analysis technology and mapping software to identify, analyze and visualize spatial data patterns. GUS faculty have expertise in a range of GIS applications, including urban analytics, health, environment, business, location analysis, geovisualization, and remote sensing.

This certificate is open to undergraduate students in all majors at Temple University. Students majoring in Geography and Urban Studies or Environmental Studies may also complete the GIS certificate.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Program Code: LA-GIS-CERT

Contact Information

GIS Advisor
215-204-3386
guses@temple.edu

Learn more about the undergraduate certificate in Geographic Information Systems.

Requirements

The curriculum consists of two required courses, GUS 3161/ENST 3161 and GUS 3062/ENST 3062, and two electives from the array below. GUS and Environmental Studies majors need only two electives from the approved list below that are unique to the certificate (they cannot double-count with the major requirements).

Code	Title	Credit Hours
Required Courses		
GUS/ENST 3161	Spatial Statistics	3
GUS/ENST 3062	Fundamentals of Geographic Information Systems	3
Electives		
Select two of the following: ¹		6
GUS/ENST 3061	Fundamentals of Cartography	
GUS/ENST 3063	Environmental Remote Sensing	
GUS 3067	GIS and Location Analysis	
GUS/ENST 3069	GIS for Health Data Analysis	
GUS/ENST 4061	Cartographic Production	
GUS/ENST 4065	Urban Geographic Information Systems	
ENST 4066	Environmental GIS	
Total Credit Hours		12

1

Alternatives are acceptable with the approval of the GUS/ENST advisor.

Geography and Urban Studies BA

Overview

The Department of Geography and Urban Studies offers a Bachelor of Arts in Geography and Urban Studies, a minor in Geography and Urban Studies, and a certificate in Geographic Information Systems (GIS). Many of our students choose to complete a double major, a minor in a complementary discipline, or the GIS certificate.

The **Bachelor of Arts in Geography and Urban Studies** combines the discipline of geography with the field of urban studies to offer a program that emphasizes geographic theory and methods to the study of urban and regional processes and problems in the U.S. and international settings. Geography and Urban Studies graduates are equipped with the intellectual and methodological tools necessary to understand and address a wide range of environmental, economic, social and political challenges that are central to the well-being of billions of people in an increasingly connected and urbanizing world.

The major focuses on the four themes of globalization, sustainability, social justice and geographic methods that are increasingly central to understanding and addressing global challenges. Geography and Urban Studies majors learn geographic theory and methods that examine the complexity of human-environmental interactions; the increasing interconnectedness of the global economy, environment, culture and politics; and the importance of place and context in people's daily lives.

The Geography and Urban Studies major introduces students to urban processes, spatial relations, geospatial technologies including GIS, and qualitative and quantitative social science research methods. In required courses and electives, students examine urban issues; the role of political institutions; policy-making; and human interactions with the environment. The Geography and Urban Studies gateway courses are designed to develop the theoretical and methodological frameworks and tools necessary to understand the relationships among people, places and the environment as they interact through local and global connections. The electives give students the opportunity to develop an area of emphasis around their particular interests. Students focus on an individualized research project in their Senior Research Seminar. Each student's program is developed with a departmental advisor to suit individual interests and is designed to maximize educational and career opportunities. We encourage Geography and Urban Studies students to incorporate a semester abroad and/or an internship into their plan of study.

The objective of the Bachelor of Arts program in Geography and Urban Studies is to provide students with an understanding of:

- How space, place, and scale shape the interaction between environment and society;
- Critical thinking skills developed through examining a range of analytical approaches to investigate geographic, urban, and environmental processes;
- Contemporary explanatory frameworks in Geography and Urban Studies such as political ecology, feminist and poststructuralist theory, and development theory;
- The application of information technology skills to analyze spatial and temporal information, processes, and patterns through integrative research experiences;
- Practical considerations of community and environmental organizational settings at the local and regional scales.

Campus Location: Main

Program Code: LA-GUS-BA

Distinction in Major

Geography and Urban Studies students can graduate with distinction if they have, at the time of graduation, a 3.5 GPA in the major and a 3.0 cumulative GPA.

Career Preparation

Geography and Urban Studies graduates are especially competitive in the job market because of their technical and critical thinking skills, a sense of the complexity of interactions between humans and the environment, and their ability to synthesize information at a variety of scales. Students have the opportunity to gain technical skills in spatial statistics, Geographic Information Systems (GIS), cartographic production and design, and qualitative methods that are highly valued by employers. Our graduates find employment with nonprofits (domestic and international), planning or government agencies, consulting firms and citizens' organizations. Many also go on to graduate programs in geography, planning, environmental studies, law and other fields. The Department of Labor estimates that employment for geographers, planners and other geographic professions is expected to grow at a rate of twenty percent or more for the next decade.

Double-Counting Across Curricula Policy

Many students elect to take a combination of the Geography and Urban Studies major or minor and the Environmental Studies major or minor as they are complementary programs, but there are limits in terms of which courses may count for the two curricula.

The ONLY courses that can double-count between the Geography and Urban Studies and Environmental Studies majors are: GUS 3161 Spatial Statistics/ENST 3161 Spatial Statistics; GUS 2197 Research Design in Geography and Urban Studies/ENST 2097 Research Design in Environmental Studies; GUS 3062 Fundamentals of Geographic Information Systems/ENST 3062 Fundamentals of Geographic Information Systems. When used for the major in either program, these courses may not be used to fulfill the minor elective requirements of the other program.

Note that GUS 4198 Senior Seminar in Geography and Urban Studies and ENST 4198 Senior Research Seminar are NOT cross-listed seminars. Anyone pursuing a double major in Geography and Urban Studies and Environmental Studies must take both capstone courses.

Internships

We encourage students to apply their skills and knowledge in a credit-bearing internship that utilizes their academic training. Assignments at planning, social service, environmental and other agencies, as well as at firms that specialize in mapping and geographic data analysis, have helped our graduates in securing employment opportunities. The internship is complemented by a seminar in which students discuss their experiences. Contact Max Andrucki (max.andrucki@temple.edu) for more information on this opportunity.

Accelerated Programs

Undergraduate Geography and Urban Studies students have an opportunity to graduate with both a bachelor's degree and a master's degree within five years in one of the following accelerated programs.

- BA in Geography and Urban Studies + Master of Arts in Geography and Urban Studies: The Master of Arts in Geography and Urban Studies is an innovative, 36-credit program. Our curriculum focuses heavily on the themes of social justice, sustainability, globalization and geographic methods. Graduates go on to pursue further graduate study as well as professional positions related to urban and economic development, environmental sustainability and social justice at the local and international scale.
- BA in Geography and Urban Studies + Professional Science Master's in Geographic Information Systems: The PSM in GIS program combines advanced training in GIS core skills with professional development and business ethics to prepare students to enter the GIS workforce. Students learn in-demand technical skills and are introduced to a wide array of software and analytical problems, making them versatile problem solvers and critical thinkers.
- BA in Geography and Urban Studies + Master of Education in Secondary Education: The Master of Education (MEd) in Secondary Education program focuses on the needs and subject areas of today's secondary school students. This graduate program prepares students to teach grades 7 through 12 in their chosen content area such as English, Mathematics, Science, Social Studies or World Languages.

Contact Information

Melissa Gilbert, Geography and Urban Studies Chair
309 Gladfelter Hall
215-204-4429
mgilbert@temple.edu

Kevin Henry, Undergraduate Chair
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kevinahenry@temple.edu

Liz Janczewski, Student Services Coordinator

338A Gladfelter Hall
215-204-3386
liz.janczewski@temple.edu

Max Andrucki, Internship Coordinator
325B Gladfelter Hall
215-204-1233
max.andrucki@temple.edu

Learn more about the Bachelor of Arts in Geography and Urban Studies.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are GUS 2197 and GUS 4198.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 83) section of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including:
 - 90 credits in CLA/CST courses;
 - 45 credits of which must be at the upper level (numbered 2000-4999).
 - For **Social Science majors**, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art and Architecture, or any department in the College of Science and Technology.
 - A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
 - Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Professional Development Requirement**
 - All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements:**
 - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
 - All students must complete at least one course from the GenEd Global/World Society category; and
 - All Bachelor of Arts students must complete one of the following options:
 - Third semester of a foreign language;
 - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
 - Take one Global Studies course from the list on the CLA College Requirements (p. 940) page;
 - Study Abroad at an approved program; or
 - Take a second General Education Global/World Society course.
- **Notes on Foreign Language Study**
 - The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
 - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
 - See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (39 credits)

Code	Title	Credit Hours
Gateway Courses		
GUS 2001	Cities	3
GUS 2002	Space and Place	3
Research Methods courses		
GUS 2197	Research Design in Geography and Urban Studies	3
GUS 3062	Fundamentals of Geographic Information Systems	3
GUS 3161	Spatial Statistics	3
Research Methods elective		
Select one of the following:		3
GUS 3001	Images of the City in Popular Culture	
GUS 3061	Fundamentals of Cartography	
GUS 3063	Environmental Remote Sensing	
GUS 3064	Qualitative Methods	
GUS 4065	Urban Geographic Information Systems	
International Course		
Select one of the following:		3
GUS 2032	Urban Systems in a Global Economy	
GUS 2073	African Development	
GUS 2074	East and South Asia	
GUS 2121	Russian Cities	
GUS 3021	International Urbanization	
GUS 3052	Environmental Problems in Asia	
GUS 3073	Geography of Travel and Tourism	
GUS 3074	Sicily: The Land, People and Identity	
GUS 3075	Comparative Regional Development	
GUS 3076	Metropolitan Tokyo	
GUS 3928	Honors Metropolitan Tokyo	
GUS 4000	Special Topics in Geography and Urban Studies	
Geography and Urban Studies electives ¹		
Select 1 GUS course numbered 0800-4999		3
Select 4 GUS courses numbered 2000-4999		12
Capstone Course		
GUS 4198	Senior Seminar in Geography and Urban Studies	3
Total Credit Hours		39

1

No electives may double-count between the Geography & Urban Studies major and either the Environmental Studies major or minor.

Suggested Academic Plan

Bachelor of Arts in Geography and Urban Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4
Foreign Language 1001 - first level		4

GenEd Breadth Course		3
Credit Hours		15
Spring		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Foreign Language 1002 - second level		4
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
GUS 2001	Cities	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
CLA/CST 0800-4999 Elective		2
CLA 1002	Professional Development for Liberal Arts Majors	1
Select one of the following:		3
Foreign Language - third level		
GenEd Global/World Society Course		
Internationally Focused Course From Approved List		
Credit Hours		15
Spring		
GUS 2002	Space and Place	3
GUS 0800-4999 Elective		3
GenEd Breadth Course		3
GenEd Breadth Course		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Year 3		
Fall		
GUS 2197	Research Design in Geography and Urban Studies	3
GUS 3062	Fundamentals of Geographic Information Systems	3
One International Geography & Urban Studies Course From Approved List		3
CLA/CST 2000+ Humanities/CST Course		3
CLA/CST 0800-4999 Elective		3
One 0800-4999 Elective in Any School or College		2
Credit Hours		17
Spring		
GUS 3161	Spatial Statistics	3
GUS Research Methods Elective Course From Approved List		3
GUS 2000+ Elective		3
CLA/CST 2000+ Humanities/CST Course		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Year 4		
Fall		
GUS 2000+ Elective		3
GUS 2000+ Elective		3
CLA/CST 0800-4999 Elective		3
CLA/CST 2000+ Elective		3

One 0800-4999 Elective in Any School or College		3
	Credit Hours	15
Spring		
GUS 4198	Senior Seminar in Geography and Urban Studies	3
GUS 2000+ Elective		3
CLA/CST 0800-4999 Elective		9
	Credit Hours	15
	Total Credit Hours	123

Geography and Urban Studies Minor

Overview

The 18-credit **Minor in Geography and Urban Studies**, offered by the Department of Geography and Urban Studies, is open to students in all majors. The minor focuses on the four themes of globalization, sustainability, social justice and geographic methods that are increasingly central to understanding and addressing global challenges.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

Students are required to take one of the Gateway courses, either GUS 2001 or GUS 2002. Students also take 5 elective courses: one at any level and four at the upper level 2000+, which they can use to focus on their own particular interests.

Code	Title	Credit Hours
Gateway Course		
Select one of the following:		3
GUS 2001	Cities	
GUS 2002	Space and Place	
Electives ¹		
Select 5 courses as per the following criteria:		15
Select one Geography & Urban Studies elective - any level		
Select four Geography & Urban Studies electives numbered 2000+ ²		
Total Credit Hours		18

¹

No electives may double-count between the Geography & Urban Studies minor and the Environmental Studies major or minor.

²

One cognate course can substitute for an elective with written permission from the faculty advisor.

German Certificate

Overview

The 20-credit **Certificate in German**, offered by the Department of French, German, Italian and Slavic, provides students the experience and interpersonal skills required to engage in complex, cross-cultural situations. Required coursework emphasizes aural, pronunciation and oral drills, as well as grammar. The program is tailored to help students achieve their learning goals, whether they want to engage in business with German partners, work in government agencies or in media, or pursue relevant graduate studies.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Program Code: LA-GER-CR2+

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Learn more about the undergraduate certificate in German.

Requirements

Code	Title	Credit Hours
GER 1001	Introduction to German I	4
GER 1002	Introduction to German II	4
GER 2001	Intermediate I	3
GER 2002	Intermediate II	3
GER 2501	German for Business I	3
Select one from:		3
GER 3096	Composition I	
GER 3201	Culture and Civilization I	
Total Credit Hours		20

German Language and Cultural Studies BA

Overview

German is a major world language spoken in Germany, Austria and Switzerland, as well as in some communities in the United States. Whether you are interested in literature, music, theater, film or art, German culture is a rich and exciting tradition. Temple's German program provides broad linguistic, cultural, and practical experiences to prepare students to participate meaningfully in the German-speaking world.

The Department of French, German, Italian and Slavic offers two different programs of study in German:

- a traditional German Language and Cultural Studies major (and minor), and
- an Interdisciplinary German Studies major (and minor).

The traditional **Bachelor of Arts in German Language and Cultural Studies** focuses on the acquisition of German language and develops that skill through courses taught completely in German from the intermediate level onward. The Bachelor of Arts in Interdisciplinary German Studies includes introductory and intermediate level German, but allows up to two electives on German culture and history to be taken outside of German (allowing for the language of instruction to be English). This allows students more flexibility in course selection and although language acquisition is important, the study of German culture is emphasized. Either program of study will help students achieve their learning goals, whether they want to go on to use German to communicate with friends in Germany, Austria or Switzerland; to engage in business with German partners; to work in government or in the media; or to participate in German culture. They develop skills in reading, writing, and oral communication while acquiring a rich understanding of the literature, cinema, history and culture of the German-speaking world.

Students who study German at Temple find that the program prepares them to do well in whatever they choose upon graduation. The German major is a good preparation for a career that requires analytical thinking and communication skills in general, which includes the domains of education, business, government service, travel and tourism. It is a good major or second major for students planning to attend law school or medical school. Studies have shown that learning a foreign language helps raise scores on the LSAT, GRE and MCAT examinations. This course of study also proves valuable to anyone who plans to work for a multinational corporation.

The German courses are often small, allowing students to get to know one another and their professors well. The program helps prepare students enrolled in the Fox School of Business and Management to acquire a special language certificate including a special course on German in the business world. Outside of class, students can share conversations and activities informally or with the Temple University German Society.

Campus Location: Main

Program Code: BA-GLCS-BA

Study Abroad

Students declaring a major or minor in the department are strongly encouraged to study abroad. Temple University has programs at the universities of Hamburg, Tübingen, and Leipzig in Germany. Courses completed in these programs may be credited toward the German major or minor and in partial satisfaction of the CLA Global Studies requirement.

Students interested in Study Abroad should discuss their plans with the faculty advisor in German early in their academic program.

Distinction in Major

To be considered for Distinction in the German Language and Cultural Studies Major, students must:

- Complete the requirements for the concentration in German with a GPA of at least 3.50;
- Have an overall GPA of at least 3.25;
- Be recommended to the chair of the department by the German faculty advisor after consultation with the German department faculty.

Contact Information

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Learn more about the Bachelor of Arts in German Language and Cultural Studies.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are GER 3096 and GER 4296.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 83) of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including:
 - 90 credits in CLA/CST courses;
 - 45 credits of which must be at the upper level (numbered 2000-4999).
 - **Distribution Requirement for Humanities majors:** Six upper level credits must be earned in the Social Science, Science, and/or interdisciplinary subject areas. Select from the following CLA departments and programs: Africology & African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Gender, Sexuality, and Women's Studies, Geography and Urban Studies, Global Studies, History, Jewish Studies, Latin American Studies, Lesbian, Gay, Bisexual, and Transgender Studies, Liberal Arts, Neuroscience (CLA), Political Science, Psychology, and Sociology, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in all CLA/CST coursework, and in the major department.

- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Professional Development Requirement**
 - All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements:**
 - The language requirements of the German major exceed the minimum College of Liberal Arts requirements; no additional coursework is necessary for this requirement.
- **Notes on Foreign Language Study**
 - The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
 - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
 - See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements: Ten courses in German (30 credits/10 Courses)

Prerequisites: GER 1001 and GER 1002, with a minimum grade of C- or equivalent placement.

Course levels are incremental in skills and content. Courses must be taken sequentially or in some instances may be taken concurrently. Students who initially place beyond GER 2001 may begin with GER 2002 or another course at the 2000-level, as appropriate. Consult the faculty advisor for information.

Code	Title	Credit Hours
GER 2001	Intermediate I ¹	3
GER 2002	Intermediate II	3
GER 3096	Composition I	3
GER 4296	Composition II ²	3
Select one from the following:		3
GER 3201	Culture and Civilization I	
GER 3202	Culture and Civilization II	
Select one German elective course at the 4000 level.		3
Select four German electives from 2000-, 3000-, and 4000-level courses (in addition to those noted above). ³		12
Total Credit Hours		30

1

Students who place out of GER 2001 will need one additional elective; those who place out of GER 2002 will need two additional electives.

2

Indicates writing capstone for the major.

3

Up to two upper-level courses outside of the department will count as electives if they relate to the major as approved in writing by the department advisor.

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in German Language and Cultural Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
GER 1001	Introduction to German I	4
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ}		4
GenEd Breadth Course		3
Credit Hours		15
Spring		
GER 1002	Introduction to German II	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
CLA 1002	Professional Development for Liberal Arts Majors	1
GER 2001	Intermediate I	3
GenEd Breadth Course		3
GenEd Breadth Course		3
One 0800-4999 Elective in Any School or College		2
CLA/CST 0800-4999 Elective		2
Credit Hours		17
Spring		
GER 2002	Intermediate II	3
GenEd Breadth Course		3
One 0800-4999 Elective in Any School or College		3
CLA/CST 2000+ Course		3
CLA/CST 2000+ Course		3
Credit Hours		15
Year 3		
Fall		
GER 3096	Composition I	3
One 2000+ German Elective		3
One 2000+ German Elective		3
CLA/CST 2000+ Social Science/CST Course		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Spring		
Select one of the following:		3
GER 3201	Culture and Civilization I	
GER 3202	Culture and Civilization II	
CLA/CST 2000+ Social Science/CST Course		3
One 2000+ German Elective		3
One 2000+ German Elective		3

CLA/CST 0800-4999 Elective	3
Credit Hours	15
Year 4	
Fall	
One 4000 level German Elective	3
CLA/CST 2000+ Course	3
CLA/CST 0800-4999 Elective	3
CLA/CST 0800-4999 Elective	3
CLA/CST 0800-4999 Elective	3
Credit Hours	15
Spring	
GER 4296 Composition II	3
CLA/CST 0800-4999 Elective	3
CLA/CST 0800-4999 Elective	3
CLA/CST 0800-4999 Elective	3
One 0800-4999 Elective in Any School or College	3
Credit Hours	15
Total Credit Hours	123

German Language and Cultural Studies Minor

Overview

The **Minor in German Language and Cultural Studies** is offered by the Department of French, German, Italian and Slavic. The minor focuses on the acquisition of German language and develops that skill through courses taught completely in German from the intermediate level onward.

Students declaring a major or minor in the department are strongly encouraged to study abroad. Temple University has programs at the universities of Hamburg, Tübingen, and Leipzig in Germany. Courses completed in these programs may be credited toward the German major or minor and in partial satisfaction of the CLA Global Studies requirement.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Students may select only one of the following programs of study: German Language and Cultural Studies major; German Language and Cultural Studies minor; Interdisciplinary German Studies major; Interdisciplinary German Studies minor.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

Prerequisites: GER 1001 or equivalent placement with a minimum grade of C-.

Code	Title	Credit Hours
GER 1002	Introduction to German II ¹	4
GER 2001	Intermediate I	3
GER 2002	Intermediate II	3
GER 3096	Composition I	3
Select one German Elective from 2000-, 3000-, and 4000-level courses		3
Select one from:		3
GER 3201	Culture and Civilization I	
GER 3202	Culture and Civilization II	
Total Credit Hours		19

1

Students who place out of GER 1002 will replace this with a 3 credit elective and will meet the requirement for the minor with 18 credits.

Note: Up to two upper-level courses outside of the department will count as electives if they relate to the major and are approved by the faculty advisor in German.

Global Studies BA

Overview

Now more than ever, global knowledge, language abilities and international experience are crucial for students preparing to enter a global workforce. The **Bachelor of Arts in Global Studies**, which is administered by the Global Studies Program, prepares students for just that by combining bedrock instruction in multiple disciplines with foreign language instruction, regional enrichment and specialization in one of three thematic areas: global security, global economy, or global cultures. The Global Studies major goes beyond work done in other majors by exposing students to interdisciplinary perspectives on the world. Students gain advanced knowledge about international cultures and perspectives as well as essential skills like critical thinking and effective communication that are prized by every professional industry.

A BA in Global Studies prepares students to

- **Understand complex global problems** using tools from multiple disciplines, including economic analysis, social science and historical methods;
- **Communicate ideas about global issues effectively** through written work, oral expression and digital communication tools;
- **Look beyond local and national boundaries** to see themselves as part of a global network, the sustainability of which requires ethical and moral forthrightness;
- **Experience other cultures** by studying a world language and participating in a regional enrichment experience such as study abroad; and
- **Thrive professionally** in a variety of careers in an increasingly global marketplace.

Curriculum

The Global Studies curriculum offers a foundation through a set of four introductory courses, as well as specialization in one of three concentrations. Students **must select one of the following concentrations**:

- Global Security
- Global Economy
- Global Cultures

The introductory courses prepare students for the concentrations by studying alternative disciplinary and problem-based approaches to global studies. Within this general framework, the three concentrations allow students to identify a specialized program of study drawing from a structured set of concentration-specific requirements and electives, culminating in a research-based and writing-intensive capstone seminar. Each concentration offers many elective options and new courses are added each semester. Students are encouraged to work with their advisor to select the best options for their intended career path.

To develop a world perspective, students in Global Studies take two full years (through 4th semester) of a foreign language and either participate in an approved study abroad program or take additional area studies courses. Students work with their advisor and the Education Abroad office to identify the best fit with their language skills, disciplinary interests, career plans and financial capabilities.

Campus Location: Main

Program Code: LA-GBST-BA

Distinction in Major

Global Studies majors will receive Distinction in the Major if they have earned an overall GPA of 3.5 or higher and a GPA of at least 3.5 in the courses required for the major (excluding the language requirement).

Career Potential

Global Studies is not a major with a limiting, predefined career destination. Today, a large and growing number of careers can and do feature international or global components. Students with a degree in Global Studies thrive in a variety of industries, including local and national government, advocacy, policy development, the business sector and diplomacy. Foreign language proficiency and study abroad experience also make Global Studies graduates attractive job candidates in a variety of industries, including business, civil service, government, education, law, trade and policy.

This major is an obvious choice for students aiming specifically for an international career in government, business, or the non-profit sector, and its interdisciplinary and multidisciplinary nature provides an appropriate foundation for work or graduate study in any field affected by global change.

Contact Information

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Learn more about the Bachelor of Arts in Global Studies.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are GBST 2197 and GBST 4096.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 83) section of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including:
 - 90 credits in CLA/CST courses;
 - 45 credits of which must be at the upper level (numbered 2000-4999).
 - For **Social Science majors**, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art and Architecture, or any department in the College of Science and Technology.
 - A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
 - Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Professional Development Requirement**
 - All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement are listed on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements**
 - Global Studies majors are required to complete the fourth level of a foreign language, which exceeds the CLA minimum requirement. No additional coursework is required. The fourth level of language is numbered 2001 in French, German, Spanish, and Portuguese and in all other foreign language subjects, it is numbered 2002.
 - **Notes on Foreign Language Study**
 - The third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
 - See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (36-58 credits - varies according to foreign language placement and regional enrichment options)

Code	Title	Credit Hours
Foundation courses		
ANTH 2305	Introduction to Cultural Anthropology	3
ECON 1103	Global Economics	3
GBST 2001	Introduction to Global Studies	3
GBST 2197	Research Skills for Global Studies	3
POLS 1301	International Politics	3
Concentration Requirements		
Select a concentration and choose 6 courses from its list (below):		18
Global Security Concentration		
Global Economy Concentration		
Global Cultures Concentration		
Senior Capstone Seminar		
GBST 4096	Capstone Seminar in Global Studies	3
Regional Enrichment		
Select one of the following:		0-6
Study abroad at a TU-approved program		
Two area studies courses from one region as outlined below:		
Africa and the Middle East		
AAAS 2201	African Civilization	
ARBC 2012	Modern Arabic Literature in Translation	
ARBC 2021	Contemporary Arab Society in Film (in Translation)	
GUS 2073	African Development	
HIST 2511	Introduction to African History	
HIST 2513	Cold War Africa	
HIST 2516	Modern Islamic History	
HIST 2702	Imperialism, Race, and Empire	
HIST 2703	African Diaspora	
HIST 3511	Southern Africa: A History	
HIST 3531	Modern India	
HIST 3571	Israel: History, Politics and Society	
HIST 3572	Modern Middle East	
HIST 3751	Colonialism and Decolonization	
POLS 3241	Mideast Politics	
Asia		
ANTH 2367	Peoples of South Asia	
ASST 2001	Practical Asian Society and Culture	
ASST 2367	South Asia: Peoples, Culture, Experiences	
CHI 2013	Modern and Contemporary Chinese Literature in Translation	
CHI 2022	Contemporary Chinese Urban Film and Fiction in Translation	
GUS 2074	East and South Asia	
GUS 3052	Environmental Problems in Asia	
HIST 2217	Vietnam War	
HIST 2501	Introduction to East Asia: China	
HIST 2502	Introduction to East Asia: Japan	
HIST 2503	Introduction to Southeast Asia: Insular	
HIST 2504	Introduction to Southeast Asia: Mainland	
HIST 2516	Modern Islamic History	
HIST 2702	Imperialism, Race, and Empire	

HIST 3521	The Chinese Revolution
HIST 3522	Contemporary China
HIST 3531	Modern India
HIST 3551	History of Vietnam
JPNS 2012	Modern and Contemporary Japanese Literature in Translation
JPNS 2021	Japanese Literature in Film
POLS 2351	Japan and the Changing World Order
POLS 3251	China: State and Society
POLS 3252	East Asia and the United States
REL 2101	Indian Philosophies and Religions
Europe	
GER 3221	German Culture through Film
HIST 2102	History of Nazi Germany
HIST 2303	History of Central Europe, 1618-1871
HIST 2304	20th Century Europe: A Continent in Crisis
HIST 2705	Anti-Semitism/Holocaust/Racism
HIST 3331	History of England
ITAL 2221	Italian Culture through Film
POLS 2211	Contemporary Politics of Europe
POLS 3212	British Government and Politics
POLS 3331	Politics of the European Union
Latin America/Caribbean	
ANTH 2361	Peoples of Latin America
HIST 2514	Introduction to Latin America
HIST 2515	Civilization and Modernity in the Caribbean
HIST 3561	History of Brazil
HIST 3562	Contemporary Mexico
LAS 1001	Perspectives on Latin America
LAS 2361	Peoples of Latin America
SOC 2163	Area Studies: Latin American Development
POLS 2231	Comparative Political Systems in Latin America
Foreign Language	
Fourth-semester proficiency in one foreign language	0-16 credits
Total Credit Hours	36-58

Global Security Concentration (6 courses)

The quest for security, and the seemingly endless recurrence of interstate war are fundamental features of an anarchical world of sovereign states. Historically, this led students of security to focus on state power, military strategy, geopolitics, diplomacy and conflict in the international arena. In the 21st century, interstate wars have been joined by both increasingly destructive civil wars within countries, and by international and global terrorism perpetrated by non-state actors. In this concentration, students will draw on disciplines as diverse as history, political science, anthropology, geography and criminal justice to understand the causes of war, the security strategies of states, and the rise of new and challenging security threats in the 21st century.

Code	Title	Credit Hours
Global Security Concentration Requirements		
Select three of the following:		9
CJ 3405	Terrorism, Transnational Crime and Global Security	
ENST 3055	Environmental Hazards and Disasters	
HIST 2304	20th Century Europe: A Continent in Crisis	
POLS 2311	Post-Cold War Security	

Note: Courses taken for this requirement may not count as Global Security electives below.

Global Security Electives

Select three of the following:

9

ANTH 3337	Anthropology of War and Conflict
ANTH 3366	Violence: An Anthropological Approach
CJ 3403	Organized Crime
CJ 3405	Terrorism, Transnational Crime and Global Security
GUS 3055	Environmental Hazards and Disasters
GUS 3071	Health Geography
HIST 2217	Vietnam War
HIST 2304	20th Century Europe: A Continent in Crisis
HIST 2317	Central Europe Through Wars and Revolution, 1848-1989
HIST 2513	Cold War Africa
HIST 2702	Imperialism, Race, and Empire
HIST 2804	Peace, Conflict, and Social Change
HIST 2811	World War I
HIST 2812	World War II
HIST 2817	Gender, War, and Society
HIST 3228	America's Rise to Globalism
HIST 3229	Superpower America
HIST 3433	Blood and Iron: 19th Century European Diplomacy
HIST 3572	Modern Middle East
POLS 2301	Theories of War and Peace
POLS 2311	Post-Cold War Security
POLS 2321	Politics of the Global Economy
POLS 2331	International Organization
POLS 2341	U.S. Foreign Policy
POLS 3332	Globalization: Politics and Political Economy ¹

1

These courses require prerequisites beyond those covered in the Global Studies Foundation courses; students wishing to take these courses should plan accordingly.

Global Economy Concentration (6 courses)

Economic globalization is one of the defining features of the contemporary world. This concentration introduces students to fundamental features of the global economy from multiple disciplinary perspectives, including in the areas of trade, finance, and development. It studies the origins and consequences of globalization for development and growth, income and poverty, literacy and health, as well as political, demographic, environmental, and cultural changes. Students examine the evolution of cooperation among states in managing the global economy, and the role of history, politics, and technology in shaping international, national, and local relations.

Code	Title	Credit Hours
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Global Economy Concentration Requirements

Select three of the following:

9

ECON 2061	Foundations of Macroeconomic Development
ECON 3062	Economics of Global Poverty
GUS 2031	Geography of the Global Economy
SOC 3221	Global Development

Note: Courses taken for this requirement may not count as Global Economy electives below.

Global Economy Electives

Select three of the following:

9

ANTH 3327	Globalization and Localization
ECON 3547	Economics of Development and Growth
ECON 3563	International Trade
ECON 3564	International Monetary Economics
GUS 2032	Urban Systems in a Global Economy

GUS 2073	African Development
GUS 3021	International Urbanization
GUS 3073	Geography of Travel and Tourism
HIST 3811	World Economy Since 1945
POLS 2201	Comparative Politics: Developing Nations
POLS 2321	Politics of the Global Economy
POLS 3332	Globalization: Politics and Political Economy
SOC 3219	Understanding Globalization

Global Cultures Concentration (6 courses)

The Global Cultures concentration studies cultural formation, cultural change, and cultural interaction among peoples across the world. "Culture" is defined as learned systems of values, beliefs, and practices that bind a group of people together and give common meaning to their lived experiences. These groups can be local, regional, national or international; they are shaped by various structures of power and are continuously migrating. Students in the Global Cultures concentration will examine the interaction of global and local cultures and study aspects of cultural circulation, transaction, and mobility through courses in Literature, Film, Religion, History, Anthropology, and Sociology.

Code	Title	Credit Hours
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Global Cultures Concentration Requirements

Select three of the following:		9
ANTH 3325	Political Anthropology	
HIST 2702	Imperialism, Race, and Empire	
HIST 2819	Global Connections	
REL 1001	Religion and Society	

Note: Courses taken for this requirement may not count as Global Cultures electives below.

Global Cultures Electives

Select three of the following:		9
AAAS 2201	African Civilization	
AAAS 3215	Languages and Cultures of West Africa ¹	
ANTH 3325	Political Anthropology	
ANTH 3327	Globalization and Localization	
ANTH 3331	Anthropology and Culture Change	
ANTH 3333	The Anthropology of Tourism	
ARBC 2012	Modern Arabic Literature in Translation	
ARBC 2021	Contemporary Arab Society in Film (in Translation)	
ASST 2001	Practical Asian Society and Culture	
ASST 2107	Asian American Experiences	
ASST 2367	South Asia: Peoples, Culture, Experiences	
ENG 2512	The Modern Novel	
ENG 2601	Introduction to Postcolonial Literatures	
ENG 2712	International Film	
ENG 3513	Modern World Fiction ¹	
ENG 3522	Contemporary World Fiction in English ¹	
ENG 3610	Topics in Postcolonial Literature ¹	
ENG 3611	Postcolonial Theory	
GUS 3001	Images of the City in Popular Culture	
GUS 3307	Transportation & Culture	
HIST 2513	Cold War Africa	
HIST 2515	Civilization and Modernity in the Caribbean	
HIST 2516	Modern Islamic History	
HIST 2611	Third World Issues through Film	
HIST 2702	Imperialism, Race, and Empire	
HIST 2703	African Diaspora	

HIST 2705	Anti-Semitism/Holocaust/Racism
HIST 2816	Gender, Class, Nation
HIST 2817	Gender, War, and Society
HIST 2818	American Icons
HIST 3431	Women's Lives in Modern Europe
HIST 3564	Caliban's World: Cultural Politics in the 20th Century Americas
HIST 3572	Modern Middle East
HIST 3711	The City in History
LAS 1001	Perspectives on Latin America
LAS 2101	Latin America through Film and Fiction
LAS 3602	Caribbean Literature and Culture
REL 1001	Religion and Society
REL 2001	Women in Religion and Society
REL 2101	Indian Philosophies and Religions
REL 2102	Introduction to Buddhism
REL 2596	What Is Christianity?
REL 2606	Introduction to Islam
REL 2702	Religion in Contemporary Africa
REL 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
REL 3101	Yoga & Tantric Mysticism
PHIL 4278	Philosophy of Culture
SOC 3209	Immigrant America: Belonging and Integration
SOC 3221	Global Development

1

These courses require prerequisites beyond those covered in the Global Studies Foundation courses; students wishing to take these courses should plan accordingly.

Suggested Academic Plan

Bachelor of Arts in Global Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4
Foreign Language 1001 - first level		4
GenEd Breadth Course		3
Credit Hours		15
Spring		
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
GenEd Breadth Course		3
Foreign Language - second level		4
ECON 1103	Global Economics	3
POLS 1301	International Politics	3
Credit Hours		16
Year 2		
Fall		
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
GenEd Breadth Course		3

Foreign Language - third level		3
GBST 2001	Introduction to Global Studies	3
CLA 2000+ Elective		3
Credit Hours		15
Spring		
CLA 1002	Professional Development for Liberal Arts Majors	1
GenEd Breadth Course		3
GenEd Breadth Course		3
Foreign Language - fourth level		3
GBST 2197	Research Skills for Global Studies	3
CLA/CST 0800-4999 Elective		2
Credit Hours		15
Year 3		
Fall		
GenEd Breadth Course		3
Global Studies Concentration 2000+ Course		3
Global Studies Concentration 2000+ Course		3
ANTH 2305	Introduction to Cultural Anthropology	3
One 0800-4999 Elective in Any School or College		2
Global Studies Concentration Course		3
Credit Hours		17
Spring		
GenEd Breadth Course		3
Global Studies Area Requirement ¹		3
Global Studies Area Requirement ¹		3
CLA/CST 2000+ Humanities/CST Course		3
CLA/CST 2000+ Humanities/CST Course		3
Credit Hours		15
Year 4		
Fall		
Global Studies Concentration 2000+ Course		3
Global Studies Concentration 2000+ Course		3
CLA 2000+ Elective		3
CLA 2000+ Elective		3
One 0800-4999 Elective in Any School or College		3
Credit Hours		15
Spring		
GBST 4096	Capstone Seminar in Global Studies	3
Global Studies Concentration Course		3
CLA 2000+ Elective		3
One 0800-4999 Elective in Any School or College		3
One 0800-4999 Elective in Any School or College		3
Credit Hours		15
Total Credit Hours		123

1

Students are encouraged to study abroad, but if not possible, can replace with the area studies requirements as noted in this grid.

Global Studies Minor

Overview

Students interested in enhancing their degree program with a firm grounding in the understanding of globalization and its impact on national and international security, the globalized economy, and global cultures may opt to declare a **Minor in Global Studies**, which is administered by the

Global Studies Program. The minor includes the primary features of the major coursework, without the requirements for foreign language and regional enrichment.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

Code	Title	Credit Hours
ANTH 2305	Introduction to Cultural Anthropology	3
GBST 2001	Introduction to Global Studies	3
ECON 1103	Global Economics	3
POLS 1301	International Politics	3
Select three courses from one of the following Global Studies tracks (see course lists below):		9
Global Security track		
Global Economy track		
Global Cultures track		
Total Credit Hours		21

Global Security

Code	Title	Credit Hours
ANTH 3337	Anthropology of War and Conflict	3
ANTH 3366	Violence: An Anthropological Approach	3
CJ 3403	Organized Crime	3
CJ 3405	Terrorism, Transnational Crime and Global Security	3
GUS 3055	Environmental Hazards and Disasters	3
GUS 3071	Health Geography	3
HIST 2217	Vietnam War	3
HIST 2304	20th Century Europe: A Continent in Crisis	3
HIST 2317	Central Europe Through Wars and Revolution, 1848-1989	3
HIST 2513	Cold War Africa	3
HIST 2702	Imperialism, Race, and Empire	3
HIST 2804	Peace, Conflict, and Social Change	3
HIST 2811	World War I	3
HIST 2812	World War II	3
HIST 2817	Gender, War, and Society	3
HIST 3228	America's Rise to Globalism	3
HIST 3229	Superpower America	3
HIST 3433	Blood and Iron: 19th Century European Diplomacy	3
HIST 3572	Modern Middle East	3
POLS 2301	Theories of War and Peace	3
POLS 2311	Post-Cold War Security	3
POLS 2321	Politics of the Global Economy	3
POLS 2331	International Organization	3
POLS 2341	U.S. Foreign Policy	3
POLS 3332	Globalization: Politics and Political Economy	3

Global Economy

Code	Title	Credit Hours
ANTH 3327	Globalization and Localization	3
ECON 3547	Economics of Development and Growth ¹	3
ECON 3563	International Trade ¹	3
ECON 3564	International Monetary Economics ¹	3
GUS 2031	Geography of the Global Economy	3
GUS 2032	Urban Systems in a Global Economy	3
GUS 2073	African Development	3
GUS 3021	International Urbanization	3
GUS 3073	Geography of Travel and Tourism	3
HIST 3811	World Economy Since 1945	3
POLS 2201	Comparative Politics: Developing Nations	3
POLS 2321	Politics of the Global Economy	3
POLS 3332	Globalization: Politics and Political Economy ¹	3
SOC 3219	Understanding Globalization	3
SOC 3221	Global Development	3

1

These courses require prerequisites beyond those covered in the Global Studies Foundation courses; students wishing to take these courses should plan accordingly.

Global Cultures

Code	Title	Credit Hours
AAAS 2201	African Civilization	3
AAAS 3215	Languages and Cultures of West Africa ¹	3
ANTH 3327	Globalization and Localization	3
ANTH 3331	Anthropology and Culture Change	3
ANTH 3333	The Anthropology of Tourism	3
ARBC 2012	Modern Arabic Literature in Translation	3
ARBC 2021	Contemporary Arab Society in Film (in Translation)	3
ASST 2001	Practical Asian Society and Culture	3
ASST 2107	Asian American Experiences	3
ASST 2367	South Asia: Peoples, Culture, Experiences	3
ENG 2512	The Modern Novel	3
ENG 2601	Introduction to Postcolonial Literatures	3
ENG 2712	International Film	3
ENG 3513	Modern World Fiction ¹	3
ENG 3522	Contemporary World Fiction in English ¹	3
ENG 3610	Topics in Postcolonial Literature ¹	3
ENG 3611	Postcolonial Theory	3
GUS 3001	Images of the City in Popular Culture	3
GUS 3307	Transportation & Culture	3
HIST 2513	Cold War Africa	3
HIST 2515	Civilization and Modernity in the Caribbean	3
HIST 2516	Modern Islamic History	3
HIST 2611	Third World Issues through Film	3
HIST 2702	Imperialism, Race, and Empire	3
HIST 2703	African Diaspora	3
HIST 2705	Anti-Semitism/Holocaust/Racism	3
HIST 2816	Gender, Class, Nation	3

HIST 2817	Gender, War, and Society	3
HIST 2818	American Icons	3
HIST 3431	Women's Lives in Modern Europe	3
HIST 3564	Caliban's World: Cultural Politics in the 20th Century Americas	3
HIST 3572	Modern Middle East	3
HIST 3711	The City in History	3
LAS 1001	Perspectives on Latin America	3
LAS 2101	Latin America through Film and Fiction	3
LAS 3602	Caribbean Literature and Culture	3
REL 1001	Religion and Society	3
REL 2001	Women in Religion and Society	3
REL 2101	Indian Philosophies and Religions	3
REL 2102	Introduction to Buddhism	3
REL 2596	What Is Christianity?	3
REL 2606	Introduction to Islam	3
REL 2702	Religion in Contemporary Africa	3
REL 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature	3
REL 3101	Yoga & Tantric Mysticism	3
PHIL 4278	Philosophy of Culture	3
SOC 3209	Immigrant America: Belonging and Integration	3
SOC 3221	Global Development	3

1

These courses require prerequisites beyond those covered in the Global Studies Foundation courses; students wishing to take these courses should plan accordingly.

Health Research Certificate

Overview

The **Certificate in Health Research**, offered by the Department of Anthropology, is an 18-credit program that allows students to explore the ways in which healthcare impacts the development, structure and functioning of human society. In addition to building a foundational knowledge of health and its role in society, students will hone their analytical research and critical thinking skills through advanced data analysis and methodology courses.

This certificate is open to undergraduate students, except for Sociology majors.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Program Code: LA-HLRE-CERT

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Learn more about the undergraduate certificate in Health Research.

Requirements

The Certificate in Health Research requires five courses, including a health-related sequence and research methods.

Code	Title	Credit Hours
Required Courses		
SOC 2552	Health and Disease in American Society	3
SOC 3201	Statistical Methods in Sociology ¹	4
SOC 3261	Research Design and Methods ¹	4
Required Advanced Methods Course		

Select one from:		4
SOC 4001	Qualitative Research ²	
SOC 4002	Data Analysis ²	
Health-related Courses		
Select one of the following:		3
SOC 2522	Sociology of the Self	
SOC 2530	Selected Topics in Medical Sociology	
SOC 2572	Sex & Society	
SOC 3511	Environmental Sociology: The End of the World as We Know It?	
SOC 3525	Urban Health	
SOC 3530	Selected Topics in Medical Sociology	
SOC 3559	Health and Reproduction	
SOC 3565	Sociology of the Body	
SOC 3575	Population Studies	
SOC 3582	Independent Study in Medical Sociology	

Total Credit Hours **18**

1

Students must take SOC 3201 prior to, or concurrently with, SOC 3261.

2

Students must complete SOC 3201 and SOC 3261 before taking either of the advanced methods courses, SOC 4001 or SOC 4002.

History BA

Overview

Using rigorous standards of evidence, historians tell meaningful stories about the past. In-depth historical study gives students important tools for understanding contemporary issues affecting their own lives as well as local, national and global events. The **Bachelor of Arts in History**, offered by the Department of History, enables students to develop skills useful for any career that requires high-level critical thinking, wide-ranging analytical skills and great writing. Our students learn to master large amounts of information, conduct in-depth research, contextualize evidence from a variety of sources, and craft powerful written and oral arguments. These strengths are a foundation not only for successful careers but for lifelong learning and civic engagement.

Our home, Philadelphia, is a terrific place to study history—not only of the city and its remarkable past, but of the world as well. Our courses take advantage of Philly's exciting past and our major allows students to take advantage of the many study abroad options available at Temple.

The History major requires twelve courses (36 credits). Students must take two introductory level courses selected from American and World history surveys. Students may opt to take two survey courses from either area or one from each. These should be taken as early as possible, preferably in the freshman year. The three-course sequence in research methods and writing should be taken in the following order: HIST 2001 The Historian's Craft, then HIST 3096 Intermediate Writing Seminar, culminating in the senior level course, HIST 4096 Capstone Seminar in History in which students develop a research and writing project on the topic of their choice.

Students must select two "American" and two "non-American" History courses. This requirement can be fulfilled with a combination of the required survey courses and the upper-level electives. (Note: HIST 2001, HIST 3096 and HIST 4096 may not be used for this requirement.)

In addition, students in this major have a high degree of freedom, selecting seven upper-level electives in history (numbered 2000+). Our majors take rigorous courses in subjects such as Dissent in America, The History of Nazi Germany, the History of Philadelphia, Immigration and the American Dream, and Cold War Africa. We have faculty experts in urban history, African history, Asian history, military history, gender history, diplomacy, imperialism, the environment and many other fields.

Campus Location: Main

Program Code: LA-HIST-BA

Undergraduate Honors and Distinction in Major

There are two ways to enhance your history degree by achieving honors within the major:

- Participate in the History Honors Thesis Program
- Become a member of *Phi Alpha Theta*, the National History Honors Society.

Students in the [History Honors Thesis Program](#) research and write an original history thesis. All students who have a 3.4 cumulative and history averages are eligible to apply by contacting the History Honors Thesis Program Advisor, Eileen Ryan (eileen.ryan@temple.edu). Note that this program is separate from the University Honors Program and is designed to complement that experience.

In addition to meeting the major requirements, students who successfully complete HIST 4934 Honors Historiography and Research Methods (3 credits, History major elective) and HIST 4997 Honors Thesis Seminar (3 credits, taken in lieu of HIST 4096) are eligible to graduate with distinction in major.

Phi Alpha Theta, the National History Honors Society, is open to both history majors and non-majors who have completed at least 12 credits in history and achieved a history GPA of 3.25 and a cumulative GPA of 3.10. Participation in *Phi Alpha Theta* is separate from the History Honors Thesis Program and the University Honors Program. For more information, contact the Phi Alpha Theta advisor, Katya Motyl (katherina.motyl@temple.edu).

Special Organizations

Both majors and minors participate in the Temple Undergraduate History and Social Sciences Association (TUHSSA).

Accelerated Program

The BA in History / MEd in Secondary Education with a concentration in Social Studies Education is an accelerated program, administered through the College of Education and Human Development, which allows students to earn a Master in Education one year after receiving their undergraduate History degree.

Career Potential

Our students have interned at organizations like the American Philosophical Society, the Constitution Center, the Historical Society of Pennsylvania, and the McNeil Center for Early American Studies. Philadelphia's rich museum heritage provides abundant opportunities for students to pursue their interests.

Graduates have gone on to successful careers, including:

- Educator,
- Layer,
- Filmmaker,
- Military officer,
- Database administrator,
- Public health professional,
- Diplomat,
- Public policy expert,
- Museum curator, and
- Historian.

Associated Research Centers

- Center for Public History
- Center for the Study of Force and Diplomacy
- Feinsein Center for American Jewish History

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Learn more about the Bachelor of Arts in History.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 83) of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including:
 - 90 credits in CLA/CST courses;
 - 45 credits of which must be at the upper level (numbered 2000-4999).
 - History is designated as a "social science" major in the College of Liberal Arts.
 - **Distribution Requirement:** Social Science majors must take 6 upper level credits (numbered 2000-4999) in Humanities subject areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art and Architecture, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Professional Development Requirement**
 - All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. History majors may select either HIST 1012 Professional Development for History Majors or CLA 1002 Professional Development for Liberal Arts Majors. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements:**
 - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
 - All students must complete at least one course from the GenEd Global/World Society category; and
 - All Bachelor of Arts students must complete one of the following options:
 - Third semester of a foreign language;
 - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
 - Take one Global Studies course from the list on the CLA College Requirements (p. 940) page;
 - Study Abroad at an approved program; or
 - Take a second General Education Global/World Society course.
- **Notes on Foreign Language Study**
 - The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
 - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
 - See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (36 credits/12 courses in history)

Code	Title	Credit Hours
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Select a minimum of 12 courses in History, distributed as follows:

Select two Introductory Level courses from: ¹

HIST 1101	U.S. History to 1877	
HIST 1102	U.S. History since 1877	
HIST 1701	World History Ancient	
HIST 1702	World History Modern	
Select 7 electives in History numbered 2000-4999 ¹		21
HIST 2001	The Historian's Craft	3
HIST 3096	Intermediate Writing Seminar	3
HIST 4096	Capstone Seminar in History	3
Total Credit Hours		36

1

From the introductory and elective courses, two courses must be taken in American History and two courses in non-American history.

Suggested Academic Plan

Bachelor of Arts in History

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4
Foreign Language 1001 - first level		4
GenEd Breadth Course		3
Credit Hours		15
Spring		
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
Foreign Language 1002 - second level		4
GenEd Breadth Course		3
Select two of the following: ¹		6
HIST 1101	U.S. History to 1877	
HIST 1102	U.S. History since 1877	
HIST 1701	World History Ancient	
HIST 1702	World History Modern	
Credit Hours		16
Year 2		
Fall		
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
HIST 2001	The Historian's Craft	3
Select one Professional Development course from:		1
HIST 1012	Professional Development for History Majors	
CLA 1002	Professional Development for Liberal Arts Majors	
GenEd Breadth Course		3
GenEd Breadth Course		3
Select one of the following:		3
Foreign Language - third level		
GenEd Global/World Society Course		
Internationally-Focused Course From Approved List		
Credit Hours		16

Spring

GenEd Breadth Course	3
GenEd Breadth Course	3
GenEd Breadth Course	3
History Electives numbered 2000+ ¹	6
Credit Hours	15

Year 3**Fall**

History Electives numbered 2000+ ¹	6
CLA/CST 2000+ Humanities/CST Course	3
CLA/CST 2000+ Course	3
CLA/CST 0800-4999 Elective	3
Credit Hours	15

Spring

HIST 3096 Intermediate Writing Seminar	3
CLA/CST 2000+ Humanities/CST Course	3
History Elective 2000+ ¹	3
CLA/CST 2000+ Course	3
CLA/CST 0800-4999 Elective	3
Credit Hours	15

Year 4**Fall**

History Elective 2000+ ¹	3
CLA/CST 2000+ Course	3
CLA/CST 2000+ Course	3
CLA/CST 0800-4999 Elective	3
CLA/CST 0800-4999 Elective	3
Credit Hours	15

Spring

HIST 4096 Capstone Seminar in History	3
History Elective 2000+ ¹	3
CLA/CST 2000+ Course	3
CLA/CST 0800-4999 Elective	2
0800-4999 Electives in Any School or College	5
Credit Hours	16

Total Credit Hours	123
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All students must take a minimum of two courses focused on American history and two courses that are non-American history. These can be taken from the introductory course options or the history electives (but not HIST 2001, HIST 3096, or HIST 4096).

History Minor

Overview

The Minor in History, offered by the Department of History, is an ideal complement to other majors and programs at Temple—from medicine to journalism, from computer science to finance, from film to marketing.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

Students are required to take six courses for a total of 18 credits. Students take two introductory courses from the list below, HIST 2001 The Historian's Craft, and any three courses in History numbered 2000-4999.

Code	Title	Credit Hours
Select two introductory courses from:		6
HIST 1101	U.S. History to 1877	
HIST 1102	U.S. History since 1877	
HIST 1701	World History Ancient	
HIST 1702	World History Modern	
Students may substitute one History course 2000+ for one of the introductory courses		
HIST 2001	The Historian's Craft	3
History electives numbered 2000+		9
Total Credit Hours		18

Interdisciplinary German Studies BA

Overview

German is a major world language spoken in Germany, Austria and Switzerland, as well as in some communities in the United States. Whether you are interested in literature, music, theater, film or art, German culture is a rich and exciting tradition. Temple's German program provides broad linguistic, cultural, and practical experiences to prepare students to participate meaningfully in the German-speaking world.

The Department of French, German, Italian and Slavic offers two different programs of study in German:

- a traditional German Language and Cultural Studies major (and minor), and
- an Interdisciplinary German Studies major (and minor).

The traditional Bachelor of Arts in German Language and Cultural Studies focuses on the acquisition of German language and develops that skill through courses taught completely in German from the intermediate level onward. The **Bachelor of Arts in Interdisciplinary German Studies** includes introductory and intermediate level German, but allows up to two electives on German culture and history to be taken outside of German (allowing for the language of instruction to be English). This allows students more flexibility in course selection and although language acquisition is important, the study of German culture is emphasized. Either program of study will help students achieve their learning goals, whether they want to go on to use German to communicate with friends in Germany, Austria or Switzerland; to engage in business with German partners; to work in government or in the media; or to participate in German culture. They develop skills in reading, writing, and oral communication while acquiring a rich understanding of the literature, cinema, history and culture of the German-speaking world.

Students who study German at Temple find that the program prepares them to do well in whatever they choose upon graduation. The German major is a good preparation for a career that requires analytical thinking and communication skills in general, which includes the domains of education, business, government service, travel and tourism. It is a good major or second major for students planning to attend law school or medical school. Studies have shown that learning a foreign language helps raise scores on the LSAT, GRE and MCAT examinations. This course of study also proves valuable to anyone who plans to work for a multinational corporation.

The German courses are often small, allowing students to get to know one another and their professors well. The program helps prepare students enrolled in the Fox School of Business and Management to acquire a special language certificate including a special course on German in the business world. Outside of class, students can share conversations and activities informally or with the Temple University German Society.

Campus Location: Main

Program Code: BA-IGS-BA

Study Abroad

Students declaring a major or minor in the department are strongly encouraged to study abroad. Temple University has programs at the universities of Hamburg, Tübingen, and Leipzig in Germany. Courses completed in these programs may be credited toward the German major or minor and in partial satisfaction of the CLA Global Studies requirement.

Students interested in Study Abroad should discuss their plans with the faculty advisor in German early in their academic program.

Distinction in Major

To be considered for Distinction in the Interdisciplinary German Studies Major, students must:

- Complete the requirements for the concentration in German with a GPA of at least 3.50;
- Have an overall GPA of at least 3.25;
- Be recommended to the chair of the department by the German faculty advisor after consultation with the German department faculty.

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Learn more about the Bachelor of Arts in Interdisciplinary German Studies.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are GER 3096 and GER 4296 .
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 83) of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including:
 - 90 credits in CLA/CST courses;
 - 45 credits of which must be at the upper level (numbered 2000-4999).
 - **Distribution Requirement for Humanities majors:** Six upper level credits must be earned in the Social Science, Science, and/or interdisciplinary subject areas. Select from the following CLA departments and programs: Africology & African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Gender, Sexuality, and Women's Studies, Geography and Urban Studies, Global Studies, History, Jewish Studies, Latin American Studies, Lesbian, Gay, Bisexual, and Transgender Studies, Liberal Arts, Neuroscience (CLA), Political Science, Psychology, and Sociology, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in all CLA/CST coursework, and in the major department.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Professional Development Requirement**
 - All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements:**

- The language requirements of the German major exceed the minimum College of Liberal Arts requirements; no additional coursework is necessary for this requirement.
- **Notes on Foreign Language Study**
 - The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
 - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
 - See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements: Ten courses in German (30 credits/10 Courses)

Prerequisites: GER 1001 and GER 1002 , with a minimum grade of C- or equivalent placement.

Course levels are incremental in skills and content. Courses must be taken sequentially or in some instances may be taken concurrently. Students who initially place beyond GER 2001 may begin with GER 2001 or speak to a faculty advisor about placement.

Code	Title	Credit Hours
GER 2001	Intermediate I	3
GER 2002	Intermediate II	3
GER 3096	Composition I	3
GER 4296	Composition II	3
Two elective courses numbered 2000 or higher must be taken in the German Department (German must be the language of instruction).		6
Four elective courses numbered 2000 or higher. English may be the language of instruction in all four of these electives; at least two of these must be taken in the German Department. Two courses may be taken in other disciplines with written approval of the German faculty advisor.		12
Total Credit Hours		30

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Interdisciplinary German Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
GER 1001	Introduction to German I	4
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ}		4
GenEd Breadth Course		3
Credit Hours		15
Spring		
GER 1002	Introduction to German II	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Courses		9
Credit Hours		16
Year 2		
Fall		
GER 2001	Intermediate I	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3

GenEd Breadth Courses		6
CLA/CST Elective numbered 0800-4999		2
Free Elective in any school or college		2
CLA 1002	Professional Development for Liberal Arts Majors	1
Credit Hours		17
Spring		
GER 2002	Intermediate II	3
GenEd Breadth Course		3
Free Elective in any school or college		3
CLA/CST 2000+ Courses		6
Credit Hours		15
Year 3		
Fall		
GER 3096	Composition I	3
German 2000+ Elective (German must be the language of instruction)		3
German 2000+ Elective (may be taught in English)		3
2000+ Distribution in CLA Social Sciences or CST		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Spring		
German 2000+ Elective (German must be the language of instruction)		3
German 2000+ Elective (may be taught in English)		3
Elective in German or, with advisor approval, a German-related discipline numbered 2000-4999		3
CLA/CST 0800-4999 Elective		3
2000+ Distribution in CLA Social Sciences or CST		3
Credit Hours		15
Year 4		
Fall		
Elective in German or, with advisor approval, a German-related discipline numbered 2000-4999		3
CLA/CST 0800-4999 Electives		6
CLA/CST 2000+ Course		6
Credit Hours		15
Spring		
GER 4296	Composition II	3
CLA/CST 0800-4999 Elective		9
Elective(s) in any school or college - any level		3
Credit Hours		15
Total Credit Hours		123

Interdisciplinary German Studies Minor

Overview

The **Minor in Interdisciplinary German Studies** is offered by the Department of French, German, Italian and Slavic. The minor includes introductory and intermediate level German, but allows up to two electives on German culture and history to be taken outside of German (allowing for the language of instruction to be English). This allows students more flexibility in course selection and although language acquisition is important, the study of German culture is emphasized.

Students declaring a major or minor in the department are strongly encouraged to study abroad. Temple University has programs at the universities of Hamburg, Tübingen, and Leipzig in Germany. Courses completed in these programs may be credited toward the German major or minor and in partial satisfaction of the CLA Global Studies requirement.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Students may select only one of the following programs of study: German Language and Cultural Studies major; German Language and Cultural Studies minor; Interdisciplinary German Studies major; Interdisciplinary German Studies minor.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

Prerequisites: GER 1001 or equivalent placement with a minimum grade of C-.

Code	Title	Credit Hours
GER 1002	Introduction to German II	4
GER 2001	Intermediate I	3
GER 2002	Intermediate II	3
German 2000+ Elective (Language of instruction must be German.)		3
Two Electives in German or a related discipline. (Language of instruction may be English.)		6
Total Credit Hours		19

International Affairs BA

Overview

The **Bachelor of Arts in International Affairs (IA)** is offered by the College of Liberal Arts' Department of Political Science and is available only at Temple University, Japan Campus. IA is an interdisciplinary and multidisciplinary subject which covers political science, geography, economics and history. It explores international cooperation and conflict, poverty and development, the nature and causes of war, nationalism and social change, and other issues. Focusing especially upon Japan and its place in Asia and the world, it requires students to study regions besides East Asia (Japan, China, Korea) and the United States. Students must undertake an internship and study an East Asian language.

Campus Location: Japan

Program Code: LA-IA-BA

Contact Information

James Brown, PhD, Major Coordinator
jamesdbrown@tj.temple.edu

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements for the Degree

1. University and College of Liberal Arts (CLA) Requirements

- All Temple students must take a minimum of two writing-intensive courses as part of the major.
- Students must complete the General Education (p. 83) curriculum.
- Students must follow CLA requirements as specified in the CLA College Requirements (p. 940) section of the Undergraduate Bulletin.

2. Major Requirements (Minimum 45 credits plus a fourth semester level East Asian language requirement)

Code	Title	Credit Hours
Major Core Courses		
POLS 1201	Foreign Governments and Politics	3
POLS 1301	International Politics	3
Select one of the following:		3-6
ECON 1101 & ECON 1102	Macroeconomic Principles and Microeconomic Principles	
ECON 1103	Global Economics	
Select one of the following:		3
HIST 1702	World History Modern	

GUS 1031	Geography of World Affairs	
Select one of the following:		3
HIST 2804	Peace, Conflict, and Social Change	
HIST 3228	America's Rise to Globalism	
HIST 3229	Superpower America	
HIST 3811	World Economy Since 1945	
Political Science Requirements ¹		
Select 2 Political Science courses in consultation with the Academic Advisor and/or Major Coordinator		6
POLS 4310 / POLS 4320 taken multiple times under different course topics can count toward Political Science requirement.		
POLS 1101	The American Political System	
POLS 2102	American State and Local Politics	
POLS 2201	Comparative Politics: Developing Nations	
POLS 2211	Contemporary Politics of Europe	
POLS 2212	Eastern Europe, Russia and the West	
POLS 2311	Post-Cold War Security	
POLS 2321	Politics of the Global Economy	
POLS 2331	International Organization	
POLS 2351	Japan and the Changing World Order	
or ASST 2351	Japan in a Changing World	
POLS 2441	Democracy, Capitalism, and Socialism	
POLS 2496	Introduction to Political Philosophy	
POLS 2503	Evidence and Knowledge	
POLS 3101	The American Presidency	
POLS 3125	Interest Group Politics	
POLS 3134	The Politics of Inequality	
POLS 3151	Public Policy Analysis	
POLS 3153	The Politics of Poverty	
POLS 3201	Nationalism, Ethnicity, and Politics	
POLS 3203	Comparative Politics of Democratization	
POLS 3212	British Government and Politics	
POLS 3213	Post-Communist Politics	
POLS 3241	Mideast Politics	
POLS 3251	China: State and Society	
or ASST 3251	China: State and Society	
POLS 3252	East Asia and the United States	
or ASST 3252	East Asia and the United States	
POLS 3265	International Environmental Policy	
or ENST 3265	International Environmental Policy	
POLS 3331	Politics of the European Union	
POLS 3451	Personality and Politics	
Interdisciplinary Requirements ¹		
Select 2 courses in Social Science or other related disciplines in consultation with the Academic Advisor and/or Major Coordinator		6
AMST 2097		
or ASST 3696		
or HIST 3696		
or GSWS 4696		
AMST 2107	Asian American Experiences	
or ASST 2107	Asian American Experiences	
or HIST 2107	Asian American History	
AMST 2217	The Vietnam War	
or ASST 2217	The Vietnam War	
or HIST 2217	Vietnam War	

AMST 3031	Political Protest and Culture in the '60s
AMST 3096 or GSWS 3096	
ANTH 1062	Introduction to Anthropology
ANTH 2238 or ASST 2238	Visual Anthropology of Modern Japan Visual Anthropology of Modern Japan
ANTH 2373 or ASST 2373	Japanese Culture Japanese Culture
ANTH 2374 or ASST 2374	The Anthropology of Modern China The Anthropology of Modern China
ARTH 2807 or ASST 2807	East Meets West East Meets West
ARTH 2815 or ASST 2815	Pre-Modern Japanese Art up to the Edo Period Japanese Art
ASST 1102 or REL 1102	Introduction to Asian Religions
ASST 2001	Practical Asian Society and Culture
ASST 2011 or JPNS 2011	Survey of Japanese Literature Before 1868 Survey of Japanese Literature: Pre-Modern
ASST 2012 or JPNS 2012	Modern and Contemporary Japanese Literature in Translation Modern and Contemporary Japanese Literature in Translation
ASST 2015 or JPNS 2015	Tokyo in Literature and Film Tokyo in Literature and Film
ASST 2016 or JPNS 2016	Mystery and Crime Fiction in Japan Mystery and Crime Fiction in Japan
ASST 2098 or JPNS 2096	Japanese Popular Culture and its Literature
ASST 2501 or HIST 2501	Introduction to East Asia: China Introduction to East Asia: China
ASST 2502 or HIST 2502	Introduction to East Asia: Japan Introduction to East Asia: Japan
ASST 2511 or IB 2501	Introduction to Asian Business Fundamentals of Asian Business
ASST 3247 or SOC 3247	Ideology and Social Change in Japan Ideology and Social Change in Japan
ASST 3541 or HIST 3541	Japan Today Japan Today
ASST 3542 or HIST 3542 or GSWS 3542	Women and Society in Japan Women and Society in Japan Women and Society in Japan
ASST 3636	Asian Women in Transition
ECON 3501	Intermediate Microeconomic Analysis
ECON 3502	Intermediate Macroeconomic Analysis
ECON 3503	Introduction to Econometrics
ECON 3504	Mathematical Economics
ECON 3506	Energy, Ecology, and Economy
ECON 3512	Public Finance
ECON 3537	Comparative Economic Systems
ECON 3538	Managerial Economics
ECON 3547	Economics of Development and Growth
ECON 3563	International Trade
ECON 3564	International Monetary Economics

ECON 3596	Energy, Ecology, and Economy
ECON 3597	Health Economics
GUS 2025	American Place
or AMST 2051	American Places: Home, City, Region
HIST 1708	
or GSWS 1708	
HIST 2103	African American History to 1865
HIST 2104	African American History 1865-Present
HIST 2702	Imperialism, Race, and Empire
HIST 2812	World War II
HIST 3363	Russia: Revolution, State, and Empire
HIST 3433	Blood and Iron: 19th Century European Diplomacy
JRN 1111	Journalism and Society
LGLS 1001	Law in Society
LGLS 3506	Law, Technology and E-Commerce
LGLS 3562	Legal Aspects of Global Business
PSY 2101	Foundations of Cognitive Psychology
PSY 2102	
PSY 2201	Foundations of Psychopathology
PSY 2301	Foundations of Developmental Psychology
PSY 2401	Foundations of Social Psychology
PSY 2402	Foundations of Industrial and Organizational Psychology
PSY 2501	Foundations of Behavioral Neuroscience
PSY 3152	
East Asian Studies Requirements ¹	
Select 3 courses that exclusively focus on East Asia in Social Science or other related disciplines in consultation with the Academic Advisor and/or Major Coordinator	
9	
POLS 4310 / POLS 4320 taken multiple times under different course topics can count toward East Asian requirement. Please consult with the Academic Advisor and/or Major Coordinator.	
AMST 2217	The Vietnam War
or ASST 2217	The Vietnam War
or HIST 2217	Vietnam War
AMST 2097	
or ASST 3696	
or HIST 3696	
or GSWS 4696	
ANTH 2238	Visual Anthropology of Modern Japan
or ASST 2238	Visual Anthropology of Modern Japan
ANTH 2373	Japanese Culture
or ASST 2373	Japanese Culture
ANTH 2374	The Anthropology of Modern China
or ASST 2374	The Anthropology of Modern China
ARTH 2807	East Meets West
or ASST 2807	East Meets West
ARTH 2815	Pre-Modern Japanese Art up to the Edo Period
or ASST 2815	Japanese Art
ARTH 2818	
or ASST 2818	
ASST 1102	
or REL 1102	Introduction to Asian Religions
ASST 2001	Practical Asian Society and Culture
ASST 2011	Survey of Japanese Literature Before 1868

or JPNS 2011	Survey of Japanese Literature: Pre-Modern
ASST 2016	Mystery and Crime Fiction in Japan
or JPNS 2016	Mystery and Crime Fiction in Japan
ASST 2012	Modern and Contemporary Japanese Literature in Translation
or JPNS 2012	Modern and Contemporary Japanese Literature in Translation
JPNS 2015	Tokyo in Literature and Film
or JPNS 2015	Tokyo in Literature and Film
ASST 2098	Japanese Popular Culture and its Literature
or JPNS 2096	
ASST 2351	Japan in a Changing World
or POLS 2351	Japan and the Changing World Order
ASST 2501	Introduction to East Asia: China
or HIST 2501	Introduction to East Asia: China
ASST 2502	Introduction to East Asia: Japan
or HIST 2502	Introduction to East Asia: Japan
ASST 2511	Introduction to Asian Business
or IB 2501	Fundamentals of Asian Business
ASST 3247	Ideology and Social Change in Japan
or SOC 3247	Ideology and Social Change in Japan
ASST 3251	China: State and Society
or POLS 3251	China: State and Society
ASST 3252	East Asia and the United States
or POLS 3252	East Asia and the United States
ASST 3541	Japan Today
or HIST 3541	Japan Today
ASST 3542	Women and Society in Japan
or HIST 3542	Women and Society in Japan
or GSWS 3542	Women and Society in Japan
JPNS 4196	Seminar in Japanese and Japan: Japanese Society and Culture through Newspaper
JPNS 4296	Seminar in Japanese and Japan: Business
JPNS 4396	

East Asia Requirement 4000+ Writing Intensive

Select 1 course in consultation with the Academic Advisor and/or Major Coordinator 3

ASST 4096	Seminar in Asian Studies (Course topic of ASST 4096 must be East Asia focused)
ASST 4696	Modern Japan: Empire, War, Society
or HIST 4697	Modern Japan: Empire, War, Society

Non-USA / Non-East Asian Studies Requirements ¹

Select 2 courses that focus on non-USA, non-East Asian regions in Social Science or other disciplines in consultation with the Academic Advisor and/or Major Coordinator 6

POLS 4310 / POLS 4320 taken multiple times under different course topics can count toward Non-USA / Non-East Asian Studies requirement. Please consult with the Academic Advisor and/or Major Coordinator.

HIST 1301

HIST 1705

HIST 1708

or GSWS 1708

HIST 2103 African American History to 1865

HIST 2304 20th Century Europe: A Continent in Crisis

HIST 2702 Imperialism, Race, and Empire

HIST 3363 Russia: Revolution, State, and Empire

HIST 3431 Women's Lives in Modern Europe

or GSWS 3431 Women's Lives Modern Europe

HIST 3433 Blood and Iron: 19th Century European Diplomacy

LGLS 1001	Law in Society	
POLS 2201	Comparative Politics: Developing Nations	
POLS 2211	Contemporary Politics of Europe	
POLS 2212	Eastern Europe, Russia and the West	
POLS 2311	Post-Cold War Security	
POLS 2321	Politics of the Global Economy	
POLS 2331	International Organization	
POLS 2441	Democracy, Capitalism, and Socialism	
POLS 2496	Introduction to Political Philosophy	
POLS 2503	Evidence and Knowledge	
POLS 3125	Interest Group Politics	
POLS 3134	The Politics of Inequality	
POLS 3151	Public Policy Analysis	
POLS 3153	The Politics of Poverty	
POLS 3201	Nationalism, Ethnicity, and Politics	
POLS 3203	Comparative Politics of Democratization	
POLS 3212	British Government and Politics	
POLS 3213	Post-Communist Politics	
POLS 3241	Mideast Politics	
POLS 3265	International Environmental Policy	
POLS 3331	Politics of the European Union	
Political Science Seminar		
Select 1 course in consultation with the Academic Advisor and/or Major Coordinator		3
POLS 4310	Seminar in International Politics	
POLS 4320	Seminar in International Politics	
Internship		
Complete at least one internship for at least 3 credits, upon approval by the Major Coordinator		3
POLS 4185	Internship I	
Political Science Capstone (WI)		
POLS 4896	Capstone Seminar in Political Science	3
East Asian Language Requirements		
Select one of the following (fourth semester):		3-4
CHI 2002	Chinese Intermediate II	
JPNS 2702	TUJ - Japanese Intermediate II	
or JPNS 2002	Intermediate Japanese II	
KRN 2002	Korean Intermediate II	

1

For a comprehensive list of courses to fulfill this requirement, please consult your advisor.

East Asian Language Proficiency Requirement: The language requirement may be satisfied by coursework or proficiency in the language for heritage speakers. Students who demonstrate proficiency beyond the fourth semester are not required to replace this with an International Affairs approved elective.

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in International Affairs

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	

GenEd Quantitative Literacy Course ^{GQ}		4
GenEd Breadth Course		3
Select one of the following first-level East Asian Foreign Language courses:		4
JPNS 1001	Japanese Elements I	
CHI 1001	Chinese Elements I	
KRN 1001	Korean Elements I	
Credit Hours		15
Spring		
IH 0851	Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
POLS 1201	Foreign Governments and Politics	3
POLS 1301	International Politics	3
Select one of the following second-level East Asian Foreign Language courses:		4
JPNS 1002	Japanese Elements II	
CHI 1002	Chinese Elements II	
KRN 1002	Korean Elements II	
Credit Hours		16
Year 2		
Fall		
IH 0852	Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Select one of the following:		3
HIST 1702	World History Modern	
GUS 1031	Geography of World Affairs	
Select one of the following third-level East Asian Foreign Language courses:		3-4
CHI 2001	Chinese Intermediate I	
JPNS 2701 or JPNS 2001	TUJ - Japanese Intermediate I or Intermediate Japanese I	
KRN 2001	Korean Intermediate I	
Credit Hours		16
Spring		
GenEd Breadth Course		3-4
GenEd Breadth Course		3
GenEd Breadth Course		3
ECON 1101	Macroeconomic Principles	3
Select one of the following fourth-level East Asian Foreign Language courses:		3-4
CHI 2002	Chinese Intermediate II	
JPNS 2702 or JPNS 2002	TUJ - Japanese Intermediate II or Intermediate Japanese II	
KRN 2002	Korean Intermediate II	
Credit Hours		16
Year 3		
Fall		
ECON 1102	Microeconomic Principles	3
Political Science 2000+ (Political Science Requirement 1)		3
CLA 2000+ (East Asia Area Requirement 1)		3
Political Science 2000+ (Political Science Requirement 2)		3
Select one of the following:		3
HIST 2804	Peace, Conflict, and Social Change	
HIST 3228	America's Rise to Globalism	
HIST 3229	Superpower America	

HIST 3811	World Economy Since 1945	
Credit Hours		15
Spring		
POLS 4185	Internship I	3
CLA 2000+ (Non-USA / Non-East Asia Requirement 1)		3
CLA 2000+ (Interdisciplinary Elective 1)		3
CLA 2000+ (East Asia Area Requirement 2)		3
CLA/CST 0800-4999 (2000+ in a related discipline recommended)		3
Credit Hours		15
Year 4		
Fall		
Asian Studies 4000+ Writing Intensive ^{WI}		3
POLS 4310	Seminar in International Politics	3
or POLS 4320	or Seminar in International Politics	
CLA 2000+ Interdisciplinary Elective 2		3
CLA 2000+ (East Asia Area Requirement 3)		3
CLA 2000+ (Non-USA/Non-East Asia Requirement 2)		3
Credit Hours		15
Spring		
POLS 4896	Capstone Seminar in Political Science	3
CLA/CST 0800-4999 (2000+ in a related discipline recommended)		3
CLA/CST 0800-4999 (2000+ in a related discipline recommended)		3
One Elective 0800-4999 in any School or College		3
One Elective 0800-4999 in any School or College		3
Credit Hours		15
Total Credit Hours		123

International Business Studies BS

Overview

The **Bachelor of Science in International Business Studies** (IBS) is offered by the College of Liberal Arts' Department of Economics and is available only at Temple University, Japan Campus (TUJ). This program will prepare students for a challenging career anywhere in the world.

The IBS program was developed in response to the contemporary global need for personnel with the knowledge and skills to work in the international arena. The curriculum encompasses a general knowledge of cultures, economies and societies, the business knowledge required to succeed in a variety of careers, and the language abilities to work across borders. The program challenges students to integrate international business with language studies, an understanding of world affairs and hands-on internship experience. Students develop the global mindset that multinational firms need in the 21st century.

IBS students work on teams with people of similar backgrounds and with those who are often quite different in how they approach life and their studies. TUJ encourages students not only to be multilingual, but also to understand how to navigate across cultures and borders. The IBS program teaches them to think critically, form a well-reasoned opinion, and then capably express that opinion. This is accomplished through class participation, visits to local businesses, and by bringing savvy international business people in the classroom. With those tools, TUJ graduates move confidently into the world of international business and launch productive, fulfilling and viable global careers.

Campus Location: Japan

Program Code: LA-IBTJ-BS

Contact Information

William Swinton, MBA, Major Coordinator
swint@tuj.temple.edu

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements for the Degree

1. University and College of Liberal Arts (CLA) Requirements

- All Temple students must take a minimum of two writing-intensive courses as part of the major.
- Students must complete the General Education (p. 83) curriculum.
- Students must follow CLA requirements as specified in the CLA College Requirements (p. 940) section of the Undergraduate Bulletin.

2. Major Requirements (Minimum 76 credits, in addition to a fourth semester level foreign language requirement)

Code	Title	Credit Hours
General IBS Core / Non-Business Courses		
MATH 1021	College Algebra	4
MATH 1031	Differential and Integral Calculus	4
MATH 2031	Probability and Statistics	3
ECON 1101	Macroeconomic Principles	3
ECON 1102	Microeconomic Principles	3
ECON 3563	International Trade	3
or ECON 3564	International Monetary Economics	
ECON 3538	Managerial Economics	3
ENG 2007	Writing for Business and Industry	3
CLA 2030	Special Topics in Liberal Arts III (Technology in International Business)	3
Political Science 2000 or higher level	elective (consult with the Academic Advisor and/or the Major Coordinator)	3
POLS 2321	Politics of the Global Economy (consult with the academic advisor for pre-requisite)	3
ASST 2511	Introduction to Asian Business	3
ECON 3581	Co-op Experience in Economics (Internship)	3
CLA 2020	Special Topics in Liberal Arts II (International Career Strategies)	2
Lower Division Business Courses		
ACCT 2101	Financial Accounting	3
ACCT 2102	Managerial Accounting	3
HRM 1101	Leadership and Organizational Management	3
MKTG 2101	Marketing Management	3
IBS Major Courses		
Select two of the following:		6
JIBS 3101	Introduction to Global Finance	
JIBS 3102	Global Operations and Supply Chain Management	
JIBS 3501	Marketing in a Global Environment	
IBS Major Courses Writing Intensive and Capstone		
JIBS 4197	Global Business Overview	3
JIBS 4596	International Business Capstone	3
College of Liberal Arts (CLA) or College of Science and Technology (CST)		
Select three of any CLA/CST courses at 2000+ level or higher		9
Fourth-semester proficiency in one foreign language		
Select one of the following, or consult with the Academic Advisor and/or the Major Coordinator:		3-4
CHI 2002	Chinese Intermediate II	
JPNS 2702	TUJ - Japanese Intermediate II	
or JPNS 2002	Intermediate Japanese II	
KRN 2002	Korean Intermediate II	

Language Proficiency Requirement: The language requirement may be satisfied by coursework or proficiency in the language for heritage speakers. The assessment tests listening, speaking, and reading comprehension as well as written communications in foreign languages approved by the International Business Studies major coordinator. Students who demonstrate proficiency beyond the fourth semester are not required to replace this with an International Business Studies approved elective.

MATH 1021: The MATH 1021 requirement may be satisfied by coursework (taken at Temple or transfer course) or the Placement Assessment. Students who are exempted from MATH 1021 by the Placement Assessment are not required to replace this with an International Business Studies approved elective.

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in International Business Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802 or ENG 0812	Analytical Reading and Writing or Analytical Reading and Writing: ESL	4
MATH 1021	College Algebra	4
Foreign Language 1001 (first level)		4
GenEd Breadth Course		3
Credit Hours		15
Spring		
IH 0851	Intellectual Heritage I: The Good Life	3
Foreign Language 1002 (second level)		4
GenEd Breadth Course		3
ECON 1101	Macroeconomic Principles	3
MATH 1031	Differential and Integral Calculus ¹	4
Credit Hours		17
Year 2		
Fall		
Foreign Language 2000+ (third level)		3-4
IH 0852	Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
GenEd Breadth Course		3
MATH 2031	Probability and Statistics	3
Credit Hours		16
Spring		
GenEd Breadth Course		3-4
GenEd Breadth Course		3
GenEd Breadth Course		3
ACCT 2101	Financial Accounting	3
Foreign Language 2000+ (fourth level)		3-4
Credit Hours		16
Year 3		
Fall		
ENG 2007	Writing for Business and Industry	3
HRM 1101	Leadership and Organizational Management	3
MKTG 2101	Marketing Management	3
ECON 1102	Microeconomic Principles	3
ACCT 2102	Managerial Accounting	3
CLA 2020	Special Topics in Liberal Arts II (International Career Strategies)	2
Credit Hours		17
Spring		
ECON 3581	Co-op Experience in Economics (Internship)	3
CLA 2030	Special Topics in Liberal Arts III (Technology in International Business)	3
One Political Science course at 2000 level or higher ²		3

Select two of the following:		6
JIBS 3101	Introduction to Global Finance	
JIBS 3102	Global Operations and Supply Chain Management	
JIBS 3501	Marketing in a Global Environment	
Credit Hours		15
Year 4		
Fall		
One CLA/CST course at 2000 level or higher		3
JIBS 4596	International Business Capstone	3
ASST 2511	Introduction to Asian Business	3
POLS 2321	Politics of the Global Economy	3
Select one of the following:		3
ECON 3563	International Trade	
ECON 3564	International Monetary Economics	
Credit Hours		15
Spring		
JIBS 4197	Global Business Overview	3
ECON 3538	Managerial Economics	3
One CLA/CST course at 2000 level or higher		3
One CLA/CST course at 2000 level or higher		3
Credit Hours		12
Total Credit Hours		123

1

This course satisfies the GenEd Quantitative Literacy requirement.

2

Through a consultation with an academic advisor or the major coordinator.

Italian BA

Overview

Apart from being the number one study abroad destination among university students, Italy's importance in the corporate world and its complimentary pairing with humanities studies make Italian the fourth most studied foreign language in the United States.

Temple University students have two options for taking a degree in Italian, offered through the Department of French, German, Italian and Slavic: a traditional **Bachelor of Arts in Italian** that focuses on learning Italian language through the advanced level, or a Bachelor of Arts in Italian Studies that focuses on learning Italian language through the intermediate level and includes more major electives in Italian culture but taught in English or Italian. Both majors are interdisciplinary programs of study that, in addition to being built on requirements of language proficiency and core knowledge of Italian literary history, places strong emphasis on cultural, global and national identity studies. An additional learning goal for students of Italian is to demonstrate understanding and appreciation of cultural perspectives and practices in the Italian-speaking world. The program's methodology is based on a communicative approach coupled with technology-based student engagement practice to enhance the students' language retention, level of competency, and proficiency, as well as to provide a window into Italian culture. The transferable communication and critical thinking skills acquired by the program prove invaluable to employers of liberal arts graduates.

Campus Location: Main

Program Code: LA-ITAL-BA

Distinction in Major

To be considered for Distinction in Major in Italian, students must:

- Complete the requirements for the concentration in Italian with a GPA of at least 3.50;
- Have an overall GPA of at least 3.25;
- Be recommended to the chair of the department by the Italian faculty advisor.

Study Abroad

Students declaring a major in Italian are encouraged to study abroad. Temple has its own campus in Rome, Italy, which offers courses in a variety of fields, including language, art, art history, architecture and international business. Students interested in studying in Italy should discuss their plans with the Italian faculty advisor as early as possible.

Contact Information

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Learn more about the Bachelor of Arts in Italian.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are ITAL 3096, and either ITAL 2096 or ITAL 4096.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 83) of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including:
 - 90 credits in CLA/CST courses;
 - 45 credits of which must be at the upper level (numbered 2000-4999).
 - **Distribution Requirement for Humanities majors:** Six upper level credits must be earned in the Social Science, Science, and/or interdisciplinary subject areas. Select from the following CLA departments and programs: Africology & African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Gender, Sexuality, and Women's Studies, Geography and Urban Studies, Global Studies, History, Jewish Studies, Latin American Studies, Lesbian, Gay, Bisexual, and Transgender Studies, Liberal Arts, Neuroscience (CLA), Political Science, Psychology, and Sociology, or any department in the College of Science and Technology.
 - A minimum GPA of 2.0, cumulatively, in all CLA/CST coursework, and in the major department.
 - Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
 - **Professional Development Requirement**

- All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements**
 - The requirements of the Italian major exceed the minimum requirements of the College of Liberal Arts; no additional coursework is required.
- **Notes on Foreign Language Study**
 - The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
 - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
 - See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (30 credits)

Code	Title	Credit Hours
ITAL 2001	Intermediate Italian I ¹	3
ITAL 2002	Intermediate Italian II	3
ITAL 3096	Composition II: Advanced Writing Skills ²	3
Select six Italian Electives numbered 2000+ ³		18
Select one of the following writing-intensive Italian courses:		3
ITAL 2096	Composition I: Italian Composition and Conversation	
ITAL 4096		
Total Credit Hours		30

1

Students who place out of ITAL 2001 will need one additional elective; those who place out of ITAL 2002 will need two additional electives.

2

Indicates writing capstone for the major.

3

Up to two cognate courses in English may be accepted (with written permission of the Italian advisor) as part of the required elective courses.

Suggested Academic Plan

Bachelor of Arts in Italian

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ}		4
ITAL 1001	Italian Language I	4
GenEd Breadth Course		3
Credit Hours		15
Spring		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
ITAL 1002	Italian Language II	4
GenEd Breadth Course		3
GenEd Breadth Course		3

GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
ITAL 2001	Intermediate Italian I	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
GenEd Breadth Course		3
CLA/CST 0800-4999 Elective		3
One 0800-4999 Elective in Any School or College		2
Credit Hours		17
Spring		
ITAL 2002	Intermediate Italian II	3
Italian 2000+ Course		3
CLA 1002	Professional Development for Liberal Arts Majors	1
GenEd Breadth Course		3
CLA/CST 0800-4999 Elective		2
CLA/CST 2000+ Course		3
Credit Hours		15
Year 3		
Fall		
CLA/CST 2000+ Social Science/CST Course		3
Italian 2000+ Course		3
Italian 2000+ Course		3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Spring		
CLA/CST 2000+ Social Science/CST Course		3
Select one of the following:		3
ITAL 2096	Composition I: Italian Composition and Conversation	
ITAL 4096		
Italian 2000+ Course		3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Year 4		
Fall		
Italian 2000+ Course		3
ITAL 3096	Composition II: Advanced Writing Skills	3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Spring		
Italian 2000+ Course		3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		3
One 0800-4999 Elective in Any School or College		3

One 0800-4999 Elective in Any School or College	3
Credit Hours	15
Total Credit Hours	123

Italian Certificate

Overview

In the 20-credit **Certificate in Italian**, offered by the Department of French, German, Italian and Slavic, students learn to effectively communicate in Italian with confidence and cultivate their writing, reading and listening skills. Apart from being the number one study abroad destination among university students, Italy's importance in the corporate world and its complimentary pairing with humanities studies make Italian the fourth most studied foreign language in the United States.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Program Code: LA-ITAL-CR2+

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Learn more about the undergraduate certificate in Italian.

Requirements

Six courses beginning with ITAL 1001 and including ITAL 2501.

Students who place out of any course will need additional electives.

Code	Title	Credit Hours
ITAL 1001	Italian Language I	4
ITAL 1002	Italian Language II	4
ITAL 2001	Intermediate Italian I	3
ITAL 2002	Intermediate Italian II	3
ITAL 2501	Italian for Business	3
Select one Italian Elective numbered 2000+		3
Total Credit Hours		20

All courses must be taught in Italian.

Italian Minor

Overview

The **Minor in Italian**, offered by the Department of French, German, Italian and Slavic, focuses on learning the Italian language.

Students declaring a minor in Italian are encouraged to study abroad. Temple has its own campus in Rome, Italy, which offers courses in a variety of fields, including language, art, art history, architecture and international business. Students interested in studying in Italy should discuss their plans with the Italian faculty advisor as early as possible.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

Six courses required (18 credit minimum)¹

Code	Title	Credit Hours
ITAL 1002	Italian Language II ¹	4
ITAL 2001	Intermediate Italian I ¹	3
ITAL 2002	Intermediate Italian II	3
Select three Italian courses numbered 2000-4999 (taught in Italian)		9
Total Credit Hours		19

1

Students with proficiency in Italian may replace ITAL 1002 and ITAL 2001 with upper-level courses taught in Italian. See the faculty advisor for more information.

Italian Studies BA

Overview

Apart from being the number one study abroad destination among university students, Italy's importance in the corporate world and its complimentary pairing with humanities studies make Italian the fourth most studied foreign language in the United States.

Temple University students have two options for taking a degree in Italian, offered through the Department of French, German, Italian and Slavic: a traditional Bachelor of Arts in Italian that focuses on learning Italian language through the advanced level, or a **Bachelor of Arts in Italian Studies** that focuses on learning Italian language through the intermediate level and includes more major electives in Italian culture but taught in English or Italian. Both majors are interdisciplinary programs of study that, in addition to being built on requirements of language proficiency and core knowledge of Italian literary history, places strong emphasis on cultural, global and national identity studies. An additional learning goal for students of Italian is to demonstrate understanding and appreciation of cultural perspectives and practices in the Italian-speaking world. The program's methodology is based on a communicative approach coupled with technology-based student engagement practice to enhance the students' language retention, level of competency, and proficiency, as well as to provide a window into Italian culture. The transferable communication and critical thinking skills acquired by the program prove invaluable to employers of liberal arts graduates.

Students who major in Italian Studies are seeking a combination of the language acquisition skills developed through the intermediate level Italian along with their interest in Italian culture and history. Many courses are offered that are related to Italian culture, but the courses are conducted in English and wouldn't normally fulfill the requirements of the traditional Italian major. Courses in Classical Culture, Art History and History may be combined with the Italian language courses for this major.

Campus Location: Main

Program Code: LA-ITLS-BA

Distinction in Major

To be considered for Distinction in Major in Italian Studies, students must:

- Complete the requirements for the concentration in Italian with a GPA of at least 3.50;
- Have an overall GPA of at least 3.25;
- Be recommended to the chair of the department by the Italian faculty advisor.

Study Abroad

Students declaring a major in Italian Studies are encouraged to study abroad. Temple has its own campus in Rome, Italy, which offers courses in a variety of fields, including language, art, art history, architecture and international business. Students interested in studying in Italy should discuss their plans with the Italian faculty advisor as early as possible.

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Learn more about the Bachelor of Arts in Italian Studies.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are ITAL 3096 , and either ITAL 2096 or ITAL 4096 .
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 83) of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including:
 - 90 credits in CLA/CST courses;
 - 45 credits of which must be at the upper level (numbered 2000-4999).
 - **Distribution Requirement for Humanities majors:** Six upper level credits must be earned in the Social Science, Science, and/or interdisciplinary subject areas. Select from the following CLA departments and programs: Africology & African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Gender, Sexuality, and Women's Studies, Geography and Urban Studies, Global Studies, History, Jewish Studies, Latin American Studies, Lesbian, Gay, Bisexual, and Transgender Studies, Liberal Arts, Neuroscience (CLA), Political Science, Psychology, and Sociology, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in all CLA/CST coursework, and in the major department.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Professional Development Requirement**
 - All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements**
 - The requirements of the Italian major exceed the minimum requirements of the College of Liberal Arts; no additional coursework is required.
 - **Notes on Foreign Language Study**
 - The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
 - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
 - See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (30 credits)

Code	Title	Credit Hours
ITAL 2001	Intermediate Italian I	3
ITAL 2002	Intermediate Italian II	3
ITAL 2096 or ITAL 4096	Composition I: Italian Composition and Conversation	3
ITAL 3096	Composition II: Advanced Writing Skills	3
Italian Electives (Italian language of Instruction) 2000+		6
Italian Electives (English or Italian language of instruction) 2000+		6
Related Electives (with faculty advisor approval)		6
Total Credit Hours		30

Note: Students who place out of ITAL 2001 must take an additional elective. Students who place out of ITAL 2002 must take two additional electives.

Suggested Academic Plan

Bachelor of Arts in Italian Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
ITAL 1001	Italian Language I	4
GenEd Quantitative Literacy Course ^{GQ}		4
GenEd Breadth Course		3
Credit Hours		15
Spring		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
ITAL 1002	Italian Language II	4
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
ITAL 2001	Intermediate Italian I	3
CLA 1002	Professional Development for Liberal Arts Majors	1
GenEd Breadth Course		3
GenEd Breadth Course		3
One 0800-4999 Elective in Any School or College		2
Credit Hours		15
Spring		
ITAL 2002	Intermediate Italian II	3
Italian 2000+ Course (In Italian)		3
GenEd Breadth Course		3
CLA/CST 0800-4999 Electives		5

CLA/CST 2000+ Course	3
Credit Hours	17
Year 3	
Fall	
Italian 2000+ Course (In Italian)	3
Italian 2000+ Course (May be taught in English; offered by the Italian Department)	3
CLA/CST 2000+ Course	3
CLA/CST 0800-4999 Elective	3
CLA/CST 2000+ Social Science/CST Course	3
Credit Hours	15
Spring	
Select one of the following:	3
ITAL 2096 Composition I: Italian Composition and Conversation	
ITAL 4096	
Italian 2000+ Course (May be taught in English; offered by the Italian Department)	3
CLA/CST 2000+ Social Science/CST Course	3
CLA/CST 0800-4999 Electives	6
Credit Hours	15
Year 4	
Fall	
ITAL 3096 Composition II: Advanced Writing Skills	3
Italian-Related Elective (Must be pre-approved by Faculty Advisor)	3
CLA/CST 2000+ Course	3
CLA/CST 0800-4999 Electives	6
Credit Hours	15
Spring	
Italian-Related Elective (Must be pre-approved by Faculty Advisor)	3
CLA/CST 2000+ Course	3
CLA/CST 0800-4999 Elective	3
0800-4999 Electives in Any School or College	6
Credit Hours	15
Total Credit Hours	123

Italian Studies Minor

Overview

The 19-credit **Minor in Italian Studies**, offered by the Department of French, German, Italian and Slavic (FGIS), is an interdisciplinary program designed for students with intermediate proficiency who want to enrich their knowledge of Italian cultural studies (film, media, music, art, literature, language and history) beyond the language requirement of the Bachelor of Arts in Italian. Students take a combination of Italian language courses (through level 2002, 4th semester Italian) and electives in literature, film, or some other aspect of Italian history and culture. One of these electives must be taught in Italian language (where the whole course is conducted in the language and assignments are done in Italian) and the other two courses may be conducted in English (one of these must be offered by the FGIS department, the other may be from another related department with the approval of the faculty advisor).

Students declaring a minor in Italian Studies are encouraged to study abroad. Temple has its own campus in Rome, Italy, which offers courses in a variety of fields, including language, art, art history, architecture and international business. Students interested in studying in Italy should discuss their plans with the Italian faculty advisor as early as possible.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

Code	Title	Credit Hours
ITAL 1002	Italian Language II	4
ITAL 2001	Intermediate Italian I	3
ITAL 2002	Intermediate Italian II	3
Italian Elective (taught in Italian)		3
Italian Elective (taught in English or Italian)		3
Elective in Italian history or culture with approval of faculty advisor - may be taught in English.		3
Total Credit Hours		19

Japanese BA

Overview

The **Bachelor of Arts in Japanese** is offered by the College of Liberal Arts' Department of Asian and Middle Eastern Languages and Studies at the Temple University, Japan Campus only.

The Japanese major is a unique undergraduate degree program designed to offer a comprehensive four-year Japanese language curriculum in a Japanese as a Second Language (JSL) setting. It aims to achieve advanced and well-balanced proficiency in Japanese so that students will, by using the Japanese language as a communication tool, be well-equipped and fully prepared to examine socio-cultural aspects of Japan and Japanese literature, and be active social agents to make contributions in the world of globalization.

The Bachelor of Arts in Japanese will be conferred upon the student after the completion of 123 credits across the following requirements:

- 35-36 credit hours of General Education coursework;
- 43 credit hours (14 courses) required for major; major courses must be passed with at least a C-; and
- 44-45 elective credit hours.

Campus Location: Japan

Program Code: LA-JPNS-BA

A Japanese minor and certificate are also offered at both Main Campus and Temple Japan.

Contact Information

Temple Japan Campus

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These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements for the Degree

1. University requirements

- All Temple students must take a minimum of two writing-intensive courses as part of the major.
- Students must complete the General Education (p. 83) curriculum.

2. General electives vary according to a student's individual program of study. Consult your academic advisor for more information.

3. Prerequisites: JPNS 1001, JPNS 1002, and JPNS 2701/JPNS 2001 with a minimum grade of C- or equivalent placement. Course levels are incremental in skills and content. Courses must be taken sequentially or in some instances may be taken concurrently. Students who are exempted from JPNS 2701/JPNS 2001 may begin with JPNS 2702 or higher level, in accordance to the placement assessment.

4. Major requirements (minimum 43 credits)

Code	Title	Credit Hours
Language Requirements		
JPNS 2702	TUJ - Japanese Intermediate II	4
JPNS 3001	Advanced Japanese I	3
JPNS 3002	Advanced Japanese II	3
JPNS 4001	Japanese Advanced III	3
JPNS 4002	Japanese Advanced IV	3

Language Skills ¹

Select at least four of the following:

12

Note: Students who have placed out of JPNS 2702 must take ONE additional Language Skills course. Those who have placed out of JPNS 3001 must take TWO additional Language Skills courses. Those who have placed out of JPNS 3002 must take THREE additional Language Skills courses.

JPNS 2003	Oral Intensive Japanese II
JPNS 2301	Kanji II
JPNS 2631	Structure of Japanese Language I
JPNS 3000	Special Topics in Japanese I (Introduction to Consecutive Translation for Non-Native Speakers of Japanese I)
JPNS 3003	Advanced Japanese Writing
JPNS 3010	Special Topics in Japanese II (Introduction to Consecutive Translation for Non-Native Speakers of Japanese II)
JPNS 3096	Intermediate Writing in Japanese
JPNS 3631	Structure of Japanese Language II
JPNS 4003	Advanced Oral Japanese

Area Studies Electives ¹

Select 3 courses from the pre-approved courses list:

9

ANTH 2238 or ASST 2238	Visual Anthropology of Modern Japan
ANTH 2373 or ASST 2373	Japanese Culture
ASST 2351 or POLS 2351	Japan in a Changing World
ASST 2502 or HIST 2502	Japan and the Changing World Order
ASST 2815 or ARTH 2815	Introduction to East Asia: Japan
ASST 3247 or SOC 3247	Introduction to East Asia: Japan
ASST 3541	Japanese Art
	Pre-Modern Japanese Art up to the Edo Period
	Ideology and Social Change in Japan
	Ideology and Social Change in Japan
	Japan Today

or HIST 3541	Japan Today
ASST 3542	Women and Society in Japan
or HIST 3542	Women and Society in Japan
or GSWS 3542	Women and Society in Japan
GUS 3076	Metropolitan Tokyo
JPNS 2011	Survey of Japanese Literature: Pre-Modern
or ASST 2011	Survey of Japanese Literature Before 1868
JPNS 2012	Modern and Contemporary Japanese Literature in Translation
or ASST 2012	Modern and Contemporary Japanese Literature in Translation
JPNS 2015	Tokyo in Literature and Film
or ASST 2015	Tokyo in Literature and Film
JPNS 2016	Mystery and Crime Fiction in Japan
or ASST 2016	Mystery and Crime Fiction in Japan
JPNS 2021	Japanese Literature in Film
or ASST 2021	Japanese Literature in Film
JPNS 3000	Special Topics in Japanese I (Japanese Communication and Culture I)
JPNS 3010	Special Topics in Japanese II (Japanese Communication and Culture II)
REL 3301	Japanese Religions
REL 3302	Japanese Buddhism

Japan Area Studies Writing Intensive (WI)

Select one of the following: 3

This course must be taught in English.

JPNS 2096	
or ASST 2098	Japanese Popular Culture and its Literature
ASST 4096	Seminar in Asian Studies (The course topic must focus on Japan exclusively.)
ASST 4696	Modern Japan: Empire, War, Society
or HIST 4697	Modern Japan: Empire, War, Society

Capstone

Select one of the following: 3

JPNS 4196	Seminar in Japanese and Japan: Japanese Society and Culture through Newspaper
JPNS 4296	Seminar in Japanese and Japan: Business
JPNS 4396	

Total Credit Hours 43

1

For a comprehensive list of courses that fulfill the Language Skills and Area Studies requirements, please refer to <https://www.tuj.ac.jp/sites/japan/files/pre-approved-courses-for-japanese-major-area-studies-electives.pdf>.

Proficiency Assessment: Students who are placed in JPNS 3001 or higher must consult with the academic advisor and the major coordinator to develop a plan to complete a sufficient number of courses and credits within the major.

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Japanese

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
JPNS 1001	Japanese Elements I	4
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
GenEd Quantitative Literacy Course	^{GQ}	4

GenEd Breadth Course		3
Credit Hours		15
Spring		
JPNS 1002	Japanese Elements II	4
IH 0851	Intellectual Heritage I: The Good Life	3
One elective related to the major (JPNS 1301 Kanji I recommended)		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
JPNS 2701	TUJ - Japanese Intermediate I	4
IH 0852	Intellectual Heritage II: The Common Good	3
One elective related to the major (JPNS 1003 Oral I recommended)		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Spring		
JPNS 2702	TUJ - Japanese Intermediate II	4
Japanese Language Skills requirement #1		3
CLA 2000+ Area Studies Elective 1 (Social Science)		3
GenEd Breadth Course		3
GenEd Breadth Course		3-4
Credit Hours		16
Year 3		
Fall		
JPNS 3001	Advanced Japanese I	3
Japanese Language Skills requirement #2		3
CLA 2000+ Area Studies Elective 2 (Writing Intensive taught in English)		3
One CLA 2000+ Elective		3
One CLA 0800-4999 Elective		3
Credit Hours		15
Spring		
JPNS 3002	Advanced Japanese II	3
Japanese Language Skills requirement #3		3
CLA 2000+ Area Studies Elective 3 (Social Science)		3
One CLA 0800-4999 Elective		3
One CLA 0800-4999 Elective		3
Credit Hours		15
Year 4		
Fall		
JPNS 4001	Japanese Advanced III	3
Japanese Language Skills requirement #4		3
CLA 2000+ Area Studies Elective 4 (Social Science)		3
One CLA 0800-4999 Elective		3
One CLA 0800-4999 Elective		3
Credit Hours		15
Spring		
JPNS 4002	Japanese Advanced IV	3
One CLA 0800-4999 Elective		3
One Elective 0800-4999 in any School or College		3
One Elective 0800-4999 in any School or College		3

Select one of the following Capstone courses:		3
JPNS 4196	Seminar in Japanese and Japan: Japanese Society and Culture through Newspaper	
JPNS 4296	Seminar in Japanese and Japan: Business	
JPNS 4396		
	Credit Hours	15
	Total Credit Hours	123

Japanese Certificate

Overview

The **Certificate in Japanese**, offered by the Department of Asian and Middle Eastern Languages and Studies, focuses on learning language skills and developing a strong foundation for the effective use of Japanese socially and professionally. This program will be of particular interest to students considering careers in international business, government service or other professions where foreign language proficiency is important. This program also contributes to meeting the diverse language needs of students with personal or academic interests in Japan and its culture.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Locations: Main and Japan

Program Code: LA-JPNS-CR2+

Contact Information

Main Campus

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Temple University Japan

Yuka Matsuhashi, MA, Japanese Coordinator
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Learn more about the undergraduate certificate in Japanese.

Requirements

This certificate can only be taken as part of an undergraduate degree program and is awarded at the time of graduation. It requires an average of 2.0 in Japanese and a minimum grade of C- or higher must be earned in all required courses listed below.

Code	Title	Credit Hours
JPNS 1001	Japanese Elements I	4
JPNS 1002	Japanese Elements II	4
JPNS 2001	Intermediate Japanese I	3
JPNS 2002	Intermediate Japanese II	3
JPNS 3001	Advanced Japanese I	3
JPNS 3002	Advanced Japanese II	3
Total Credit Hours		20

Japanese Minor

Overview

The **Minor in Japanese**, offered by the Department of Asian and Middle Eastern Languages and Studies, emphasizes language study while also recognizing the importance of learning about Japan through work in fields such as literature, history, anthropology and religion. This program will be of particular interest to students interested in careers in academia, business, government or other professions where Japanese language proficiency is important.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main and Japan

Contact Information

Main Campus

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Temple Japan Campus

Yuka Matsuhashi, MA, Major Coordinator
yuka.matsuhashi@tuj.temple.edu

Requirements

This minor requires a minimum of three Japanese-language courses and three Japan-focused content courses. A minimum grade of C- must be earned in all courses used for the minor. Students who place out of JPNS 2002, JPNS 3001, and/or JPNS 3002 may substitute Japanese electives. See the Department of Asian and Middle Eastern Languages and Studies for more information on placement and appropriate substitutions.

Code	Title	Credit Hours
JPNS 2002	Intermediate Japanese II	3
JPNS 3001	Advanced Japanese I	3
JPNS 3002	Advanced Japanese II	3
Select two of the following:		6
ASST 2098	Japanese Popular Culture and its Literature	
ASST 2030	Special Topics I (Course must focus solely on Japanese literature and/or film.)	
JPNS 2000	Special Topics I	
JPNS/ASST 2011	Survey of Japanese Literature: Pre-Modern	
JPNS/ASST 2012	Modern and Contemporary Japanese Literature in Translation	
JPNS/ASST 2015	Tokyo in Literature and Film	
JPNS/ASST 2016	Mystery and Crime Fiction in Japan	
JPNS/ASST 2017	Stories of Parents and Children in Japanese Literature and Film	
JPNS/ASST 2021	Japanese Literature in Film	
JPNS 2111	Japanese Literature: From Classical to Contemporary	
or ASST 2111	Japanese Literature: From Classical to Contemporary	
With the assistance of your advisor, select one CLA course that focuses exclusively on Japan		3
Total Credit Hours		18

Jewish Secular Studies Certificate

Overview

The **Certificate in Jewish Secular Studies** is offered by the Department of Religion.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Program Code: LA-JSST-CERT

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

Code	Title	Credit Hours
Select one course from:		3
JST 2408	Jewish Secular Thought and Culture from Spinoza to Seinfeld: A History of Jewish Secularism	

JST 2409	Secular Jewish Utopian Politics / Jewtopias: The Jewish Romance with Communism, Zionism, and America	
Select four of the following electives: ¹		12
JST 2705	Anti-Semitism/Holocaust/Racism	
JST 3000	Topics in Jewish Studies	
JST 3085	Jewish Studies Internship	
JST 3221	Jewish Experience in America	
JST 3250	Topics: Jews & Film	
JST 3406	Women in Judaism	
JST 3411	The Philosophies of Judaism	
JST 3711	Israelis and Palestinians	
JST 4096	Independent Study in Jewish Studies	

Total Credit Hours

15

1

If a student takes JST 2408 AND JST 2409, one may count as an elective in this category.

Jewish Studies BA

Overview

This program is not accepting applications for academic year 2023-2024.

The **Bachelor of Arts in Jewish Studies** is offered by the Department of Religion. Jewish Studies is an interdisciplinary field that allows students to sample courses across the liberal arts curriculum at Temple University. Central to Jewish Studies is an examination of the history, culture, beliefs, customs, practices, texts and languages of the Jewish people. It addresses the legacy of over 2,000 years of Jewish life as it has been lived in Jewish communities across the globe. At Temple we pay particular attention to contemporary issues of Jewish culture, identity, and practice.

Program Code: LA-JST-BA

Distinction in Major

Jewish Studies majors may graduate with distinction if they have a GPA of 3.5 or better in the major, a cumulative GPA of 3.0 or better, and a grade of 3.5 or better in the capstone course (JST 4096, an individual research project with a specific faculty member, intended for majors in the final semester of coursework).

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are JST 4096 and one additional Jewish Studies elective that is writing-intensive.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 83) of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including:
 - 90 credits in CLA/CST courses;
 - 45 credits of which must be at the upper level (numbered 2000-4999).
 - For **Social Science majors**, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art and Architecture, or any department in the College of Science and Technology.
 - A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
 - Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
 - **Professional Development Requirement**

- All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements:**
 - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
 - All students must complete at least one course from the GenEd Global/World Society category; and
 - All Bachelor of Arts students must complete one of the following options:
 - Third semester of a foreign language;
 - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
 - Take one Global Studies course from the list on the CLA College Requirements (p. 940) page;
 - Study Abroad at an approved program; or
 - Take a second General Education Global/World Society course.
- **Notes on Foreign Language Study**
 - The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
 - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
 - See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (33 credits)

Code	Title	Credit Hours
Language Requirement		
HEBR 2001	Intermediate I	3
HEBR 2002	Intermediate II (or equivalent approved by a faculty advisor)	3
Jewish Studies course at the 2000 level ¹		3
Jewish Religion		
Select two of the following:		6
JST/REL 3404		
REL 3405	Judaism and Literature	
JST 3406	Women in Judaism	
JST/REL 3407		
JST/REL 3411	The Philosophies of Judaism	
POLS 3411	Classical Political Philosophy	
JST/REL 4406	Ancient Judaism	
Jewish History		
Select two of the following: ¹		6
JST/HIST 2705	Anti-Semitism/Holocaust/Racism	
JST 2706	Jewish Diaspora/Survey of Jewish History	
HIST 2706		
JST/HIST 3221	Jewish Experience in America	
REL 3401		
JST 3406	Women in Judaism	
JST 3571	Israel, History, Politics and Society	
HIST 3571	Israel: History, Politics and Society	
JST 3408	Israel in the Middle East	
JST/REL 4406	Ancient Judaism	
Hebrew language, literature or culture		
Select one of the following: ¹		3
JST/HEBR 2797		

JST/HEBR 2779	Love Themes in Hebrew Literature	
REL 3405	Judaism and Literature	
JST 3406	Women in Judaism	
JST/REL 3407		
JST 3408	Israel in the Middle East	
JST/HEBR 3711	Israelis and Palestinians	
JST 3250	Topics: Jews & Film	
JST/REL 3411	The Philosophies of Judaism	
POLS 3411	Classical Political Philosophy	
Any Hebrew language course above 2002		
JST/HEBR 3797		
Select two Jewish Studies Electives numbered 2000+		6
JST 4096	Independent Study in Jewish Studies	3
Total Credit Hours		33

1

All students must take two writing-intensive courses in their major. In addition to JST 4096, students must select one Jewish Studies elective that is writing-intensive.

Students interested in a history or religion focus should consult with a Jewish Studies advisor to plan an individual program of study.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Jewish Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4
HEBR 1001	Elements I ¹	4
GenEd Breadth Course		3
Credit Hours		15
Spring		
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
HEBR 1002	Elements II ²	4
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
HEBR 2001	Intermediate I	3
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
CLA 1002	Professional Development for Liberal Arts Majors	1
GenEd Breadth Course		3
CLA/CST 0800-4999 Elective		2
CLA/CST 0800-4999 Elective		3
One 0800-4999 Elective in Any School or College		2
Credit Hours		17

Spring		
HEBR 2002	Intermediate II ²	3
GenEd Breadth Course		3
GenEd Breadth Course		3
CLA/CST 2000+ Course		3
One 2000-2999 Jewish Studies Course ³		3
Credit Hours		15
Year 3		
Fall		
CLA/CST 2000+ Course		3
One 2000+ Jewish Studies Course		3
One Jewish Religion Course From Approved List		3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Spring		
CLA/CST 2000+ Course		3
One Jewish History Course From Approved List		3
One Jewish Religion Course From Approved List		3
One 2000+ Jewish Studies Course		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Year 4		
Fall		
One Jewish History Course From Approved List		3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Spring		
One Hebrew Language, Literature or Culture Course From Approved List		3
JST 4096	Independent Study in Jewish Studies	3
CLA/CST 0800-4999 Elective		3
One 0800-4999 Elective in Any School or College		3
One 0800-4999 Elective in Any School or College		3
Credit Hours		15
Total Credit Hours		123

1

Course typically offered only in the fall semester.

2

Course typically offered only in the spring semester.

3

At least one required course for the major besides JST 4096 must be a writing-intensive course. This course can be either a general or an area elective.

Jewish Studies Minor

Overview

The **Minor in Jewish Studies** is offered by the Department of Religion.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

Code	Title	Credit Hours
Language Requirement		
HEBR 2001	Intermediate I (or equivalent approved by a faculty advisor)	3
One Jewish Studies course at the 2000 level		3
Jewish Religion		
Select one of the following:		3
JST/REL 3404		
REL 3405	Judaism and Literature	
JST 3406	Women in Judaism	
JST/REL 3407		
JST/REL 3411	The Philosophies of Judaism	
POLS 3411	Classical Political Philosophy	
JST/REL 4406	Ancient Judaism	
Jewish History		
Select one of the following:		3
JST/HIST 2705	Anti-Semitism/Holocaust/Racism	
JST 2706	Jewish Diaspora/Survey of Jewish History	
HIST 2706		
JST/HIST 3221	Jewish Experience in America	
JST 3406	Women in Judaism	
JST 3571	Israel, History, Politics and Society	
HIST 3571	Israel: History, Politics and Society	
JST 3408	Israel in the Middle East	
JST/REL 4406	Ancient Judaism	
Hebrew Language, Literature or Culture		
Select one of the following:		3
JST/HEBR 2797		
JST/HEBR 2779	Love Themes in Hebrew Literature	
REL 3405	Judaism and Literature	
JST 3406	Women in Judaism	
JST/REL 3407		
JST 3408	Israel in the Middle East	
JST/HEBR 3711	Israelis and Palestinians	
JST 3250	Topics: Jews & Film	
JST/REL 3411	The Philosophies of Judaism	
POLS 3411	Classical Political Philosophy	
JST/HEBR 3797		
Any Hebrew language course above 2002		
Two upper-level Jewish Studies Electives (2000-4999)		6
Total Credit Hours		21

Language and Cross-Cultural Communication Certificate

Overview

The **Certificate in Language and Cross-Cultural Communication**, offered by the Department of Anthropology, is designed to provide students with the anthropological and linguistic tools to understand and study the sociocultural foundations of language use and communication, including both forms of everyday and institutional communication.

This program fits well with the current institutional mission of Temple University to prepare students to work and thrive in an increasingly globalized world where language-related expertise, particularly cross-linguistic and cross-cultural knowledge, is a highly desirable skill. This program is also congruent with professional trends in language-related disciplines that currently emphasize programs that provide students with the sociolinguistic and cultural knowledge needed to solve language-related problems in the real world.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Program Code: LA-LCCC-CERT

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Learn more about the undergraduate certificate in Language and Cross-Cultural Communication.

Requirements

Five courses for a minimum of 15 credits.

Code	Title	Credit Hours
Select five of the following:		
ANTH 2501	Language, Power, & Identity	15
ANTH 2507 or ANTH 2907	Language and Culture Honors Language and Culture	
ANTH 2525	Maya Language and Culture	
ANTH 2535	Language, Thought, and Reality	
ANTH 2536	Language in the City	
ANTH 3509	Language Socialization and Cultural Reproduction	
ANTH 3537	Language and the Immigrant Experience	
ANTH 3589	Language as Social Action	
ANTH 3596	Research Methods in Culture and Communication	
Total Credit Hours		

Latin American Studies BA

Overview

The **Bachelor of Arts in Latin American Studies** is offered by the Latin American Studies Program within the Department of Spanish and Portuguese.

Latin American Studies (LAS) offers an interdisciplinary approach to learning about the politics, economics, cultures and societies of Latin America and the Caribbean. LAS uses this region as a framework for exploring thematic issues in such disciplines as anthropology, art, history, political science, Spanish and Portuguese, and communication studies. Courses are offered in departments from every school and college, and our affiliated faculty research diverse topics from development economics to immigrant healthcare, from Latin American music to colonial literature. Our students become true experts who can speak to a wide range of issues confronting Latin America; experts who can contribute proactively to development and cooperation, as well as to business and political analysis in a way that their peers with a more traditional disciplinary focus cannot.

Campus Location: Main

Program Code: LA-LAS-BA

Distinction in Major

Latin American Studies majors may graduate with distinction in the major if they have a GPA of at least 3.5 in the major and a cumulative GPA of at least 3.0.

Contact Information

Latin American Studies Office
4th Floor Mazur Hall

Monica Ricketts, Director (on sabbatical Fall 2023; returning Spring 2024)
921 Gladfelter Hall
monica.ricketts@temple.edu

Danielle Scherer, Director (Fall 2023)
1008A Gladfelter Hall
danielle.scherer@temple.edu

Michelle Xu, Administrator
215-204-5628
xu.michelle@temple.edu

Annette Vega, Coordinator
215-204-2877
avega1@temple.edu

Learn more about the Bachelor of Arts in Latin American Studies.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are LAS 4097 and one of the following: LAS 2097, LAS 2098, LAS 4698.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 83) section of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including:
 - 90 credits in CLA/CST courses;
 - 45 credits of which must be at the upper level (numbered 2000-4999).
 - For **Social Science majors**, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art and Architecture, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Professional Development Requirement**
 - All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements:**
 - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
 - All students must complete at least one course from the GenEd Global/World Society category; and
 - All Bachelor of Arts students must complete one of the following options:
 - Third semester of a foreign language;
 - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);

- Take one Global Studies course from the list on the CLA College Requirements (p. 940) page;
 - Study Abroad at an approved program; or
 - Take a second General Education Global/World Society course.
- **Notes on Foreign Language Study**
 - The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
 - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
 - See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (36 credits)

Code	Title	Credit Hours
Introduction to Latin American Studies		
LAS 1001	Perspectives on Latin America ¹	3
Writing Intensive Course		
Select one of the following:		3
LAS 2097	Writing Seminar I	
LAS 2098	The Legacy of Mesoamerica	
LAS 4698		
Latin American Studies Electives		
Select eight Latin American Studies Electives numbered 1000-4999 ²		24
Spanish-American Literature Courses		
Select one of the following:		3
SPAN 3241	The Cultures of Latin America	
SPAN 3243	The Culture of Puerto Rico	
Any 4000+ level Spanish-American literature course taught in Spanish ³		
Capstone		
LAS 4097	Latin American Studies Seminar (offered only one time per year) ⁴	3
Total Credit Hours		36

1

Students who have completed the Latin American Studies Semester may waive this course.

2

Excluding courses used for another part of the major. Select from the approved list of undergraduate courses in Latin American Studies. See advisor for this list.

3

From the approved list of undergraduate courses in Latin American Studies.

4

Indicates Writing Capstone for the Major.

Suggested Academic Plan

Bachelor of Arts in Latin American Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4

SPAN 1001	Basic I	4
GenEd Breadth Course		3
Credit Hours		15
Spring		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
SPAN 1002	Basic II	4
LAS 1001	Perspectives on Latin America ¹	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
SPAN 1003	Intermediate	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
One 0800-4999 Elective in Any School or College		2
Credit Hours		17
Spring		
SPAN 2001	Conversational Review	3
GenEd Breadth Course		3
Latin American Studies 2000+ Course From Approved List		3
Latin American Studies 2000+ Course From Approved List		3
CLA 1002	Professional Development for Liberal Arts Majors	1
CLA/CST 0800-4999 Elective		2
Credit Hours		15
Year 3		
Fall		
SPAN 2002	Hispanic Readings	3
SPAN 2096	Composition	3
Latin American Studies 2000+ Course From Approved List		3
Latin American Studies 2000+ Course From Approved List		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Spring		
SPAN 3001	Advanced Composition & Conversation	3
Latin American Studies 2000+ Course From Approved List		3
Latin American Studies 2000+ Course From Approved List		3
CLA/CST 0800-4999 Elective		3
Select one of the following:		3
LAS 2097	Writing Seminar I	
LAS 2098	The Legacy of Mesoamerica	
LAS 4698		
Credit Hours		15
Year 4		
Fall		
Latin American Studies 2000+ Course From Approved List		3
Latin American Studies 2000+ Course From Approved List		3
CLA/CST 0800-4999 Elective		3

CLA/CST 0800-4999 Elective		3
Select one of the following:		3
SPAN 3241	The Cultures of Latin America	
SPAN 3243	The Culture of Puerto Rico	
4000+ Literature Course ²		
	Credit Hours	15
Spring		
LAS 4097	Latin American Studies Seminar ³	3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
One 0800-4999 Elective in Any School or College		3
One 0800-4999 Elective in Any School or College		3
	Credit Hours	15
	Total Credit Hours	123

1

Latin American Studies Semester (LASS) can replace LAS 1001; see an advisor for this option.

2

Check prerequisites for 4000+ literature option.

3

LAS 4097 offered only once a year; see advisor before senior year.

Latin American Studies Certificate

Overview

Each spring semester, the Department of Spanish and Portuguese offers a Latin American Studies Semester (LASS) immersion program. Students who successfully complete the LASS program may be awarded a **Certificate in Latin American Studies** and a waiver of the General Education World Society requirement. The 17-credit Certificate in Latin American Studies combines 9 credit hours of intensive Spanish language with 8 credit hours of study focusing on geography, history, and culture in Latin America and a 21-day trip to a Spanish-speaking country.

Applications for LASS are received between April and November for the following spring. For information, please visit Study Abroad or contact Montserrat Piera (mpiera01@temple.edu) (215-204-8285).

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Program Code: LA-LAS-CERT

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Learn more about the undergraduate certificate in Latin American Studies.

Latin American Studies Minor

Overview

The **Minor in Latin American Studies** is offered by the Latin American Studies Program within the Department of Spanish and Portuguese. The Latin American Studies minor enables students to combine the requirements of their majors with the study of Latin America. It is designed to be of particular value to students who intend to engage in technical, professional, business or government work involving Latin America. To earn the minor, students must complete six 3-credit courses in subjects with a Latin American emphasis and demonstrate a reading knowledge and speaking facility of Spanish or Portuguese.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

Code	Title	Credit Hours
Introductory course		
LAS 1001	Perspectives on Latin America	3
Electives		
Select five Latin American Studies Electives numbered 1000-4999 ¹		15
Language Proficiency Requirement		
Select one of the following: ²		
Spanish or Portuguese 2000+		
Latin American Studies Semester (LASS)		
Proficiency examination		
Total Credit Hours		18

1

Students who successfully complete the Latin American Studies Semester (LASS Program) need only four additional LAS electives. They are waived LAS 1001, one elective course, and the language proficiency requirement.

2

Students also must demonstrate reading knowledge and speaking facility of Spanish or Portuguese.

Lesbian, Gay, Bisexual and Transgender Studies Minor

Overview

The **Minor in Lesbian, Gay, Bisexual and Transgender Studies** analyzes gender, sexuality and sexual orientation as they are understood by various disciplines and in cross-cultural perspectives. The minor, which is housed within the Gender, Sexuality and Women's Studies Program, enables students to become familiar with concepts, theories, history, literature and socio-political issues concerning the LGBTQ community. It also gives students an opportunity to examine and think critically about the intersections of sexuality, sex, and gender and become aware of the diversity of attitudes about sexuality in different cultures and historical eras.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Double-Counting of Credits

Students combining a minor in Lesbian, Gay, Bisexual and Transgender Studies and a major, minor, or certificate in Gender, Sexuality and Women's Studies may double-count for both programs only Field Work (GSWS 4389 or LGBT 4489) and Queer Lives (GSWS 2405 or LGBT 2405).

Contact Information

Department Office
811 Mazur Hall
215-204-1644

Barbara Thornbury, GSWS Program Director
811 Mazur Hall
barbara.thornbury@temple.edu

Jennifer Pollitt, Faculty Advisor
819 Mazur Hall
jennifer.pollitt@temple.edu

LaTasha Goodman, Administrator
1041 Mazur Hall

215-204-8516

latasha.goodman@temple.edu

Requirements

Code	Title	Credit Hours
Required Courses		
LGBT 2405	Queer Lives	3
One experiential learning course selected from:		3
LGBT 4489	Field Work in LGBT Studies	
LGBT 4082	Independent Study	
Electives		
Four electives are required. Among those courses, students must take either two LGBT themed courses and two gender themed courses or three LGBT themed courses and one gender themed course. See advisor for options, some of which are listed below:		12
GSWS 0832	Politics of Identity in America	
GSWS 3097	Feminist Theory	
or ENG 3097	Feminist Theory	
GSWS 3546	Sexuality and Gender	
HIST 2109	Sexuality and Gender in American History	
LGBT 2002	Religion and Human Sexuality	
LGBT 2003	Gender in the Cinema	
LGBT 2007	Creative Writing: Fiction: LGBTQ Lives	
LGBT 2207	Creative Writing: Non-Fiction: Queer Lives	
LGBT 2305	LGBTQ Film: The Coming of Age Genre	
LGBT 2306	LGBTQ Film: Queer Representation	
LGBT 2400	Topics in LGBT Studies	
LGBT 2406	LGBTQ Social Movements	
LGBT 2815	Love, Marriage, and Family	
LGBT 3205	Queer Novels of the 20th Century	
LGBT 3206	Queer Novels of the 21st Century	
LGBT 3400	Topics in LGBT Studies	
LGBT 3548	Intimate Partner Violence: Gender and Social Justice	
Total Credit Hours		18

Liberal Studies BA

Overview

The **Bachelor of Arts in Liberal Studies** is offered by the Liberal Studies Program within the College of Liberal Arts. The major is designed to meet the unique needs of working adults who may have delayed or stopped out of college, or who have difficulty finding a major in one of the other disciplines in the College of Liberal Arts that meets their scheduling needs.

The Liberal Arts major is essentially self-designed, other than some common writing intensive coursework and a course that emphasizes critical thinking. It is purposely flexible so students can develop a program of study that will help them achieve a specific personal or professional goal that might be unrelated to a traditional discipline. Courses are offered year-round at Main Campus, Ambler Campus, Online, and at Temple University Center City. Students may combine locations as their schedule dictates.

Curriculum

The primary goal of the Liberal Studies curriculum is to assist students in developing their analytical, critical thinking, reading, writing and research skills, as they progress through a challenging curriculum that is primarily of their own design.

The curriculum is a broad-based liberal arts program, primarily focused on upper-division coursework selected by the student in keeping with their professional and academic goals.

All students in the Liberal Studies major begin their studies in CLA 2096 Approaches to Liberal Studies. This writing intensive, interdisciplinary course brings students together and (re)introduces the idea of academic research, writing, and participation in the academic enterprise. Instructors select a topic of their choice and examine it from a variety of perspectives and viewpoints in the various disciplines of the liberal arts.

Later in their program of study, all Liberal Studies majors take AMST 2098 Reading Culture to complete the second required writing intensive course for the General Education Curriculum.

Critical Thinking (either PHIL 1055 or PSY 1004) is the foundations-level course for this major.

Students must select a track, either Humanities or Social Sciences, and follow the requirements of that track. Within their track, students select a "concentration" of five courses all taken in a single department in their chosen track, all of which are numbered 2000-4999. If a particular course requires a lower-level prerequisite, this prerequisite is taken in addition to the required upper-level courses of their program. Four upper-level "breadth" courses numbered 2000+ are selected from other cognate departments within their chosen track. In lieu of the CLA Distribution requirement, students in the Liberal Studies major take four courses numbered 2000-4999 in the "other" track (Humanities or Social Sciences).

Campus Locations: Main, Ambler, Temple University Center City, Online

Program Code: LA-LIBS-BA

Program Restrictions

Liberal Studies is a stand-alone program and **may not be combined** with any other majors, minors or certificate programs.

Life Experience Portfolio Review

Students in the Liberal Studies major have the opportunity to submit a portfolio for review to earn up to 6 credits of professional "life experience." See your faculty advisor for more information.

Online-only Program of Study

New non-traditional, transfer students can take their entire degree program online. Required courses for the major are offered online in the fall and spring semesters, and a variety of other courses to fulfill elective requirements are also available via online instruction. For more information contact Keith Gumery (gumery@temple.edu).

Contact Information

Liberal Studies Program Office
8th Floor Mazur Hall

Michael D. Szekely, Program Director
818 Mazur Hall
mszekely@temple.edu

Keith Gumery, Director of Bachelor of Arts in Liberal Studies Online Program
gumery@temple.edu

LaTasha Goodman, Administrator
1041 Mazur Hall
215-204-8516
latasha.goodman@temple.edu

Learn more about the Bachelor of Arts in Liberal Studies.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The writing-intensive courses required for this major are CLA 2096 and AMST 2098.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 83) section of the *Undergraduate Bulletin* for more details

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including:
 - 90 credits in CLA/CST courses;
 - 45 credits of which must be at the upper level (numbered 2000-4999).
 - The distribution requirement is built into this major.
 - A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
 - Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Professional Development Requirement**
 - All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements**
 - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
 - All students must complete at least one course from the GenEd Global/World Society category; and
 - All Bachelor of Arts students must complete one of the following options:
 - Third semester of a foreign language;
 - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
 - Take one Global Studies course from the list on the CLA College Requirements (p. 940) page;
 - Study Abroad at an approved program; or
 - Take a second General Education Global/World Society course.
- **Notes on Foreign Language Study**
 - The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
 - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
 - See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements - 16 courses/48 credits

Code	Title	Credit Hours
Required Courses		
PSY 1004 or PHIL 1055	Critical Thinking in Psychology Critical Thinking	3
CLA 2096	Approaches to Liberal Studies	3
AMST 2098	Reading Culture	3
Concentration Courses		
Five courses from a single subject area (cannot overlap with other major courses) ¹		15
Humanities Courses		
Four Humanities courses (may not overlap with concentration area) ¹		12
Social Science Courses		
Four Social Science courses (may not overlap with concentration area) ¹		12
Total Credit Hours		48

¹ Concentration, Humanities, and Social Science courses must be taken at the upper level (2000-4999).

Suggested Academic Plans

Bachelor of Arts in Liberal Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Humanities Track

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4
Foreign Language 1001 - first level		4
GenEd Breadth Course		3
Credit Hours		15
Spring		
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
Foreign Language 1002 - second level		4
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
GenEd Breadth Course		3
Elective in Any School or College		3
Elective in Any School or College		4
Select one of the following:		3
Foreign Language - third level		
GenEd Global/World Society Course		
Internationally Focused Course From Approved List		
Credit Hours		16
Spring		
GenEd Breadth Course		3
GenEd Breadth Course		3
Select one of the following:		3
PSY 1004	Critical Thinking in Psychology	
PHIL 1055	Critical Thinking	
Breadth - Any Social Science 2000-4999 Course		3
CLA Elective		2
CLA 1002	Professional Development for Liberal Arts Majors	1
Credit Hours		15
Year 3		
Fall		
CLA Elective		3
CLA 2096	Approaches to Liberal Studies	3
Concentration 2000-4999		3
Breadth - Any Social Science 2000-4999 Course		3
Cognate in Humanities Track 2000-4999		3
Credit Hours		15

Spring

CLA Elective	3
Breadth - Any Social Science 2000-4999 Course	3
Concentration 2000-4999	3
Concentration 2000-4999	3
Cognate in Humanities Track 2000-4999	3

Credit Hours	15
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Year 4**Fall**

Concentration 2000-4999	3
Concentration 2000-4999	3
AMST 2098 Reading Culture	3
Cognate in Humanities Track 2000-4999	3
Elective in any School or College	3

Credit Hours	15
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Spring

CLA Elective	3
Cognate in Humanities Track 2000-4999	3
Breadth - Any Social Science 2000-4999 Course	3
Elective in any School or College	4
Elective in any School or College	3

Credit Hours	16
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Total Credit Hours	123
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Social Science Track**Year 1****Fall****Credit Hours**

ENG 0802 Analytical Reading and Writing or ENG 0812 or Analytical Reading and Writing: ESL or ENG 0902 or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ}	4
Foreign Language 1001 - first level	4
GenEd Breadth Course	3

Credit Hours	15
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Spring

IH 0851 Intellectual Heritage I: The Good Life or IH 0951 or Honors Intellectual Heritage I: The Good Life	3
Foreign Language 1002 - second level	4
GenEd Breadth Course	3
GenEd Breadth Course	3
GenEd Breadth Course	3

Credit Hours	16
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Year 2**Fall**

IH 0852 Intellectual Heritage II: The Common Good or IH 0952 or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course	3
Elective in Any School or College	3
Elective in Any School or College	4
Select one of the following:	3
Foreign Language - third level	
GenEd Global/World Society Course	

Internationally Focused Course From Approved List

Credit Hours		16
Spring		
GenEd Breadth Course		3
GenEd Breadth Course		3
Select one of the following:		3
PSY 1004	Critical Thinking in Psychology	
PHIL 1055	Critical Thinking	
Breadth - Any Humanities 2000-4999 Course		3
CLA Elective		2
CLA 1002	Professional Development for Liberal Arts Majors	1
Credit Hours		15
Year 3		
Fall		
CLA Elective		3
CLA 2096	Approaches to Liberal Studies	3
Concentration 2000-4999		3
Breadth - Any Humanities 2000-4999 Course		3
Cognate in Social Science Track 2000-4999		3
Credit Hours		15
Spring		
CLA Elective		3
Breadth - Any Humanities 2000-4999 Course		3
Concentration 2000-4999		3
Concentration 2000-4999		3
Cognate in Social Science Track 2000-4999		3
Credit Hours		15
Year 4		
Fall		
Concentration 2000-4999		3
Concentration 2000-4999		3
AMST 2098	Reading Culture	3
Cognate in Social Science Track 2000-4999		3
Elective in any School or College		3
Credit Hours		15
Spring		
CLA Elective		3
Cognate in Social Science Track 2000-4999		3
Breadth - Any Humanities 2000-4999 Course		3
Elective in any School or College		4
Elective in any School or College		3
Credit Hours		16
Total Credit Hours		123

Management Career Certificate

Overview

The **Certificate in Management Career**, offered by the Department of Economics, is designed for students who intend to seek employment in the business or nonprofit sectors of the economy. It is designed to provide students with skills that complement those acquired through a traditional liberal arts education and to make the students more appealing to potential employers.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main and Japan

Program Code: LA-ECMG-CR2+

Contact Information

Main Campus

Moritz Ritter
215-204-5029
moritz.ritter@temple.edu

Temple Japan Campus

Hady George Kahy, PhD, Economics Coordinator
hkahy@tuj.temple.edu

Learn more about the undergraduate certificate in Management Career.

Requirements

Code	Title	Credit Hours
Required Courses		
Select one of the following:		3
ECON 1001	Introduction to the Economy	
ECON 1102	Microeconomic Principles	
ECON 1902	Honors Microeconomic Principles	
ACCT 2103 or ACCT 2903	Financial and Managerial Accounting for Decision Making Honors Financial and Managerial Accounting	4
HRM 1101	Leadership and Organizational Management	3
PSY 2402 or MKTG 2101	Foundations of Industrial and Organizational Psychology ¹ Marketing Management	3
One Statistics course selected in consultation with the certificate advisor.		3
Approved Elective		
Select one of the following: ²		3-4
ECON 1101	Macroeconomic Principles	
ECON 3536	Economics of American Industry	
ECON 3541	The Economics of Sports	
MKTG 2101	Marketing Management ¹	
HRM 2501	Introduction to Human Resource Management	
CIS 1055	Computers and Applications	
GUS 2031	Geography of the Global Economy	
POLS 2321	Politics of the Global Economy	
POLS 3155	Business and Public Policy	
PSY 2402	Foundations of Industrial and Organizational Psychology ¹	
Total Credit Hours		19-20

¹

Students may not double count either MKTG 2101 or PSY 2402 within this certificate program.

²

An alternative elective or an internship or practicum may be approved to substitute for the elective. Please see the certificate advisor prior to registration for written approval.

Mathematical Economics BA (CLA)

Overview

The College of Liberal Arts' Department of Economics and the College of Science and Technology's Department of Mathematics jointly offer the **Bachelor of Arts in Mathematical Economics** as a platform for systematic concentration in the mathematical approach to economics. Economics has progressed in the last several decades by making extensive use of mathematical techniques. As a result, students who wish to pursue graduate study in economics, finance, accounting and other disciplines that make an extensive use of economics need a thorough grounding in both economics and mathematics. The Mathematical Economics curriculum provides this grounding with a broad selection of courses that cover all important areas of economics and the mathematical tools required for a critical, deep mastery of these areas. This program is especially recommended for those students who intend to pursue graduate studies in economics.

Campus Location: Main

Program Code: LA-MECN-BA

Residency Requirements

Students must satisfy general Temple University residency requirements (p. 1838).

At least 10 courses required for the major must be completed at Temple. At least 5 Mathematics courses and 4 Economics courses must be completed at Temple.

Distinction in Major

For distinction in Mathematical Economics, a student must have an overall GPA of 3.25 or higher. A student must also have a GPA of 3.50 or higher in the 3000+ Mathematics courses and a GPA of 3.60 or higher in the 3000+ Economics courses.

Contact Information

Michael Bognanno, Economics Department Chair
bognanno@temple.edu

Brian Rider, Mathematics Department Chair
mathematics@temple.edu

Dimitrios Diamantaras, Economics Advisor
215-204-8169
dimitrios.diamantaras@temple.edu

Boris Datskovsky, Mathematics Director of Undergraduate Studies
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mathadvising@temple.edu

Maria E. Lorenz, Mathematics Department Vice Chair
215-204-7852
mathadvising@temple.edu

Belinda Wilson, Administrator
215-204-0472
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Janice Vincent, Economics Department Coordinator
215-204-8880

Learn more about the Bachelor of Arts in Mathematical Economics.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 and/or ENG 0701, if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of their major. All students must take ECON 3598 as their capstone experience. The following is a list of courses that can be used to satisfy the remaining writing-intensive requirement:

Code	Title	Credit Hours
ECON 3596	Energy, Ecology, and Economy	3
ECON 3597	Health Economics	3
ECON 3696	Behavioral Economics	3
ECON 3697	The Economics of Sports	3
ECON 3698	Economic Inequality	3
MATH 3096 or MATH 3098	Introduction to Modern Algebra Modern Algebra	3
MATH 4096	Senior Problem Solving	3

- Students must complete the General Education (GenEd (p. 83)) requirements. Students who complete this major typically receive a waiver for 1 Quantitative Literacy (GQ) GenEd course.

College Requirements

Completion of a minimum of 123 credits, including:

- 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
- 45 Upper-Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
- Two (2) Upper-Level (2000+) Liberal Art courses.
- Second (2nd) Level of a Foreign Language (1002).

Major Requirements (60-62 credits)

Code	Title	Credit Hours
Computer & Information Science		
Select one of the following:		3-4
CIS 1051 or CIS 1951	Introduction to Problem Solving and Programming in Python Honors Introduction to Problem Solving and Programming in Python	
CIS 1057	Computer Programming in C	
CIS 1068 or CIS 1968	Program Design and Abstraction Honors Program Design and Abstraction	
MATH 1033 & MATH 1034	Computing in MATLAB and Applications in MATLAB	
Mathematics		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
MATH 2101	Linear Algebra	3
MATH 2111	Basic Concepts of Math	3
MATH 3031	Probability Theory I	3
MATH 3032	Mathematical Statistics (S)	3
Select one of the following sequences:		6-7
MATH 3043 & MATH 3044	Numerical Analysis I and Numerical Analysis II	
MATH 3137 & MATH 3138	Real & Complex Analysis I and Real & Complex Analysis II	
MATH 3141 & MATH 3142	Advanced Calculus I and Advanced Calculus II	
One Mathematics elective at the 3000 level or above ^{1,2}		3
Economics		

ECON 1102 or ECON 1902	Microeconomic Principles Honors Microeconomic Principles	3
ECON 3501 or ECON 3701	Intermediate Microeconomic Analysis Intermediate Microeconomic Analysis with Calculus	3
ECON 3502 or ECON 3702	Intermediate Macroeconomic Analysis Intermediate Macroeconomic Analysis with Calculus	3
ECON 3503 or ECON 3703	Introduction to Econometrics Econometric Theory	3
ECON 3504	Mathematical Economics	3
ECON 3598	Economics Writing Seminar	3
Two Economics electives at the 3000 level or above, with permission from advisor ²		6
Total Credit Hours		60-62

Code	Title	Credit Hours
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(F) - Fall only course.

(S) - Spring only course.

1

MATH 2041, MATH 2941, MATH 2045, or MATH 2121 may be used to fulfill the Mathematics elective at the 3000 level or above.

2

One of the Mathematics or Economics electives must be a writing-intensive course in order to satisfy the University requirement that each student must fulfill two writing-intensive courses within the major.

Suggested Academic Plan

Bachelor of Arts in Mathematical Economics

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
Select one of the following:		3-4
CIS 1051 or CIS 1951	Introduction to Problem Solving and Programming in Python or Honors Introduction to Problem Solving and Programming in Python	
CIS 1057	Computer Programming in C	
CIS 1068 or CIS 1968	Program Design and Abstraction or Honors Program Design and Abstraction	
MATH 1033 & MATH 1034	Computing in MATLAB and Applications in MATLAB	
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
General Education/Elective Credits ¹		8-7
Credit Hours		15
Spring		
ECON 1102 or ECON 1902	Microeconomic Principles or Honors Microeconomic Principles	3
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
General Education/Elective Credits		9
Credit Hours		16
Year 2		
Fall		
ECON 3501 or ECON 3701	Intermediate Microeconomic Analysis or Intermediate Microeconomic Analysis with Calculus	3
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4

General Education/Elective Credits		9
Credit Hours		16
Spring		
ECON 3502 or ECON 3702	Intermediate Macroeconomic Analysis or Intermediate Macroeconomic Analysis with Calculus	3
MATH 2111	Basic Concepts of Math	3
General Education/Elective Credits		9
Credit Hours		15
Year 3		
Fall		
3000+ Economics Elective, with permission from advisor ²		3
MATH 2101	Linear Algebra	3
MATH 3031	Probability Theory I	3
General Education/Elective Credits		6
Credit Hours		15
Spring		
ECON 3504	Mathematical Economics	3
MATH 3032	Mathematical Statistics (S)	3
3000+ Mathematics Elective ^{2,3}		3
General Education/Elective Credits		6
Credit Hours		15
Year 4		
Fall		
ECON 3503 or ECON 3703	Introduction to Econometrics or Econometric Theory	3
Select one of the following: ⁴		3-4
MATH 3043	Numerical Analysis I (F)	
MATH 3137	Real & Complex Analysis I	
MATH 3141	Advanced Calculus I	
General Education/Elective Credits		10-9
Credit Hours		16
Spring		
ECON 3598	Economics Writing Seminar	3
3000+ Economics Elective, with permission from advisor ²		3
Select one of the following: ⁴		3
MATH 3044	Numerical Analysis II	
MATH 3138	Real & Complex Analysis II	
MATH 3142	Advanced Calculus II	
General Education/Elective Credits		6
Credit Hours		15
Total Credit Hours		123

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

1

All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement are ENG 1801 Career Seminar and PSY 1002 Careers in Psychology.

2

One of the Mathematics or Economics electives must be a writing-intensive course in order to satisfy the University requirement that each student must fulfill two writing-intensive courses within the major.

3

MATH 2041, MATH 2941, MATH 2045, or MATH 2121 may be used to fulfill the Mathematics elective at the 3000 level or above.

4

You must complete the year-long sequence of either MATH 3043 and MATH 3044; or MATH 3137 and MATH 3138; or MATH 3141 and MATH 3142.

Neuroscience Research Minor

Overview

The **Minor in Neuroscience Research**, offered by the Department of Psychology and Neuroscience, expands opportunities for Temple students to apply neuroscience knowledge in research settings and to become more competitive in their applications to graduate and professional schools. The required courses in the Neuroscience Research minor focus on basic neuroscience, neuroanatomy, cellular neuroscience and conducting research.

In addition to formal coursework, students are required to take two neuroscience elective courses. The students have options to take independent study courses that result in a research project as electives. The Neuroscience Research Project is a unique project developed over two semesters of independent study. This research project may not overlap with projects for other programs (e.g., Honors).

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Curricular Overlap Policies

Students majoring in Psychology may declare a minor in Neuroscience Research and may double-count **one elective** and NSCI 3096 Conducting Neuroscience Research for both programs without taking any replacement coursework.

Because of some overlap in coursework, students cannot pursue both the Neuroscience Research minor and the Cognitive Neuroscience minor.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

Code	Title	Credit Hours
Required Courses		
NSCI 1051	Fundamentals of Neuroscience	3
NSCI 2122	Cellular Neuroscience	3
NSCI 2001	Functional Neuroanatomy	3
NSCI 3096	Conducting Neuroscience Research	3
Electives		
Select two of the following:		6-7
NSCI 3000-4999 not used for another requirement		
NSCI 2121	Development/Plasticity/Repair	
NSCI 2222	The Neurobiology of Disease	
PSY 2501	Foundations of Behavioral Neuroscience	
PSY 2502	Foundations of Cognitive Neuroscience	
PSY 3306	Neuroscience of Development and Aging	
PSY 3561	Psychopharmacology	
Total Credit Hours		18-19

Neuroscience: Systems, Behavior and Plasticity BS

Overview

Neuroscience is a rapidly growing field that is making great advances in understanding behavior and cognitive functions, as well as advancing treatments for psychiatric, neurodegenerative and neurological disorders. It encompasses a broad domain that ranges from molecular genetics and neural development, to brain processes involved in cognition and emotion, to mechanisms and consequences of neurodegenerative disease. The field of neuroscience also includes mathematical and physical principles involved in modeling neural systems and in brain imaging.

The **Bachelor of Science in Neuroscience: Systems, Behavior and Plasticity**, offered by the Neuroscience Program within the Department of Psychology and Neuroscience, is designed to teach students to explore neural and brain function at multiple levels. The curriculum is customizable and flexible to ensure students get a well-rounded academic experience to prepare for graduate school, professional school (e.g., medical school, occupational therapy school, etc.), and entering the workforce.

The degree includes 52-54 required credits: 25 credits in Neuroscience, 6-8 credits in electives on neuroscience topics from a variety of participating departments, and 21 credits of co-requisite courses in Biology, Chemistry and Psychology. Students majoring in Neuroscience are strongly encouraged to participate in hands-on research by taking Independent Study courses as part of their elective credits for the major. Independent Study opportunities are offered in many of the laboratories of the more than 130 neuroscientist faculty members within the various colleges and schools participating in Temple University's Neuroscience Program.

Campus Location: Main

Program Code: LA-NSCI-BS

Curricular Overlap Policy

Because of overlap in coursework, students pursuing the BS in Neuroscience: Systems, Behavior and Plasticity cannot complete the Cognitive Neuroscience minor offered by the Department of Psychology and Neuroscience.

Combining the Major in Neuroscience with Major or Minor Programs in Psychology

Students who choose to double-major in Neuroscience and Psychology may count the following courses towards both majors without taking replacement coursework:

- PSY 1001 Introduction to Psychology
- PSY 1003 Statistics for Psychology
- NSCI 3096 Conducting Neuroscience Research
- BIOL 1012 General Biology II
- CHEM 1031 General Chemistry I and CHEM 1033 General Chemistry Laboratory I
- CHEM 1032 General Chemistry II and CHEM 1034 General Chemistry Laboratory II

For students who major in Neuroscience and minor in Psychology, the following courses may count towards both programs without taking replacement coursework:

- PSY 1001 Introduction to Psychology
- PSY 1003 Statistics for Psychology
- NSCI 3096 Conducting Neuroscience Research

Distinction in Major

Majors in Neuroscience: Systems, Behavior and Plasticity have the opportunity to be awarded departmental distinction upon graduation. Graduating with distinction can be achieved by maintaining a GPA of 3.0 or better in all neuroscience courses, completing two semesters of *Independent Study in Neuroscience* (NSCI 4182 and NSCI 4282) with an A- or better, and successfully completing a neuroscience research project based on the independent study work and described in a research paper and poster presented to Neuroscience Program faculty and students. Learn more about graduating with distinction.

Accelerated +1 Bachelor of Science/Master of Science Program

The accelerated +1 Bachelor of Science / Master of Science in Neuroscience: Systems, Behavior and Plasticity program offers outstanding Temple University Neuroscience: Systems, Behavior and Plasticity majors the opportunity to earn both the BS and MS in Neuroscience: Systems, Behavior and Plasticity in just 5 years. Admission to the program is highly selective. The program is designed to provide a research-intensive experience, advanced coursework and professional development to students who intend to pursue doctoral studies in any of the academic Neuroscience disciplines.

The accelerated +1 program consists of a maximum of 113 semester hours of undergraduate coursework, a maximum of 10 semester hours of graduate coursework to count towards both the undergraduate and the graduate degrees, and an additional 20 semester hours of graduate coursework as a

graduate student. Upon successful completion of the fourth year, students will receive a BS in Neuroscience: Systems, Behavior and Plasticity, using 10 credits of graduate coursework, if they have met all other degree requirements. At the end of the contiguous fifth year, students will receive a MS in Neuroscience: Systems, Behavior and Plasticity.

Students apply to the +1 program in the spring semester of the junior year after completing a minimum of 72 undergraduate credits. Additionally, students must have a faculty sponsor who has agreed to mentor the student's master's project research during the four-semester program.

Career Options

Many high-level career options within and outside of the field of neuroscience are open to students with this major. This is a popular major with students aiming for professional careers in the health sciences such as in medicine, dentistry, pharmacy, physical and occupational therapy, and veterinary science. Students interested in graduate school in biology, chemistry, communications science, neuroscience or psychology are also likely to find this major attractive. Learn more about career options.

Student Organizations

Neuroscience majors are encouraged to get involved in various organizations outside the classroom. Learn more about the Nu Rho Psi Honor Society and the Undergraduate Neuroscience Society.

Contact Information

Neuroscience Program Office
6th Floor Weiss Hall

Vinay Parikh, Director
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Learn more about the Bachelor of Science in Neuroscience: Systems, Behavior and Plasticity.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are NSCI 3096 and NSCI 4197.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 83) of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including:
 - 90 credits in CLA/CST courses;
 - 45 credits of which must be at the upper level (numbered 2000-4999).
 - For **Social Science majors**, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art and Architecture, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- **Professional Development Requirement**
 - All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. NSCI 1002 Careers in Neuroscience, PSY 1002 Careers in Psychology or CLA 1002 Professional Development for Liberal Arts Majors would be an appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, or minor requirements.
- Note: For Neuroscience majors, there is no CLA Foreign Language/Global Studies Requirement because it is a Bachelor of Science program. However, students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (52-54 credits)

Code	Title	Credit Hours
Required Courses		
BIOL 1012	General Biology II	4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	4
PSY 1001	Introduction to Psychology	3
PSY 1003	Statistics for Psychology	3
NSCI 1051	Fundamentals of Neuroscience	3
NSCI 2001	Functional Neuroanatomy	3
NSCI 2121	Development/Plasticity/Repair	3
NSCI 2122	Cellular Neuroscience	3
NSCI 2222	The Neurobiology of Disease	3
NSCI 3087	Techniques in Neuroscience	3
NSCI 3096	Conducting Neuroscience Research	3
NSCI 4197	Capstone in Neuroscience	4
Foundations Courses:		
Select one of the following:		3
PSY 2501	Foundations of Behavioral Neuroscience	
PSY 2502	Foundations of Cognitive Neuroscience	
Electives		
Select two of the following:		6-8
Any course(s) in NSCI numbered 3000-4999 not used for another requirement		
CSCD 3235	Human Neuroscience	
CSCD 3382	Independent Study in Communication Sciences	
PHIL 2144	Introduction to the Philosophy of Mind	
PSY 3306	Neuroscience of Development and Aging	
PSY 3561	Psychopharmacology	
PSY 3566	Neurobiology of Learning and Memory	
PSY 4182	Independent Study in Cognitive Neuroscience I	
PSY 4282	Independent Study in Cognitive Neuroscience II	
BIOL 3082	Independent Research II	
BIOL 3204	Cell Structure and Function	
BIOL 3352	Systems Neuroscience	
BIOL 3354	Neural Basis of Animal Behavior	
BIOL 3356	Organization and Development of the Nervous System	
CHEM 3881	Cooperative Research	
CHEM 4107	Drug Analysis	
PHYS 3301	Electricity and Magnetism	
Total Credit Hours		52-54

Students should check prerequisites for all courses.

Suggested Academic Plan

Bachelor of Science in Neuroscience: Systems, Behavior and Plasticity

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		14
Spring		
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
GenEd Breadth Course		3
NSCI 1051	Fundamentals of Neuroscience	3
PSY 1001	Introduction to Psychology	3
BIOL 1012	General Biology II	4
Credit Hours		16
Year 2		
Fall		
NSCI 2001	Functional Neuroanatomy	3
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
GenEd Breadth Course		3
CLA/CST 0800-4999 Elective		3
One 0800-4999 Elective in Any School or College		3
Credit Hours		15
Spring		
CLA 1002	Professional Development for Liberal Arts Majors ¹	1
GenEd Breadth Course		3
CLA/CST 2000+ Elective		3
PSY 1003	Statistics for Psychology	3
One 0800-4999 Elective in Any School or College		3
CLA/CST 0800-4999 Elective		2
Credit Hours		15
Year 3		
Fall		
CLA/CST 2000+ Humanities/CST Course		3
NSCI 3096	Conducting Neuroscience Research	3
CHEM 1031	General Chemistry I	4
& CHEM 1033	and General Chemistry Laboratory I ²	
NSCI 2121	Development/Plasticity/Repair	3
One 0800-4999 Elective in Any School or College		3
Credit Hours		16
Spring		
CLA/CST 2000+ Humanities/CST Course		3
CHEM 1032	General Chemistry II	4
& CHEM 1034	and General Chemistry Laboratory II ²	
NSCI 2122	Cellular Neuroscience	3
NSCI 2222	The Neurobiology of Disease	3

Select one of the following:		3
PSY 2501	Foundations of Behavioral Neuroscience	
PSY 2502	Foundations of Cognitive Neuroscience	
Credit Hours		16
Year 4		
Fall		
NSCI 3087	Techniques in Neuroscience	3
One 2000+ Elective From the Approved List		3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
One 0800-4999 Elective in Any School or College		3
Credit Hours		15
Spring		
NSCI 4197	Capstone in Neuroscience	4
One 2000+ Elective From the Approved List		4
CLA/CST 2000+ Elective		3
CLA/CST 2000+ Elective		3
One 0800-4999 Elective in Any School or College		2
Credit Hours		16
Total Credit Hours		123

1

Students may substitute NSCI 1002 or PSY 1002 for this requirement.

2

CHEM 1031/CHEM 1033 and CHEM 1032/CHEM 1034 fulfill the GenEd Science & Technology requirement. Prerequisite for CHEM 1031 is MATH 1021 with a C or better or placement into MATH 1022.

Philosophy BA

Overview

Philosophy explores life's big questions about knowledge, existence, and value. What is it to be rational? What is the mind? What is it to be responsible for our actions? What kinds of facts and explanations do the sciences offer? What is a good life? Students in the **Bachelor of Arts in Philosophy** learn to assess claims and evaluate arguments in a wide range of fields. They graduate with the ability to think incisively and critically, to write and speak clearly and intelligently, and to structure and simplify complex information. Philosophy course offerings cover pure and applied philosophy; contemporary philosophy and the history of philosophy; and philosophy of race, gender, and other forms of social diversity.

Besides the BA in Philosophy (with or without pre-law emphasis), the Department of Philosophy also offers a minor in Philosophy and a certificate in Ethics.

Campus Location: Main

Program Code: LA-PHIL-BA

Distinction in Major

Students graduate with Distinction in Major upon successful completion of PHIL 4999.

Accelerated Bachelor of Arts / Master of Arts in Philosophy (4+1) Program

High-achieving undergraduates can apply for the 4+1 BA/MA accelerated degree program in Philosophy, which enables them to obtain their BA and MA in Philosophy in five years rather than the usual six. Students begin taking graduate courses in their last three undergraduate semesters, and then spend their fifth year completing all remaining MA requirements. Eligible students must have a minimum overall undergraduate GPA of 3.5 and a 3.5 in Philosophy. Students will receive notification of eligibility at the end of their sophomore year, and applications will be accepted until October 15th of their junior year. For more information, please contact the Graduate Chair.

Awards

[The Ira Lawrence Family Award](#) - Established from a gift to the Philosophy department from Ira Lawrence, Jr. MD (CST '76), this award is given to a graduating CLA student majoring in philosophy with outstanding academic performance in the major.

The Thomas Meyer Memorial Award - Established by family, faculty and friends in memory of Thomas Meyer, former Philosophy department professor, this award is given to a CLA student majoring in philosophy for community building activities among philosophy undergraduates.

Professional Development

Philosophy is an excellent major for careers in medicine, law and business. Career options are regularly discussed in the Undergraduate Philosophy Club and featured on the Philosophy department's web site.

Contact Information

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Learn more about the Bachelor of Arts in Philosophy.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are PHIL 1196, and either PHIL 4297 or PHIL 4298.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 83) of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including:
 - 90 credits in CLA/CST courses;
 - 45 credits of which must be at the upper level (numbered 2000-4999).
 - **Distribution Requirement for Humanities majors:** Six upper level credits must be earned in the Social Science, Science, and/or interdisciplinary subject areas. Select from the following CLA departments and programs: Africology & African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Gender, Sexuality, and Women's Studies, Geography and Urban Studies, Global Studies, History, Jewish Studies, Latin American Studies, Lesbian, Gay, Bisexual, and Transgender Studies, Liberal Arts, Neuroscience (CLA), Political Science, Psychology, and Sociology, or any department in the College of Science and Technology.
 - A minimum GPA of 2.0, cumulatively, in all CLA/CST coursework, and in the major department.
 - Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
 - **Professional Development Requirement**
 - All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
 - **Foreign Language/Global Studies Requirements**

- All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
- All students must complete at least one course from the GenEd Global/World Society category; and
- All Bachelor of Arts students must complete one of the following options:
 - Third semester of a foreign language;
 - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
 - Take one Global Studies course from the list on the CLA College Requirements (p. 940) page;
 - Study Abroad at an approved program; or
 - Take a second General Education Global/World Society course.
- **Notes on Foreign Language Study**
 - The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
 - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
 - See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements: 12 courses in Philosophy (36 credits)

Code	Title	Credit Hours
PHIL 1066	Introduction to Logic	3
PHIL 1196	Introduction to Philosophy	3
PHIL 2161	History of Philosophy: Greek	3
PHIL 2172	History of Philosophy: Modern	3
Ethics		
Select one of the following: ¹		3
PHIL 3222	Contemporary Ethical Theory	
PHIL 3226	Classics in Moral Philosophy	
Senior Seminar		
PHIL 4298 or PHIL 4297	Senior Seminar Pre-Law Tutorial	3
Six additional Philosophy courses at the 2000+ level		18
Total Credit Hours		36

¹
For scheduling reasons, especially for transfer students, another ethics-related course is often substituted.

Suggested Requirements for the Philosophy Major with a Pre-Law Emphasis

Code	Title	Credit Hours
PHIL 1196	Introduction to Philosophy	3
PHIL 1055	Critical Thinking	3
PHIL 2161	History of Philosophy: Greek	3
PHIL 2172	History of Philosophy: Modern	3
PHIL 3243	Philosophy of Law	3
PHIL 4297	Pre-Law Tutorial	3
PHIL 3085	Pre-Law Internship	3
Five additional Philosophy courses at the 2000+ level		15
Total Credit Hours		36

Suggested Academic Plans

Bachelor of Arts in Philosophy

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4
Foreign Language 1001 - first level		4
GenEd Breadth Course		3
Credit Hours		15
Spring		
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
Foreign Language 1002 - second level		4
GenEd Breadth Course		3
PHIL 1066	Introduction to Logic	3
PHIL 1196	Introduction to Philosophy	3
Credit Hours		16
Year 2		
Fall		
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
CLA 1002	Professional Development for Liberal Arts Majors	1
PHIL 2161	History of Philosophy: Greek	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Select one of the following:		3
Foreign Language - third level		
GenEd Global/World Society course		
Internationally Focused Course From Approved List		
Credit Hours		16
Spring		
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
PHIL 2172	History of Philosophy: Modern	3
One 2000+ Philosophy Course		3
Credit Hours		15
Year 3		
Fall		
CLA/CST 2000+ Social Science/CST Course		3
One 2000+ Philosophy Course		3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
Select one of the following:		3
PHIL 3222	Contemporary Ethical Theory	
PHIL 3226	Classics in Moral Philosophy	
Credit Hours		15

Spring

CLA/CST 2000+ Social Science/CST Course	3
One 2000+ Philosophy Course	3
One 2000+ Philosophy Course	3
CLA/CST 2000+ Course	3
CLA/CST 0800-4999 Elective	3
One 0800-4999 Elective in Any School or College	2
Credit Hours	17

Year 4**Fall**

One 2000+ Philosophy Course	3	
CLA/CST 2000+ Course	3	
PHIL 4298 or PHIL 4297	Senior Seminar ¹ or Pre-Law Tutorial	3
CLA/CST 0800-4999 Elective	3	
CLA/CST 0800-4999 Elective	2	
Credit Hours	14	

Spring

One 2000+ Philosophy Course	3
CLA/CST 2000+ Course	3
CLA/CST 0800-4999 Elective	3
CLA/CST 0800-4999 Elective	3
One 0800-4999 Elective in Any School or College	3
Credit Hours	15
Total Credit Hours	123

1

PHIL 4298/PHIL 4297 may not be offered every semester. Check with advisor for offerings.

Bachelor of Arts in Philosophy with a Pre-Law Emphasis**Year 1**

Fall		Credit Hours
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ}		4
Foreign Language 1001 - first level		4
GenEd Breadth Course		3
Credit Hours		15

Spring

IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Foreign Language 1002 - second level		4
GenEd Breadth Course		3
PHIL 1055	Critical Thinking	3
PHIL 1196	Introduction to Philosophy	3
Credit Hours		16

Year 2**Fall**

IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
GenEd Breadth Course		3

PHIL 2161	History of Philosophy: Greek	3
CLA 1002	Professional Development for Liberal Arts Majors	1
Select one of the following:		3
Foreign Language - third level		
GenEd Global/World Society course		
Internationally Focused Course From Approved List		
Credit Hours		16
Spring		
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
PHIL 2172	History of Philosophy: Modern	3
One 2000+ Philosophy Course		3
Credit Hours		15
Year 3		
Fall		
CLA/CST 2000+ Social Science/CST Course		3
One 2000+ Philosophy Course		3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
One 0800-4999 Elective in Any School or College		2
Credit Hours		17
Spring		
CLA/CST 2000+ Social Science/CST Course		3
PHIL 3243	Philosophy of Law ¹	3
One 2000+ Philosophy Course		3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Year 4		
Fall		
One 2000+ Philosophy Course		3
CLA/CST 2000+ Course		3
PHIL 4297	Pre-Law Tutorial ²	3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Spring		
PHIL 3075	Pre-Law Seminar ^{1,3}	3
PHIL 3085	Pre-Law Internship ^{1,3}	3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		2
One 0800-4999 Elective in Any School or College		3
Credit Hours		14
Total Credit Hours		123

1

Typically offered only in the spring.

2

Course may not be offered every semester. Check with advisor for offerings.

3

PHIL 3085 must be taken with PHIL 3075.

Philosophy Minor

Overview

The **Minor in Philosophy**, offered by the Department of Philosophy, is an excellent minor for careers in medicine, law and business. Career options are regularly discussed in the Undergraduate Philosophy Club and featured on the Philosophy department's web site.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

Code	Title	Credit Hours
Introductory Philosophy		
PHIL 1196 or PHIL 1001	Introduction to Philosophy Philosophical Challenges to the Individual	3
PHIL 1066 or PHIL 1055	Introduction to Logic Critical Thinking	3
History of Philosophy		
PHIL 2161 or PHIL 2172	History of Philosophy: Greek History of Philosophy: Modern	3
Ethics		
Select one of the following:		3
PHIL 3222	Contemporary Ethical Theory	
PHIL 3226	Classics in Moral Philosophy ¹	
Three Philosophy electives numbered 2000-4999		9
Total Credit Hours		21

1

For scheduling reasons, especially for transfer students, another ethics-related course is often substituted.

Political Economy Certificate

Overview

The Department of Economics and the Department of Political Science jointly offer the **Certificate in Political Economy**.

The 24-credit Political Economy certificate enables undergraduate students to study more intensely the relationship between the political and economic spheres of society. The program is based on the belief that a focused examination of this relationship provides a better understanding of several social phenomena. Chief among these is a better understanding of public policy and the policy making process, as well as how government actions affect the process of economic change and vice versa.

The program is open to all matriculated undergraduate students. It is not restricted to Economics or Political Science majors. The Political Economy program provides an excellent preparation for graduate study in not just economics and political science but also in public policy, law and business.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Locations: Main and Japan

Program Code: LA-POLE-CERT

Contact Information

Main Campus

Moritz Ritter, Department of Economics
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Temple University Japan

Masaki Kakizaki, PhD, Political Science Coordinator
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Learn more about the undergraduate certificate in Political Economy.

Requirements

The program consists of two components: required core courses at the lower-division level and elective courses at the upper-division level.

Core Courses

All students must take the following core courses:

Code	Title	Credit Hours
ECON 1101 or ECON 1901	Macroeconomic Principles Honors Macroeconomic Principles	3
ECON 1102 or ECON 1902	Microeconomic Principles Honors Microeconomic Principles	3
POLS 1101 or POLS 1911	The American Political System Honors Introduction to American Politics	3
Select one of the following:		3
POLS 1201 or POLS 1921	Foreign Governments and Politics Honors Foreign Governments and Politics	
POLS 1301 or POLS 1931	International Politics Honors International Politics	

Elective Courses

All students must successfully complete (grade of C- or better) four courses from the following list. Two of the four courses must be in economics, and two courses must be in political science. Students should select courses that correspond to their own substantive interests and are encouraged to take cognate areas (e.g., if you choose international politics courses, also choose international economics courses). Students should plan their schedules well in advance, since some courses are not offered each semester.

Code	Title	Credit Hours
Select two of the following:		6
ECON 3531	History of Economic Theory	
ECON 3547	Economics of Development and Growth	
ECON 3511	The Economics and Management of Privatization	
ECON 3512	Public Finance	
ECON 3513	Economics of State and Local Governments	
ECON 3563	International Trade	
ECON 3564	International Monetary Economics	
ECON 3596 or ECON 3506	Energy, Ecology, and Economy ¹ Energy, Ecology, and Economy	
ECON 3597	Health Economics ¹	

or ECON 3507	Health Economics
ECON 3545	Economics of Labor Markets
ECON 3546	Women in the Economy
ECON 3535	Public Control of Business: Antitrust
ECON 3536	Economics of American Industry
Select two of the following:	
POLS 2102	American State and Local Politics
POLS 2103	Making Public Policy
POLS 2201	Comparative Politics: Developing Nations
POLS 2321	Politics of the Global Economy
POLS 2441	Democracy, Capitalism, and Socialism
POLS 3134	The Politics of Inequality
POLS 3151	Public Policy Analysis
POLS 3152	U.S. Environmental Policy
POLS 3155	Business and Public Policy
POLS 3252	East Asia and the United States
POLS 3265	International Environmental Policy

6

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Writing Intensive courses.

Political Science BA

Overview

The **Bachelor of Arts in Political Science**, offered by the Department of Political Science, enables students to learn about the theory and practice of politics across four established subfields:

- American politics (including the local, state, and federal levels);
- comparative (foreign) governments;
- international relations, and
- political theory.

Students develop strong proficiency in analytical, research and writing skills, with a particular emphasis on methodological rigor. They learn how to develop sophisticated arguments, conduct critical research on a variety of topics, and communicate their work through oral presentations and scholarly papers. Finally, they gain civic awareness about their role as citizens and thinkers in an increasingly complex political world.

Political Science graduates pursue a wide range of careers. Many work in government offices, political campaigns, civic organizations, public institutions and international agencies. A degree in Political Science is also excellent preparation for graduate school, with law school, public policy and international affairs being the most popular choices. Many also work in the private sector, such as consulting, business and the media. To support career planning, the department offers its own 1-credit career development seminar (POLS 1002).

The department offers many opportunities for students to further their learning outside the classroom. Many students undertake internships linked to academic study, including public service opportunities. The Experiential Learning Program offers internships combined with academic seminars. The department also works closely with several student organizations, including the Political Science Society as well as Pi Sigma Alpha, the national honorary political science society.

Course Sequencing for Political Science Majors

Students begin the major by taking four introductory courses: POLS 1101, POLS 1201, POLS 1301, and POLS 2496.

Courses should be sequenced so that students take the introductory courses before the upper-level courses. POLS 1101 is an introduction to U.S. politics and should be taken before upper-level courses in this area. Similarly, POLS 1201 introduces foreign governments and precedes upper-level courses in this field. POLS 1301 introduces international politics and is a prerequisite for upper-level courses in this subject matter. POLS 2496 introduces political theory and should generally be taken in the sophomore year and should precede upper-level theory courses.

Once the introductory courses are completed, students can move on to the electives at the upper level (numbered 2000-4999), of which 3 are needed. Students should pay particular attention to the order in which they take the research methods-capstone sequence (which is taken concurrent with the electives). The first course in this sequence is POLS 2503 Evidence and Knowledge, a research design course that teaches students how to conduct empirical research, an essential skill for successfully completing the upper-level courses.

Evidence and Knowledge (POLS 2503) will lay the foundation for the next two research preparation courses (numbered 3501 through 3599). These research-intensive courses focus on an advanced topic, like other upper level courses, but they also place an emphasis on sharpening the research skills covered in the first course. Once two research intensive courses are completed, the student enrolls in a capstone seminar, the culminating experience of the Political Science major. Topics for research intensive and capstone courses change each semester and often address recent political events and dilemmas. Course descriptions for these courses will be available online.

Campus Location: Main and Japan

Program Code: LA-POLS-BA

Distinction in Major

Distinction in Major recognizes highly motivated Political Science students who accept opportunities to demonstrate their interests and skills by undertaking additional research-oriented classes or in-depth Political Science oriented internships.

Students earn Distinction in Major by holding a GPA in the major of at least 3.8 at graduation and by completing at least one additional upper-level course (POLS 3580, POLS 3996, or an additional 4000-level capstone) or by enrolling in a 3+ credit Political Science internship (POLS 4585). Entry to junior and senior capstone courses requires permission by the Political Science Advisors (Nick Catsis (ncatsis@temple.edu) and Sean Murphy (seanmurphy@temple.edu)). When applying for permission, students should note their interest in receiving distinction.

Students who have questions about their eligibility are encouraged to contact Undergraduate Chair, Alexandra Guisinger (alexandra.guisinger@temple.edu).

Accelerated Bachelor of Arts / Master of Arts in Political Science (4+1) Program

High-achieving undergraduates can apply for the 4+1 BA/MA accelerated degree program in Political Science, which enables them to obtain their BA and MA in Political Science in five years rather than the usual six. Students begin taking graduate courses in their last three undergraduate semesters, and then spend their fifth year completing all remaining MA requirements. Eligible students must have a minimum GPA of 3.5, both overall and in Political Science and have passed POLS 2503 Evidence and Knowledge by the time they begin graduate coursework. Students will receive notification of eligibility at the end of their sophomore year, and applications will be accepted until October 15th of their junior year. For more information, please contact the Graduate Chair.

Accelerated Bachelor of Arts in Political Science / Master of Public Policy (4+1) Program

The Department of Political Science and the Master of Public Policy (MPP) program offer an accelerated track that enables students to attain their BA in Political Science and an MPP in five years, instead of the customary six. Students apply to the program during their third or fourth year of undergraduate study and begin taking graduate coursework upon entry. The GRE is not necessary, but students must maintain an overall undergraduate GPA of at least 3.5. For more information, please contact the MPP Director, Gary Mucciaroni (gary.mucciaroni@temple.edu).

Funding and Support

- Students may apply for financial support to cover research-related activities, such as visits to archives, travel to present a scholarly paper, etc., through the Creative Arts, Research and Scholarship (CARAS) Program.
- Funding is also available through the Diamond Research Scholars Program.
- Students are also encouraged to submit their completed research papers to the Library Prize for Undergraduate Research and the Temple University Symposium for Undergraduate Research and Creativity.
- The department is committed to supporting student success through internships and presenting research. It works with alumni funding to support internship placements. The department also funds students traveling to present undergraduate research, such as with the annual conference of Pi Sigma Alpha, the national honorary political science society.

The Political Economy Certificate Program

The Department of Political Science and the Department of Economics offer an interdisciplinary program leading to a Certificate in Political Economy. The program focuses on the interaction between government and the economy and is ideal preparation for students planning careers in either the public or private sector. It also provides an excellent foundation for graduate studies in law, the social sciences, and public administration. The program is open to all matriculated students in the university. Contact Alexandra Guisinger (alexandra.guisinger@temple.edu) or Roselyn Hsueh (rhsueh@temple.edu) for specific details and requirements.

Pre-Law Studies

Beth Lawson
 CLA Academic Advising
 elizabeth.lawson@temple.edu

Political Science is one of the most popular majors for pre-law students. Pre-law students should develop skills in communicating ideas, sharpen their analytical abilities and ability to think logically, and acquire in-depth understanding of at least one liberal arts field (such as Political Science). Students

interested in law school can read these requirements at CLA Pre-Law (p. 944), and for more information contact Paul Crowe (pcrowe@temple.edu) in the Philosophy department.

Internships

The department encourages students to obtain internships linked to academic study. Students may replace up to two upper-level electives (equivalent to 6 credit hours) from qualifying internships undertaken with external organizations and programs, as approved by the Internship Coordinator. In addition, the Experiential Learning Program offers internships combined with academic seminars, with courses specially designated for this track.

Public Service Opportunities through the Public Service Cooperative

Temple University's faculty, students and alumni have a long tradition of public service. For internships related to public service, the department offers several credit-bearing opportunities at the local, state and federal levels. Interested students should complete the program application and contact Internship Coordinator Sean Murphy (seanmurphy@temple.edu).

The City Hall Experience

The City Hall Internship Experience allows undergraduate students the opportunity to work in Philadelphia City Hall for 10-12 hours each week while earning the equivalent of a 3-credit internship. In addition to receiving credits for internship, students will participate in a 1-credit class for one hour each week to discuss Philadelphia, its policy initiatives, and the ins and outs of city government.

Harrisburg Capital Semester

Temple University sponsors an internship semester each fall and spring in Harrisburg in association with Temple's Harrisburg campus. Students have the opportunity to explore government affairs, policymaking and implementation first-hand while being full-time students and staying on track to graduation. The Harrisburg semester allows students to receive 6-9 credit hours of internship along with a 3-credit Research Preparation course and a 1-credit Professional Development Seminar.

The Washington Semester

The Washington Semester allows Temple students to gain valuable career experience in the nation's capital, while remaining full-time students. If accepted into the program, students register for three courses in the College of Liberal Arts (two for 3 credits each, and one for 9 credits) for a 15-credit semester in the fall or spring. (Summer programs are also available for 12 credits.) Temple University serves as liaison to The Washington Center (TWC), a well-established and well-regarded internship semester program in Washington, D.C., through which Temple students receive internships and take classes.

Study Abroad

Many Political Science majors have taken advantage of Temple's study abroad programs, which provide the life-changing experience of scholarship at overseas institutions, immersion in foreign cultures and learning new languages. The Office of Education Abroad and Overseas Campuses has information on a variety of programs. The most popular destinations include the Temple campuses in Tokyo and Rome, as well as programs in the United Kingdom, France, Germany and Spain. Study abroad destinations include over 80 countries located on every continent. For questions regarding eligibility and program equivalency, please contact Undergraduate Advisor Nick Catsis (ncatsis@temple.edu).

Student Organizations

The department hosts two main organizations that represent the breadth and depth of its students. The faculty advisor is Sean Yom (seanyom@temple.edu).

Political Science Society

The Political Science Society is the organization for all Political Science majors and minors at Temple University. The purpose of the association is to represent the opinions and interests of undergraduate majors within the Political Science Department. The association sponsors activities including career forums, lectures, student and faculty mixers, law and graduate forums, seminars on popular topics, and trips to locales like New York City and Washington, DC.

Pi Sigma Alpha

Pi Sigma Alpha is the national honorary society for political science students. Temple's chapter was founded in 1965, and since then has inducted over a thousand students. Eligible students are offered membership prior to their junior or senior year. Membership is lifetime. Students who join have opportunities to attend special research conferences, apply for internship and graduate funding, and publish their work in research journals.

Contact Information

Main Campus

Department Office
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Temple Japan Campus

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Learn more about the Bachelor of Arts in Political Science.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are POLS 2496 Introduction to Political Philosophy and POLS 4896 Capstone Seminar in Political Science.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 83) section of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including:
 - 90 credits in CLA/CST courses;
 - 45 credits of which must be at the upper level (numbered 2000-4999).
 - For **Social Science majors**, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art and Architecture, or any department in the College of Science and Technology.
 - A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- **Professional Development Requirement**
 - All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Foreign Language/Global Studies Requirements**
 - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
 - All students must complete at least one course from the GenEd Global/World Society category; and
 - All Bachelor of Arts students must complete one of the following options:

- Third semester of a foreign language;
 - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
 - Take one Global Studies course from the list on the CLA College Requirements (p. 940) page;
 - Study Abroad at an approved program; or
 - Take a second General Education Global/World Society course.
- **Notes on Foreign Language Study**
 - The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
 - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
 - See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements - 11 Courses in Political Science (33 credits)

Code	Title	Credit Hours
Required Courses		
POLS 1101	The American Political System	3
POLS 1201	Foreign Governments and Politics	3
POLS 1301	International Politics	3
POLS 2496	Introduction to Political Philosophy	3
POLS 2503	Evidence and Knowledge	3
Electives		
Select 2 Research Preparatory courses numbered 3501-3599		6
Select 3 upper-level Political Science courses numbered 2000-4999 ¹		9
Capstone		
POLS 4896	Capstone Seminar in Political Science ²	3
Total Credit Hours		33

1

With the exception of POLS 2496.

2

POLS 4896 is the capstone course for the major and should be taken in the senior year after the completion of POLS 1101, POLS 1201, POLS 1301, POLS 2496, POLS 2503, two Research Preparatory courses (numbered 3501-3599), and three additional Political Science courses (numbered 2000-4999).

Not all courses are offered every semester. Please check the Class Schedule for actual course offerings each semester.

Suggested Academic Plan

Bachelor of Arts in Political Science

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ}		4
Foreign Language 1001 - first level		4
GenEd Breadth Course		3
Credit Hours		15

Spring

IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Foreign Language 1002 - second level		4
GenEd Breadth Course		3
POLS 1101	The American Political System	3
POLS 1201	Foreign Governments and Politics	3
Credit Hours		16

Year 2**Fall**

IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
GenEd Breadth Course		3
POLS 1301	International Politics	3
One 0800-4999 Elective in Any School or College		2
Select one of the following:		3
Foreign Language - third level		
GenEd Global/World Society Course		
Internationally Focused Course From Approved List		
Credit Hours		17

Spring

GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
One 2000+ Political Science Course		3
POLS 2496	Introduction to Political Philosophy	3
CLA 1002	Professional Development for Liberal Arts Majors	1
Credit Hours		16

Year 3**Fall**

POLS 2503	Evidence and Knowledge	3
CLA/CST 0800-4999 Elective		3
One 2000+ Political Science Course		3
CLA/CST 2000+ Course		3
CLA/CST 2000+ Humanities/CST Course		3
Credit Hours		15

Spring

CLA/CST 2000+ Humanities Course		3
Political Science 3501-3599 Capstone Preparation Course		3
One 2000+ Political Science Course		3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15

Year 4**Fall**

Political Science 3501-3599 Capstone Preparation Course		3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		2
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
Credit Hours		14

Spring		
POLS 4896	Capstone Seminar in Political Science	3
CLA/CST 2000+ Course		3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		3
One 0800-4999 Elective in Any School or College		3
Credit Hours		15
Total Credit Hours		123

Political Science Minor

Overview

The **Minor in Political Science**, offered by the Department of Political Science, enables students to learn about the theory and practice of politics across four established subfields:

- American politics (including the local, state, and federal levels),
- comparative (foreign) governments,
- international relations, and
- political theory.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

The Political Science Society is the organization for all Political Science majors and minors at Temple University. The purpose of the association is to represent the opinions and interests of undergraduate students within the Political Science department. The association sponsors activities including career forums, lectures, student and faculty mixers, law and graduate forums, seminars on popular topics, and trips to locales like New York City and Washington, DC.

Campus Locations: Main and Japan

Contact Information

Main Campus

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Temple Japan Campus

Masaki Kakizaki, PhD, Political Science Coordinator
 masaki.kakizaki@tuj.temple.edu

Requirements

Code	Title	Credit Hours
Introduction		
Select two of the following:		6
POLS 1101	The American Political System	
POLS 1201	Foreign Governments and Politics	
POLS 1301	International Politics	
POLS 2496	Introduction to Political Philosophy	
Electives		
Select 4 upper-level courses numbered 2000-4999 ¹		12
Total Credit Hours		18

1

With the exception of POLS 2496

Portuguese Minor

Overview

The minor in Portuguese, offered by the Department of Spanish and Portuguese, prepares students to engage with diverse communities both at home and abroad through the development of language skills and intercultural competencies. The Portuguese minor is designed to develop strong language and professional skills and to provide a critical awareness of Brazilian, Portuguese and Luso-African cultures.

Spanish and Portuguese organizations and activities include Sigma Delta Pi, the National Hispanic Honor Society, the scholarly publications of the Society of Spanish and Spanish-American Studies, and the Spanish and Portuguese Clubs and Film Series.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

The minor in Portuguese requires 6 courses (18 credits minimum) in Portuguese.

Code	Title	Credit Hours
PORT 1001	Basic I ¹	4
PORT 1002	Basic II ¹	4
Select 4 Portuguese elective courses from 2000+ level offerings.		10-12
Total Credit Hours		18-20

1

Students may substitute PORT 1021 Portuguese for Spanish Speakers or intermediate/advanced level courses for the beginning PORT 1001 and PORT 1002. Students must still take at least six courses.

Professional Writing Certificate

Overview

Powerful writing is an invaluable asset for people in all walks of life. The **Certificate in Professional Writing**, offered by the Department of English, is designed to give students training that will prepare them to be polished communicators in a variety of professional environments, effectively use digital tools, skillfully convey field-specific information, productively collaborate with diverse teams, and competently interact with cross-cultural audiences. Students will put the specific knowledge and skills learned in their majors to work in publishing, editing, content-generation, development, communications, or administration in for-profit, non-profit, government and free-lance settings, among others. At the conclusion of the certificate, they will have assembled a portfolio of accomplished work. The certificate provides maximum flexibility, allowing students to focus on the specific skills and competencies that are most relevant for their chosen field.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Program Code: LA-PRWR-CERT

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Learn more about the undergraduate certificate in Professional Writing.

Requirements

Select a total of five courses in Writing. Two courses must be selected from the 2000 level options, two from the 3000 level options, and one additional elective from either list.

Code	Title	Credit Hours
2000-Level Courses		
Select two courses at the 2000 level from this list:		6
ENG 2006	Non-Fiction Writing	
ENG 2007	Writing for Business and Industry	
ENG 2008/2696	Technical Writing	
ENG 2009	Writing the Research Essay	
ENG 2022	Beyond the Field: Sports and Storytelling	
ENG 2714	Writing for the Arts	
ENG 2831	Literacy and Society	
ENG 2832	Science Writing	
ENG 2833	Medical Writing	
3000-Level Courses		
Select at least two courses at the 3000 level from this list:		6
ENG 3009	Building Electronic Portfolios	
ENG 3085	Career Internship (Must be taken for at least 3 credits.)	
ENG 3401	Intermediate Writing: Non-Fiction	
ENG 3813	Writers at Work	
ENG 3814	Topics in Professional Writing	
ENG 3821	Linguistics and Grammar	
Electives		
Select one elective from either list noted above.		3
Total Credit Hours		15

Students who are majoring in English may double-count no more than two courses between these programs.

Psychological Studies BA

Overview

The **Bachelor of Arts in Psychological Studies** is offered by the College of Liberal Arts's Department of Psychology and Neuroscience and is available only at Temple University, Japan Campus (TUJ).

The Psychological Studies major is designed to promote a broad understanding of human behavior and the affective and cognitive processes that underlie it from the perspective of psychology as a science and a profession. In addition to introductory courses, the study of statistics and research methodology will prepare students to deal with the wealth of research-based knowledge they will encounter as they develop a strong foundation in basic and applied areas of psychology. The research or internship option rounds out the Psychological Studies majors' experiences as they complete advanced electives. Unique to TUJ's Psychological Studies major is its focus on cross-cultural issues, with special emphasis on Asia and the U.S.

Campus Location: Japan

Program Code: LA-PSYS-BA

A Psychology minor is also offered at both Main Campus and Japan Campus.

Contact Information

Dariusz Skowronski, PhD, Major Coordinator
dariusz.skowronski@tuj.temple.edu

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements for the Degree

1. University and College of Liberal Arts (CLA) Requirements

- All Temple students must take a minimum of two writing-intensive courses as part of the major. The writing-intensive courses required for this major are PSY 3096 and a Psychology course at the 4000 level, such as PSY 4696.

- Students must complete the General Education (p. 83) curriculum.
- Students must follow CLA requirements as specified in the CLA College Requirements (p. 940) section of the Undergraduate Bulletin.

2. Major Requirements (Minimum 38 credits)

Code	Title	Credit Hours
Introductory Courses		
PSY 1001	Introduction to Psychology	3
PSY 1002	Careers in Psychology (should be taken in the students' freshman / sophomore year)	1
PSY 1003	Statistics for Psychology	3
PSY 1004	Critical Thinking in Psychology	3
Psychological Studies Science Requirement		
Select one of the following:		4
BIOL 1001	Human Biology	
BIOL 1011	General Biology I	
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
PHYS 1021	Introduction to General Physics I	
Developmental/Clinical/Social Foundation Courses (Group 1)		
Select one of the following:		3
PSY 2201	Foundations of Psychopathology	
PSY 2301	Foundations of Developmental Psychology	
PSY 2401	Foundations of Social Psychology	
PSY 2402	Foundations of Industrial and Organizational Psychology	
Brain and Cognitive Sciences Foundation Courses (Group 2)		
Select one of the following:		3
PSY 2101	Foundations of Cognitive Psychology	
PSY 2103	Foundations of Learning and Behavior Analysis	
PSY 2104	Foundations of Sensation and Perception	
PSY 2501	Foundations of Behavioral Neuroscience	
PSY 2502	Foundations of Cognitive Neuroscience	
Psychology Foundation Elective Course		
Select an additional course from Group 1 or Group 2		3
Required Methods Course		
PSY 3096	Conducting Psychological Research	3
Advanced Courses		
In consultation with the Academic Advisor and/or Major Coordinator, select 2 psychology courses at the 3000 level or higher, one of which must focus on gender/culture.		6
PSY 3151	Direct Applications of Behavioral Principles	
PSY 3152		
PSY 3221	Clinical Psychology: Research and Practice	
PSY 3223	Child Psychopathology and Treatment	
PSY 3620	Topics in Psychology (focus on gender/culture)	
Internship / Collaborative Research / Clinical Practicum		
Must complete at least one internship, collaborative research or clinical practicum for at least 3 credits, with approval by the Major Coordinator.		3
PSY 3785	Psychology Internship	
PSY 3787	Practicum	
PSY 3791	Collaborative Research I	
PSY 3891	Collaborative Research II	
Senior Writing Seminar		
PSY 4696	Capstone in Psychology	3
Total Credit Hours		38

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Psychological Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
GenEd Quantitative Literacy Course ^{GQ}		4
GenEd Breadth Course		3
Foreign Language 1001 (first level)		4
Credit Hours		15
Spring		
IH 0851	Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Foreign Language 1002 (second level)		4
PSY 1001	Introduction to Psychology	3
BIOL 1001	Human Biology	4
Credit Hours		17
Year 2		
Fall		
IH 0852	Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
GenEd Breadth Course		3
PSY 1002	Careers in Psychology	1
PSY 1003	Statistics for Psychology	3
Select one of the following:		3-4
Foreign Language (third level)		
GenEd Global/World Society Course		
Internationally Focused Course from Approved List		
Credit Hours		16-17
Spring		
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Psychology 2000-level Foundations #1		3
PSY 1004	Critical Thinking in Psychology	3
Credit Hours		15
Year 3		
Fall		
Psychology 2000-level Foundations #2		3
Psychology 2000-level Foundations #3		3
One CLA/CST 2000+ Humanities/CST course		3
One CLA/CST 2000+ course		3
One Elective 0800-4999 in any School or College		3
Credit Hours		15
Spring		
PSY 3096	Conducting Psychological Research	3
One CLA/CST 2000+ Humanities/CST course		3
One CLA/CST 2000+ course		3

One CLA/CST 2000+ course	3
One CLA/CST 2000+ course	3
Credit Hours	15
Year 4	
Fall	
One 3000-3620 Advanced Psychology #1 course (Gender or Culture)	3
One CLA/CST 2000+ course	3
One CLA/CST 0800-4999 Elective	3
One CLA/CST 0800-4999 Elective	3
Select one of the following:	3
PSY 3785 Psychology Internship	
PSY 3791 Collaborative Research I	
Credit Hours	15
Spring	
PSY 4696 Capstone in Psychology	3
One 3000-3625 Advanced Psychology #2 course	3
One CLA/CST 0800-4999 course	3
One CLA/CST 0800-4999 course	3
One Elective 0800-4999 in any School or College	3
Credit Hours	15
Total Credit Hours	123-124

Psychology BA

Overview

The **Bachelor of Arts in Psychology**, offered by the Department of Psychology and Neuroscience, provides a modern curriculum covering a breadth of content, ranging from biological bases of cognition and behavior to sociocultural influences on human interactions and psychological disorders. The curriculum is designed to develop students' critical thinking skills through emphasis of the scientific basis of psychology and through courses in statistics and research methodology. The program also emphasizes the integration and synthesis of information across courses and activities through the step-wise progression of the curriculum from the introductory, foundational and advanced classes up to the final capstone course that is taken in the senior year. Students are strongly encouraged to develop applied skills through rigorous and highly focused experiential learning in research laboratories and community-based internships. The curriculum is designed to be sufficiently flexible to satisfy the diversity of needs among undergraduates. An individually tailored curriculum may be selected for the purpose of preparing students for employment or further study in psychology, neuroscience, medicine, law, business or other fields.

Psychology identifies several learning goals for each level of instruction in the program. At the introductory level (PSY 1001, PSY 1002, PSY 1003, PSY 1004), goals include familiarity with the scientific grounding of the discipline (PSY 1001), basic statistics (PSY 1003) and scientific methods (PSY 1004), as well as information on how to prepare for a career in psychology or a related discipline (PSY 1002). At the Foundation level (2000-level courses), students develop deeper knowledge of the fascinating content areas in the discipline, which are broadly organized in two groups:

1. Developmental/Clinical/Social (DCS); and
2. Brain and Cognitive Sciences (BCS).

Students are required to choose at least two courses from each of these two general areas, and this ensures familiarity with the breadth of the discipline. These courses cover a wide range of topics from the functions of the neuron to the development of moral thought. At the Advanced level (3000-3620), students continue to develop critical thinking skills to dispassionately examine conflicting claims, analyze data, organize research papers, and become more proficient with the scientific process in a writing-intensive course (PSY 3096). Students also are required to select four courses with the option of continuing to develop breadth or choosing to delve into greater depth in one area, such as clinical psychology. Finally, at the 4000 level, students choose a Capstone course to complete their coursework. This writing-intensive course is designed to help students integrate their knowledge base, to refine their critical and writing skills, and generally to synthesize their knowledge of the discipline.

Campus Location: Main

Program Code: LA-PSY-BA

Internships and Research Opportunities

Psychology students have the opportunity to gain real-world experiences and course credit through Internship and Practicum classes. Learn more information about Internships and Practica.

For students interested in research opportunities, many of the Temple Psychology faculty have active research laboratories on a wide range of research topics. Students can apply to work as research assistants in a laboratory and can also earn Collaborative Research credit for doing so. Learn more about Collaborative Research.

Accelerated +1 BA/MS Program

The accelerated +1 Bachelor of Arts in Psychology / Master of Science in Psychological Research offers outstanding Temple University psychology majors the opportunity to earn both the BA in Psychology and the MS in Psychological Research in just 5 years. Admission to the program is highly selective. This program is designed to provide a research-intensive experience, advanced coursework and professional development to students who intend to pursue doctoral studies in any of the academic psychology disciplines.

Students apply to the program in the spring semester of their junior year after completing a minimum of 72 undergraduate credits. Eligible students have a minimum 3.5 GPA overall and in Psychology. Additionally, students must have a faculty sponsor who has agreed to mentor the student's master's project research during the four-semester program.

Applications are due March 1st each year.

Learn more about the MS in Psychological Research.

Careers

An undergraduate degree in psychology affords many opportunities for careers and further study at the graduate level because the knowledge and skills learned through the major (e.g. critical thinking, human behavior) are important to many disciplines. Psychology majors are often employed in management positions, education, healthcare, research, real estate, sales, marketing, social services and labor relations. Many psychology majors also go on to graduate study in psychology or other fields, including law, medicine and business school.

Psychology students at Temple are informed of career options and advised to begin to make career decision through a formal course called Careers in Psychology (PSY 1002). This course is designed to encourage students to begin to prepare for their career early during their undergraduate training so that they may maximally benefit from their undergraduate education.

Curricular Overlap Policies

There are several related majors and minors offered by the Psychology and Neuroscience department, including the major and minor in Psychology, the Cognitive Neuroscience minor, the Clinical and Health Psychology minor, the major in Neuroscience: Systems, Behavior and Plasticity, and the Neuroscience Research minor.

Students majoring in Psychology may take a minor in Cognitive Neuroscience, a second major in Neuroscience: Systems, Behavior and Plasticity, or a minor in Neuroscience Research. Psychology majors are not permitted to take the minor in Clinical and Health Psychology but are permitted to take its courses as electives in their major.

Students who opt to double major in Psychology and Neuroscience: Systems, Behavior and Plasticity may double-count the following required courses without taking additional electives in their major to replace the credits:

- PSY 1001 Introduction to Psychology
- PSY 1003 Statistics for Psychology
- PSY 3096 Conducting Psychological Research or NSCI 3096 Conducting Neuroscience Research
- BIOL 1012 General Biology II
- CHEM 1031 General Chemistry I and CHEM 1033 General Chemistry Laboratory I
- CHEM 1032 General Chemistry II and CHEM 1034 General Chemistry Laboratory II

Students who major in Psychology and minor in Cognitive Neuroscience may double count the following required courses:

- PSY 1001 Introduction to Psychology
- PSY 1003 Statistics for Psychology
- PSY 1004 Critical Thinking in Psychology

Students who major in Psychology and minor in Neuroscience Research may double count one elective course and

- PSY 3096 Conducting Psychological Research or NSCI 3096 Conducting Neuroscience Research

The Psychology Honors Program

Students who major in Psychology are encouraged to participate in the Psychology Honors Program. A main goal of the Psychology Honors Program is to provide each student with an individualized experience that will prepare them for psychological research in the future. This program is designed as a two-year study that begins with critical thinking, writing and the study of methodology. Grade requirement is a 3.5 GPA across all courses. Upon completion of this program, students will have produced a senior thesis and presented their work at a student poster session. Some students present research at regional or national meetings.

Learn more about the Psychology Honors Program.

Code	Title	Credit Hours
PSY 2991	Honors Research I	4
PSY 3991	Honors Research II	3
PSY 4991	Honors Research III	3
PSY 4996	Honors Capstone	4

Distinction in Major

Students earn Distinction in Major upon completion of the Psychology Honors Program.

Student Organizations and Honor Societies

Joining a student organization can provide opportunities for leadership experience, career development and service. Some of the student organizations that are of particular interest for psychology majors are:

- Psychology Majors Association (PMA)
- Psychology Majors of Color (PMC)
- Psi Chi: The International Honor Society in Psychology

Learn more about student organizations for psychology majors.

The Undergraduate Psychology Majors Association

The goal of the Psychology Majors Association (PMA) is to provide opportunities for students to apply their appreciation of psychology through activities outside of the classroom. PMA also promotes networking between students and faculty members within the psychology department. PMA members participate in a variety of opportunities including volunteer work, field trips, workshops on graduate school, current topics in psychology, and career development. More information is available at Psychology Majors Association.

Psychology Majors of Color

Psychology Majors of Color bridges the gap between psychology students of color (and other related fields) by providing a common place to convene to create a sense of community. We touch upon mental wellness issues within communities of color as well as making sure that our members are able to thrive within their career paths post-Temple by providing them with the necessary skill sets. By creating this common space, we provide a supportive environment for our members to uplift each other's professional goals. For more information, contact templepmc@gmail.com.

Psi Chi - The National Honor Society in Psychology

Psi Chi, the National Honor Society in Psychology, has an active chapter at Temple University. The minimum requirements for membership in Psi Chi are a 3.20 cumulative GPA and a 3.50 GPA in Psychology courses. Psi Chi members are given opportunities for growth and development within the field of psychology. Psi Chi encourages students to engage in research opportunities within psychology as well as continue their education in graduate studies. For more information, contact psichi@temple.edu.

Phi Beta Kappa

Phi Beta Kappa is the oldest honor society in the United States. It was developed to foster and recognize excellence in the humanities and sciences. More information about Phi Beta Kappa requirements and activities is available at Honor Societies (p. 61).

Advising Resources

The Department of Psychology and Neuroscience has its own academic advisor for undergraduate students. Psychology majors are encouraged to contact the department advisor with questions about the curriculum and graduation requirements. In addition, psychology majors should contact the advisor for:

- Capstone Registration,
- Psychology Internship Inquiries,

- Research Credits, and
- Adding a Psychology Course After the Open Drop/Add Period.

Contact Information

Department Office
6th Floor Weiss Hall

Peter Marshall, Chair
656 Weiss Hall
215-204-7360
peter.marshall@temple.edu

Peter James, Associate Chair
617 Weiss Hall
215-204-3409
pjames@temple.edu

Cynthia Gooch, Director of Undergraduate Studies
519 Weiss Hall
215-204-6514
cgooch@temple.edu

Learn more about the Bachelor of Arts in Psychology.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are PSY 3096 Conducting Psychological Research and one of the following capstone courses: PSY 4696 or PSY 4996.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 83) of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including:
 - 90 credits in CLA/CST courses;
 - 45 credits of which must be at the upper level (numbered 2000-4999).
 - For **Social Science majors**, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art and Architecture, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Professional Development Requirement**
 - All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. PSY 1002 Careers in Psychology is the appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements**
 - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
 - All students must complete at least one course from the GenEd Global/World Society category; and
 - All Bachelor of Arts students must complete one of the following options:
 - Third semester of a foreign language;
 - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
 - Take one Global Studies course from the list on the CLA College Requirements (p. 940) page;

- Study Abroad at an approved program; or
 - Take a second General Education Global/World Society course.
- **Notes on Foreign Language Study**
- The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
 - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
 - See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (minimum 44 credits; 40 credits in Psychology plus 4 credits in a designated science area)

Code	Title	Credit Hours
Introductory Courses Required		
PSY 1001 or PSY 1901	Introduction to Psychology Honors: Introduction to Psychology	3
PSY 1002	Careers in Psychology	1
PSY 1003	Statistics for Psychology	3
PSY 1004	Critical Thinking in Psychology	3
Psychology Science Requirement		
Select one of the following:		4
BIOL 1001	Human Biology	
BIOL 1011	General Biology I	
CHEM 1021 & CHEM 1023	Introduction to Chemistry I and Introduction to Chemistry Laboratory I	
CHEM 1027	Applications of Chemistry	
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
PHYS 1021	Introduction to General Physics I	
EES 2001	Physical Geology	
Developmental/Clinical/Social (DCS) Foundation Courses ¹		
Select two of the following:		6
PSY 2201	Foundations of Psychopathology	
PSY 2301	Foundations of Developmental Psychology	
PSY 2401	Foundations of Social Psychology	
PSY 2402	Foundations of Industrial and Organizational Psychology	
PSY 2601	Foundations of Health Psychology	
Brain and Cognitive Sciences (BCS) Foundation Courses ¹		
Select two of the following:		6
PSY 2101	Foundations of Cognitive Psychology	
PSY 2103	Foundations of Learning and Behavior Analysis	
PSY 2104	Foundations of Sensation and Perception	
PSY 2501	Foundations of Behavioral Neuroscience	
PSY 2502	Foundations of Cognitive Neuroscience	
Required Methods Course		
PSY 3096	Conducting Psychological Research	3
Advanced Courses (3000-3620)		
Select three of the following: ²		9
PSY 3002	Evolutionary and Comparative Psychology	
PSY 3003	Advanced Undergraduate Statistics	

PSY 3005	Affective Neuroscience
PSY 3100	Topics: Brain, Behavior and Cognition
PSY 3151	Direct Applications of Behavioral Principles
PSY 3200	Topics: Clinical
PSY 3221	Clinical Psychology: Research and Practice
PSY 3223	Child Psychopathology and Treatment
PSY 3301	Phases of Development: Infancy
PSY 3303	Psychological Testing: Measuring IQ, Thoughts, Feelings, and Attitudes
PSY 3304	Personality, Social and Emotional Development
PSY 3305	Cognitive and Language Development
PSY 3306	Neuroscience of Development and Aging
PSY 3411	Social Cognition
PSY 3417	Personnel Psychology
PSY 3418	Human Performance Improvement
PSY 3561	Psychopharmacology
PSY 3566	Neurobiology of Learning and Memory
PSY 3600	Advanced Topics in Health Psychology
PSY 3601	Social Health Psychology
PSY 3602	Clinical Neuropsychology
PSY 3603	Clinical Applications of Health Psychology
PSY 3615	History and Systems of Psychology
PSY 3620	Topics in Psychology
CJ 3408	Forensic Psychology

Psychology Elective

One additional course at the Foundation Level or the Advanced Level (2000-3620). 3

Capstone Course³

Select one of the following: 3-4

PSY 4696	Capstone in Psychology
PSY 4996	Honors Capstone

Total Credit Hours 44-45

1

Foundation courses are prerequisites for the advanced (3000-level) areas.

2

Select three from any of the advanced courses (3000-3620) for which you have completed the prerequisite foundation course. These courses cover specialty areas within particular fields of psychology.

Note: PSY 3096 does not count toward the requirement.

3

Seniors only - minimum of 90 credits completed and completion of PSY 3096.

Individual Study Courses

Permission of the instructor is required to register for these courses. For all Psychology majors and minors.

Code	Title	Credit Hours
PSY 4182 & PSY 4282	Independent Study in Cognitive Neuroscience I and Independent Study in Cognitive Neuroscience II	6
Select one of the following:		1-4
PSY 3791	Collaborative Research I	
PSY 3891	Collaborative Research II	
PSY 4791	Collaborative Research III	
PSY 4891	Collaborative Research IV	

PSY 3785	Psychology Internship	3
PSY 3787	Practicum	3

Suggested Academic Plan

Bachelor of Arts in Psychology

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4
Foreign Language 1001 - first level		4
GenEd Breadth Course		3
Credit Hours		15
Spring		
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
Foreign Language 1002 - second level		4
GenEd Breadth Course		3
GenEd Breadth Course		3
PSY 1001	Introduction to Psychology	3
or PSY 1901	or Honors: Introduction to Psychology	
Credit Hours		16
Year 2		
Fall		
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
GenEd Breadth Course		3
CLA/CST 0800-4999 Elective		3
PSY 1002	Careers in Psychology ¹	1
PSY 1003	Statistics for Psychology	3
Select one of the following:		3
Foreign Language - third level		
GenEd Global/World Society course		
Internationally Focused Course From Approved List		
Credit Hours		16
Spring		
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
CLA/CST 2000+ Course		3
PSY 1004	Critical Thinking in Psychology	3
Credit Hours		15
Year 3		
Fall		
CLA/CST 2000+ Humanities/CST Course		3
One Psychology Science course from approved list		4
One Psychology 2000-level BCS Area Foundation Course		3
One Psychology 2000-level DCS Area Foundation Course		3
One Psychology 2000-level DCS or BCS Area Foundation Course		3
Credit Hours		16

Spring		
CLA/CST 2000+ Humanities/CST Course		3
PSY 3096	Conducting Psychological Research	3
One Psychology 2000-level DCS or BCS Area Foundation Course		3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Year 4		
Fall		
Psychology 3000-3620 - One Advanced Course		3
Psychology 3000-3620 - One Advanced Course		3
Psychology 2000-3620 - One Foundation or Advanced Course		3
CLA/CST 0800-4999 Elective		3
CLA/CST 2000+ Course		3
Credit Hours		15
Spring		
Psychology 3000-3620 - One Advanced Course		3
CLA/CST 2000+ Course		3
One 0800-4999 Elective in Any School or College		3
One 0800-4999 Elective in Any School or College		3
Select one of the following:		3
PSY 4696	Capstone in Psychology	
PSY 4996	Honors Capstone	
Credit Hours		15
Total Credit Hours		123

1

PSY 1002 Careers in Psychology completes the CLA Professional Development requirement.

Psychology Minor

Overview

The **Minor in Psychology**, offered by the Department of Psychology and Neuroscience, introduces the student to a representative array of Psychology courses, prepares the student for the minimal course requirements for acceptance to most Psychology graduate schools, and results in formal university recognition on the student's official transcript.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Locations: Main and Japan

Contact Information

Main Campus

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Temple University Japan

Dariusz Skowronski, PhD
 Psychological Studies Coordinator
 dariusz.skowronski@tuj.temple.edu

Requirements

Code	Title	Credit Hours
Required Courses		
PSY 1001	Introduction to Psychology	3

or PSY 1901	Honors: Introduction to Psychology	
PSY 1003	Statistics for Psychology	3
PSY 1004	Critical Thinking in Psychology	3
Brain and Cognitive Sciences		
Select one of the following:		3
PSY 2101	Foundations of Cognitive Psychology	
PSY 2103	Foundations of Learning and Behavior Analysis	
PSY 2104	Foundations of Sensation and Perception	
PSY 2501	Foundations of Behavioral Neuroscience	
PSY 2502	Foundations of Cognitive Neuroscience	
Developmental/Clinical/Social		
Select one of the following:		3
PSY 2201	Foundations of Psychopathology	
PSY 2301	Foundations of Developmental Psychology	
PSY 2401	Foundations of Social Psychology	
PSY 2402	Foundations of Industrial and Organizational Psychology	
PSY 2601	Foundations of Health Psychology	
Advanced Courses		
Select two advanced courses from:		6
PSY numbered 3000-3620		
CJ 3408	Forensic Psychology	

Total Credit Hours**21**

Public Policy Minor

Overview

The **Minor in Public Policy**, offered by the Department of Political Science, combines a student's interest in their major discipline or particular societal issue with the study of how public policies are created, implemented, and how they impact specific populations. This minor is specially designed to integrate well with many disciplines in CLA and several in other colleges. Students take two specifically required courses in Public Policy combined with four policy-related electives. See the Public Policy advisor for more options such as special topics courses that might complete this requirement. This six-course program may be completed in as few as two semesters.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Curricular Overlap Policies

Students majoring or minoring in Political Science may count PLCY 2103/POLS 2103 and PLCY 3151/POLS 3151 towards that program.

Students in the Public Policy minor have flexibility in the electives and may count up to two courses towards another major, minor, or certificate program in the College of Liberal Arts. CLA students may count CLA courses numbered 2000-4999 towards the upper level CLA requirement. Non-CLA courses count towards free electives only.

Students may not declare this minor after application to the Accelerated Master of Public Policy (4+1) Program. Students may declare this minor and later apply to that program and no courses will double-count between the two programs.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

This minor requires 6 courses for a total of 18 credits. The courses are distributed as follows:

Code	Title	Credit Hours
Required Policy Courses		
PLCY 2103 or POLS 2103	Making Public Policy	3
PLCY 3151 or POLS 3151	Public Policy Analysis	3
Policy-Related Electives		
Select four from the following:		12
College of Liberal Arts Electives		
CJ 2001	Introduction to Juvenile Justice	
CJ 2002	Victims in Society	
CJ 2201	Criminal Courts and Criminal Justice	
CJ 2301	Introduction to Corrections	
CJ 2304	Ethics, Crime, and Justice	
CJ 3002	Drugs, Crime, and Justice	
CJ 3003	Race and Criminal Justice	
CJ 3101	Police Organization and Management	
CJ 3201	The American Jury System	
CJ 3301	Community Corrections	
CJ 3302	Prisons in America	
CJ 3303	Rehabilitation of the Offender	
CJ 3304	Capital Punishment	
CJ 3401	White Collar Crime	
CJ 3402	Street-Level Criminology	
CJ 3403	Organized Crime	
CJ 3405	Terrorism, Transnational Crime and Global Security	
CJ 3406	Youth and Crime	
CJ 3407	Violence, Crime, and Justice	
CJ 3409	Criminal Gangs	
CJ 3501	Criminal Procedure: Police Phase	
CJ 3502	Criminal Procedure: Prosecution & Adjudication	
CJ 3701	Land Management and Federal Law Enforcement	
ECON 3506	Energy, Ecology, and Economy	
ECON 3507	Health Economics	
ECON 3512	Public Finance	
ECON 3513	Economics of State and Local Governments	
ECON 3514	The Economics of Education and Human Capital	
ECON 3535	Public Control of Business: Antitrust	
ECON 3543	Law and Economics	
ECON 3545	Economics of Labor Markets	
ECON 3546	Women in the Economy	
ECON 3547	Economics of Development and Growth	
ECON 3596	Energy, Ecology, and Economy	
ECON 3597	Health Economics	
ENST 2025	Environmental Law and Regulation	
ENST 2051	The Urban Environment	
ENST 3004	Geography of Natural Resources	
ENST 3051	Environmental Policy Issues	
ENST 3055	Environmental Hazards and Disasters	
ENST 3057	Sustainable Cities	
ENST 3062	Fundamentals of Geographic Information Systems	

ENST 3152	U.S. Environmental Policy
ENST 3265	International Environmental Policy
ENST 4017	Health and Environment Seminar
GUS 2014	Urban Geography
GUS 2031	Geography of the Global Economy
GUS 2032	Urban Systems in a Global Economy
GUS 2051	Urban Environment
GUS 3015	The Geographic Basis of Land Use Planning
GUS 3018	Economic Development Planning for Cities
GUS 3021	International Urbanization
GUS 3307	Transportation & Culture
GUS 3062	Fundamentals of Geographic Information Systems
GUS 4013	Drugs in Urban Society
PLCY 2000	Special Topics I
PLCY 3000	Special Topics II
PLCY 3185	Internship I
POLS 2102	American State and Local Politics
POLS 2255	Comparative Public Policy
POLS 2341	U.S. Foreign Policy
POLS 3123	American Constitutional Principles II: Civil Rights in America
POLS 3124	Politics of Sexual Orientation and Gender Identity
POLS 3134	The Politics of Inequality
POLS 3152	U.S. Environmental Policy
POLS 3154	Health Policy
POLS 3550	Special Topics: Research Preparation Seminar (Research Prep Seminar in Public Policy)
SOC 2171	Sociology of Law
SOC 3176	Sociology of Education
SOC 3209	Immigrant America: Belonging and Integration
SOC 3243	Social Movements and Conflict
SOC 3249	Social Inequality
SOC 3251	Urban Sociology
SOC 3571	Methods in Program Evaluation
Electives from other colleges at Temple:	
EDUC 2103	Socio-cultural Foundations of Education in the United States
HPM 2208	Natural Disasters: Response and Recovery
HPM 2214	Politics and Payments in US Healthcare System
HRM 2501	Introduction to Human Resource Management
HRM 2511	Corporate Sustainability: People, Profits & Planet
HRM 3501	Power, Influence and Negotiation
HRM 3512	Human Resource Management and Public Policy

Total Credit Hours**18**

Religion BA

Overview

Religion is a pervasive, powerful, multifaceted and enduring dimension of human experience. Religions have shaped complex cultures and countless individual lives. Religions are influential in the world today and will continue to be so in the future.

The academic study of religion is multidisciplinary, drawing upon approaches from history, literary studies, philosophy and the social sciences. It is multicultural, exploring the beliefs, practices and development of particular religious communities in many different cultures. The Department of Religion provides a wide array of courses introducing students to the major religions of the world, with an emphasis upon the comparison of traditions and their encounter with one another. Instruction is offered in African and African American religions, Buddhism, Christianity, Confucianism, Hinduism, Judaism and Daoism.

The **Bachelor of Arts in Religion**, offered by the Department of Religion, is very flexible by design; it easily accommodates study abroad plans, internship opportunities, or a second major or minor in a related discipline. The Religion major provides graduates with the knowledge base and the intellectual, analytical, communication and interpersonal skills essential to succeed in any career. Consult your academic advisor to develop a plan of study that meets your professional goals.

Campus Location: Main

Program Code: LA-REL-BA

Career Preparation

Students who major in Religion develop a useful skill set that is in demand in a number of professions. Cultural sensitivity, analytical thinking, and excellent writing and verbal communications are the necessary training for careers related to public service, diplomacy, journalism, counseling, research, social work, health and human services, conflict resolution, and government. Some students go on to further study in doctoral programs, law school, medical school, or prepare for the ministry.

Employment prospects after graduation include the fields of journalism and communications, social work, ministry/chaplaincy, pre-law, pre-med/health services, government/FBI, non-profit organizations, hospice/end-of-life care, international enterprise, education, academic research, human resources, tourism and hospitality.

Distinction in Major

For graduation with Distinction in Major, an overall GPA of 3.25 is required along with a GPA of 3.5 in Religion courses.

Contact Information

Department Office
6th Floor Mazur Hall

Khalid Blankinship, Chair
khalid.blankinship@temple.edu

Belinda Wilson, Administrator
belinda.wilson@temple.edu

Learn more about the Bachelor of Arts in Religion.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. All students take the Capstone, REL 4096, and one upper level elective in Religion that is designated as WI.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 83) of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including:
 - 90 credits in CLA/CST courses;
 - 45 credits of which must be at the upper level (numbered 2000-4999).
 - **Distribution Requirement for Humanities majors:** Six upper level credits must be earned in the Social Science, Science, and/or interdisciplinary subject areas. Select from the following CLA departments and programs: Africology & African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Gender, Sexuality, and Women's Studies, Geography and Urban Studies, Global Studies, History, Jewish Studies, Latin American Studies, Lesbian, Gay, Bisexual, and Transgender Studies, Liberal Arts, Neuroscience (CLA), Political Science, Psychology, and Sociology, or any department in the College of Science and Technology.
 - A minimum GPA of 2.0, cumulatively, in all CLA/CST coursework, and in the major department.
 - Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
 - **Professional Development Requirement**

- All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements**
 - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
 - All students must complete at least one course from the GenEd Global/World Society category; and
 - All Bachelor of Arts students must complete one of the following options:
 - Third semester of a foreign language;
 - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
 - Take one Global Studies course from the list on the CLA College Requirements (p. 940) page;
 - Study Abroad at an approved program; or
 - Take a second General Education Global/World Society course.
- **Notes on Foreign Language Study**
 - The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
 - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
 - See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements: Eleven courses in Religion (33 credits)

Code	Title	Credit Hours
Required Courses		
REL 1001	Religion and Society	3
Writing-Intensive Course		
Select one designated writing intensive course in Religion numbered 2000+		3
Electives		
Select eight (8) courses in Religion, numbered 2000-4999		24
Capstone		
REL 4096	Capstone Seminar in Religion ¹	3
Total Credit Hours		33

1

Restricted to Religion majors (and minors with permission of instructor). Students must have completed at least five courses in the major prior to taking the capstone.

Transfer students: No more than five religion courses taken at other institutions may be accepted for the major. The director of undergraduate studies must determine that these meet the standards of the Religion major.

Suggested Academic Plan

Bachelor of Arts in Religion

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ}		4
Foreign Language 1001 - first level		4

GenEd Breadth Course		3
Credit Hours		15
Spring		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Foreign Language 1002 - second level		4
GenEd Breadth Course		3
GenEd Breadth Course		3
REL 1001	Religion and Society	3
Credit Hours		16
Year 2		
Fall		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
CLA 1002	Professional Development for Liberal Arts Majors	1
GenEd Breadth Course		3
Religion Elective 2000+		3
CLA/CST 0800-4999 Elective		2
Select one of the following:		3
Foreign Language - third level		
GenEd Global/World Society course		
Internationally Focused Course From Approved List		
Credit Hours		15
Spring		
Religion 2000+ Writing Intensive Course From Approved List ^{WI}		3
GenEd Breadth Course		3
GenEd Breadth Course		3
CLA/CST 2000+ Course		3
CLA/CST 2000+ Course		3
Credit Hours		15
Year 3		
Fall		
Religion Elective 2000+		3
Religion Elective 2000+		3
Distribution Requirement: CLA/CST 2000+ Social Science/CST Course		3
GenEd Breadth		3
CLA/CST 0800-4999 Elective		3
One 0800-4999 Elective in Any School or College		2
Credit Hours		17
Spring		
Religion Elective 2000+		3
Religion Elective 2000+		3
Religion Elective 2000+		3
Distribution Requirement: CLA/CST 2000+ Social Science/CST Course		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Year 4		
Fall		
Religion Elective 2000+		3
Religion Elective 2000+		3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3

CLA/CST 0800-4999 Elective	3
Credit Hours	15
Spring	
REL 4096 Capstone Seminar in Religion ¹	3
CLA/CST 2000+ Course	3
CLA/CST 0800-4999 Elective	3
CLA/CST 0800-4999 Elective	3
One 0800-4999 Elective in Any School or College	3
Credit Hours	15
Total Credit Hours	123

1

Typically offered only in the spring semester.

Religion Minor

Overview

The **Minor in Religion**, offered by the Department of Religion, is an excellent addition to the degree programs in the College of Liberal Arts or other colleges throughout Temple University. Students who have an interest in world history and providing sensitive patient care will find this program of study especially helpful.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

Code	Title	Credit Hours
REL 1001	Religion and Society	3
Five Religion courses 2000+		15
Total Credit Hours		18

Social Science Research Certificate

Overview

The **Certificate in Social Science Research**, offered by the Department of Sociology, provides undergraduate students the opportunity to acquire a diverse range of skills in applied statistics and research. The acquisition of these skills places students in a competitive position in a labor market that requires not only the mastery of specific skill sets, but also the flexibility to respond to changing jobs and job requirements.

The program is inherently interdisciplinary and students can design a program of study that pushes them to develop a wide range of skills. Where there is an overlap in requirements, students in CLA may "double count" up to two courses in their major with this program. (Note: These do not carry additional credits.)

This program is open to any matriculated Temple University undergraduate student.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Program Code: LA-SSR-CERT

Contact Information

Kimberly Goyette, Department of Sociology

215-204-0134

kimberly.ann.goyette@temple.edu

Learn more about the undergraduate certificate in Social Science Research.

Requirements

Code	Title	Credit Hours
Five courses, distributed as follows:		15
Select one course from the following Statistics list:		
ANTH 3771	Quantitative Analysis in Anthropology	
CJ 2602	Criminal Justice Statistics	
GUS 3161	Spatial Statistics	
PSY 1003	Statistics for Psychology	
SOC 3201	Statistical Methods in Sociology	
Select one course from the following Research Methods list:		
CJ 2597	Criminal Justice Research Methods	
ENST 2097	Research Design in Environmental Studies	
GUS 2197	Research Design in Geography and Urban Studies	
NSCI 3096	Conducting Neuroscience Research	
POLS 2503	Evidence and Knowledge	
PSY 1004	Critical Thinking in Psychology	
PSY 3096	Conducting Psychological Research	
SOC 3261	Research Design and Methods	
Select three courses from the following Electives list, in consultation with a faculty advisor:		
ANTH 3170	Techniques in Archaeology	
ECON 3522	Economic Theory of Networks	
ENST 3062	Fundamentals of Geographic Information Systems	
GUS 3061	Fundamentals of Cartography	
GUS 3062	Fundamentals of Geographic Information Systems	
GUS 3063	Environmental Remote Sensing	
GUS 3064	Qualitative Methods	
HIST 2151	Introduction to Public History	
HIST 3152	Material Culture for Historians	
POLS 3500	Special Topics: Research Preparation Seminar	
POLS 3510	Special Topics: Research Preparation Seminar	
POLS 3520	Special Topics: Research Preparation Seminar	
POLS 3530	Special Topics: Research Preparation Seminar	
POLS 3540	Special Topics: Research Preparation Seminar	
POLS 3550	Special Topics: Research Preparation Seminar	
PSY 2401	Foundations of Social Psychology	
PSY 3003	Advanced Undergraduate Statistics	
SOC 3575	Population Studies	
SOC 4001	Qualitative Research	
SOC 4002	Data Analysis	

Total Credit Hours
15

Other electives may be added to this list as new courses are developed. See advisor for more information.

Sociology BA

Overview

The **Bachelor of Arts in Sociology** is offered by the Department of Sociology.

Sociology is the study of human behavior in the context of the groups, organizations, institutions, and societies in which it occurs. The sociology department offers courses covering a wide range of topics, including: contemporary social issues, race and racism, sexuality and gender, health and health care, education, urban life, housing, organizations, family, political life, popular culture, immigration, law, international development and globalization. The sociological perspective pays close attention to diversity in culture, values and human experience.

Campus Location: Main

Program Code: LA-SOC-BA

Accelerated Programs

Sociology majors may opt to do a Bachelor of Arts in Sociology (or the Health Track option) and apply to earn an accelerated master's degree. Sociology has three programs:

- BA in Sociology with an MA in Sociology
- BA in Sociology with an MEd in Advocacy and Organizational Development
- BA in Sociology with an MEd in Secondary Education (Social Studies)

For more information on other master's programs that accept students from any major in CLA, see Accelerated Degree Programs (p. 1792).

Careers Related to Sociology

Majoring in sociology prepares students for many careers and graduate programs by providing both a broad sociological perspective and specific research, statistical and analytic skills. Students gain experience in fieldwork and interviewing; they develop, administer and analyze surveys and statistics; and they write research reports. Sociology provides an excellent background for students planning to begin their careers upon graduation as well as those planning to pursue graduate education. Recent graduates have gone to work and graduate school in the areas of law, medicine, business, non-profits, community planning, social work, market research and education. Students who are interested in a career in the health field can pursue a special sociology major option focused on health-related coursework. The Health Track option (p. 1159) prepares students for graduate studies in leading medical, dental, nursing, public health, and physical and occupational therapy programs as well as graduate programs in sociology and related fields.

Student Organizations and Opportunities

Sociology majors and minors are encouraged to participate in the Sociology Undergraduate Majors and Minors Association (SUMMA), which hosts academic, community service and social events throughout the year. The department sponsors an annual student research conference where students can present their work.

Awards

Awards available to sociology majors include the Robert K. Merton Award, the Sociology Prize, the Benjamin and Irma Robboy Award, and the Nelsi Beato Award.

Distinction in Major

Sociology majors graduate with distinction in the major if they have a GPA of 3.5 or higher in the major and a minimum cumulative GPA of 3.25.

Contact Information

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7th Floor Gladfelter Hall

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709 Gladfelter Hall
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Learn more about the Bachelor of Arts in Sociology.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are SOC 3396 and SOC 4096.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 83) section of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including:
 - 90 credits in CLA/CST courses;
 - 45 credits of which must be at the upper level (numbered 2000-4999).
 - For **Social Science majors**, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art and Architecture, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Professional Development Requirement**
 - All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements**
 - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
 - All students must complete at least one course from the GenEd Global/World Society category; and
 - All Bachelor of Arts students must complete one of the following options:
 - Third semester of a foreign language;
 - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
 - Take one Global Studies course from the list on the CLA College Requirements (p. 940) page;
 - Study Abroad at an approved program; or
 - Take a second General Education Global/World Society course.
- **Notes on Foreign Language Study**
 - The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
 - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
 - See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (36 credits)

Code	Title	Credit Hours
Required Courses		
SOC 1176 or SOC 1576	Introduction to Sociology Introduction to Sociology for Health Professions	3
SOC 3201	Statistical Methods in Sociology ¹	4

SOC 3261	Research Design and Methods ¹	4
SOC 3396	Development of Sociological Thought	3
SOC 4096	Senior Seminar ²	3
Five Sociology electives at the 2000 level or higher		15
Advanced Methods Course		
Select one of the following: ³		4
SOC 4001	Qualitative Research	
SOC 4002	Data Analysis	
Total Credit Hours		36

1

Students must take SOC 3201 prior to (or concurrently with) SOC 3261.

2

Indicates writing capstone for the major.

3

Students must complete SOC 3201 and SOC 3261 before taking either of the advanced methods courses, SOC 4001 or SOC 4002.

Suggested Academic Plan

Bachelor of Arts in Sociology

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4
Foreign Language 1001 - first level		4
GenEd Breadth Course		3
Credit Hours		15
Spring		
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
Foreign Language 1002 - second level		4
GenEd Breadth Course		3
GenEd Breadth Course		3
SOC 1176	Introduction to Sociology	3
or SOC 1576	or Introduction to Sociology for Health Professions	
Credit Hours		16
Year 2		
Fall		
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
GenEd Breadth Course		3
GenEd Breadth Course		3
Sociology 2000-4999 Course		3
Select one of the following:		3
Foreign Language - third level		
GenEd Global/World Society Course ^{GG}		
Internationally Focused Course From Approved List		
Credit Hours		15
Spring		
CLA 1002	Professional Development for Liberal Arts Majors	1

GenEd Breadth Course		3
GenEd Breadth Course		3
SOC 3201	Statistical Methods in Sociology	4
CLA/CST 2000+ Elective		3
CLA/CST 0800-4999 Elective		1
Credit Hours		15
Year 3		
Fall		
CLA/CST 2000+ Humanities/CST Course		3
SOC 3396	Development of Sociological Thought	3
SOC 3261	Research Design and Methods	4
Sociology 2000-4999 Course		3
CLA/CST 2000+ Elective		3
Credit Hours		16
Spring		
Sociology 2000-4999 Course		3
Sociology 2000-4999 Course		3
CLA/CST 2000+ Humanities/CST Course		3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Year 4		
Fall		
Sociology 2000-4999 Course		3
CLA/CST 2000+ Elective		3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
Select one of the following Advanced Methods courses: ¹		4
SOC 4001	Qualitative Research	
SOC 4002	Data Analysis	
Credit Hours		16
Spring		
SOC 4096	Senior Seminar	3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
One 0800-4999 Elective in Any School or College		3
One 0800-4999 Elective in Any School or College		3
Credit Hours		15
Total Credit Hours		123

1

SOC 4001 is only offered in the spring and SOC 4002 only in the fall; plan to take *prior* to SOC 4096. See advisor for course selection.

Please check prerequisites for all Sociology courses.

Health Track Option

Sociology students who are interested in a career in the health field can follow the Health Track option which focuses on health-related coursework. This option prepares students for graduate studies in leading medical, dental, nursing, public health, and physical and occupational therapy programs as well as graduate programs in sociology and related fields.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. SOC 3396 and SOC 4096 fulfill this requirement for this major.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 83) of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including:
 - 90 credits in CLA/CST courses;
 - 45 credits of which must be at the upper level (numbered 2000-4999).
 - For **Social Science majors**, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art and Architecture, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Professional Development Requirement**
 - All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements**
 - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
 - All students must complete at least one course from the GenEd Global/World Society category; and
 - All Bachelor of Arts students must complete one of the following options:
 - Third semester of a foreign language;
 - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
 - Take one Global Studies course from the list on the CLA College Requirements (p. 940) page;
 - Study Abroad at an approved program; or
 - Take a second General Education Global/World Society course.
- **Notes on Foreign Language Study**
 - The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
 - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
 - See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements for Health Track Option (36 credits)

Code	Title	Credit Hours
Required Courses		
SOC 1176 or SOC 1576	Introduction to Sociology Introduction to Sociology for Health Professions	3
SOC 3201	Statistical Methods in Sociology ¹	4
SOC 3261	Research Design and Methods ¹	4
SOC 3396	Development of Sociological Thought	3
SOC 4096	Senior Seminar ²	3
Five Sociology electives at the 2000 level or higher (three must be selected from the Health-related course list below)		15

Advanced Methods CourseSelect one of the following:³

4

SOC 4001 Qualitative Research

SOC 4002 Data Analysis

Health-related Courses

SOC 2552 Health and Disease in American Society

SOC 2530 Selected Topics in Medical Sociology

SOC 2522 Sociology of the Self

SOC 2545 Food for Thought: Sociological Thinking About Food

SOC 2555 Sociology on Drugs

SOC 2565 Race, Science, Health, and Medicine

SOC 2572 Sex & Society

SOC 2575 Science, Technology & Society

SOC 3511 Environmental Sociology: The End of the World as We Know It?

SOC 3525 Urban Health

SOC 3530 Selected Topics in Medical Sociology

SOC 3559 Health and Reproduction

SOC 3565 Sociology of the Body

SOC 3575 Population Studies

SOC 3582 Independent Study in Medical Sociology

Total Credit Hours**36**

1

Students must take SOC 3201 prior to or concurrently with SOC 3261.

2

Indicates writing capstone for major.

3

Students must complete SOC 3201 and SOC 3261 before taking either of the advanced methods courses, SOC 4001 or SOC 4002.

Suggested Academic Plan**Bachelor of Arts in Sociology: Health Track Option****Suggested Plan for New Students Starting in the 2023-2024 Academic Year****Year 1**

Fall	Credit Hours
ENG 0802 Analytical Reading and Writing or ENG 0812 or Analytical Reading and Writing: ESL or ENG 0902 or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ}	4
Foreign Language 1001 - first level	4
GenEd Breadth Course	3
Credit Hours	15
Spring	
IH 0851 Intellectual Heritage I: The Good Life or IH 0951 or Honors Intellectual Heritage I: The Good Life	3
Foreign Language 1002 - second level	4
GenEd Breadth Course	3
GenEd Breadth Course	3
Select one of the following:	3
SOC 1176 Introduction to Sociology	
SOC 1576 Introduction to Sociology for Health Professions	
Credit Hours	16

Year 2**Fall**

IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Sociology 2000-4999 Course		3
Select one of the following:		3
Foreign Language - third level		
GenEd Global/World Society Course ^{GG}		
Internationally Focused Course From Approved List		

Credit Hours	15
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Spring

GenEd Breadth Course		3
GenEd Breadth Course		3
SOC 3201	Statistical Methods in Sociology	4
CLA 1002	Professional Development for Liberal Arts Majors	1
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		2

Credit Hours	16
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Year 3**Fall**

CLA/CST 2000+ Humanities/CST Course		3
SOC 3396	Development of Sociological Thought	3
SOC 3261	Research Design and Methods	4
Sociology 2000-4999 Health Track Elective		3
CLA/CST 0800-4999 Elective		3

Credit Hours	16
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Spring

CLA/CST 2000+ Humanities/CST Course		3
CLA/CST 2000+ Elective		3
Sociology 2000-4999 Health Track Elective		3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3

Credit Hours	15
---------------------	-----------

Year 4**Fall**

Sociology 2000-4999 Health Track Elective		3
CLA/CST 2000+ Elective		3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
Select one of the following Advanced Methods courses: ¹		4
SOC 4001	Qualitative Research	
SOC 4002	Data Analysis	

Credit Hours	16
---------------------	-----------

Spring

SOC 4096	Senior Seminar	3
Sociology 2000-4999 Course		3
CLA/CST 0800-4999 Elective		3
One 0800-4999 Elective in Any School or College		3

One 0800-4999 Elective in Any School or College	2
Credit Hours	14
Total Credit Hours	123

1

SOC 4001 is only offered in the spring and SOC 4002 only in the fall; plan to complete prior to taking SOC 4096. See advisor for course selection.

Please check prerequisites for all Sociology courses.

Sociology Minor

Overview

The **Minor in Sociology** is offered by the Department of Sociology. Sociology is the study of human behavior in the context of the groups, organizations, institutions and societies in which it occurs.

Sociology majors and minors are encouraged to participate in the Sociology Undergraduate Majors and Minors Association (SUMMA), which hosts academic, community service and social events throughout the year. The department sponsors an annual student research conference where students can present their work.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

The minor in Sociology requires a minimum of six courses:

Code	Title	Credit Hours
SOC 1176	Introduction to Sociology	3
or SOC 1576	Introduction to Sociology for Health Professions	
Five Sociology electives at the 2000 level or above		15
Total Credit Hours		18

Sociology of Health Minor

Overview

The **Minor in Sociology of Health** is offered by the Department of Sociology. Sociology is the study of human behavior in the context of the groups, organizations, institutions and societies in which it occurs.

Sociology majors and minors are encouraged to participate in the Sociology Undergraduate Majors and Minors Association (SUMMA), which hosts academic, community service and social events throughout the year. The department sponsors an annual student research conference where students can present their work.

This minor is not open to Sociology majors or Sociology majors pursuing the Health Track option.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

The minor in the Sociology of Health requires a minimum of six courses, three of which are health-related.

Code	Title	Credit Hours
Required Courses		
SOC 1176	Introduction to Sociology	3
or SOC 1576	Introduction to Sociology for Health Professions	
Five Sociology electives at the 2000 level or higher (three must be from the Health-related course list below)		15
Health-related Courses		
Select three as part of the above requirements:		
SOC 2522	Sociology of the Self	
SOC 2530	Selected Topics in Medical Sociology	
SOC 2545	Food for Thought: Sociological Thinking About Food	
SOC 2552	Health and Disease in American Society	
SOC 2555	Sociology on Drugs	
SOC 2565	Race, Science, Health, and Medicine	
SOC 2572	Sex & Society	
SOC 2575	Science, Technology & Society	
SOC 3511	Environmental Sociology: The End of the World as We Know It?	
SOC 3525	Urban Health	
SOC 3530	Selected Topics in Medical Sociology	
SOC 3559	Health and Reproduction	
SOC 3565	Sociology of the Body	
SOC 3575	Population Studies	
SOC 3582	Independent Study in Medical Sociology	
SOC 3585	Internship in Medical Sociology	
Total Credit Hours		18

Spanish and Latin American Studies for Business Certificate

Overview

This interdisciplinary **Certificate in Spanish and Latin American Studies for Business** is designed to allow Temple students in business-related programs to develop skills and knowledge in two complementary areas so that they may compete more successfully in this growing job market. To earn this certificate, students need a minimum of 18 credits.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Program Code: LA-SLSB-CR2+

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Learn more about the undergraduate certificate in Spanish and Latin American Studies for Business.

Requirements

Code	Title	Credit Hours
Required Courses		
Select three of the following:		9
SPAN 1001	Basic I	
SPAN 1002	Basic II	

SPAN 1003	Intermediate	
SPAN 2001	Conversational Review	
SPAN 2096	Composition	
SPAN 2002	Hispanic Readings	
SPAN 3002	Hispanic Readings II	
SPAN 1076	Intensive Practice in the Four Skills ^{1,2}	
SPAN 2098	Advanced Intensive Practice in the Four Skills ²	
Spanish for Business Professions		
Select one of the following:		3
SPAN 3501	Spanish for Business Professions	
SPAN 3502	Business Spanish I	
Latin American Culture Course		
Select one of the following:		3
LAS 1001	Perspectives on Latin America	
LAS 2220	Special Topics - LASS Seminar ³	
LAS 2101	Latin America through Film and Fiction ³	
SPAN 3204	Latin America through Film	
SPAN 3241	The Cultures of Latin America	
SPAN 3261	The Hispanic World	
Latin American Business Course		
Select one of the following:		3
LAS 2502	Fundamentals of Latin American Business	
IB 2502	Fundamentals of Latin American Business	

Total Credit Hours**18**

1

Students participating in SPAN 1076 must also complete SPAN 2002.

2

SPAN 1076 or SPAN 2098 count as two of the three required courses; each is 9 s.h. and taught in connection with the Latin American Studies Semester (LASS), an immersion program offered every spring. Students who choose this option must take at least one additional language course from this list.

3

These courses are part of the Latin American Studies Semester. The LASS Program is an integration of several courses totaling 17 s.h.: 9 credits are assigned to language instruction, 6 credits to culture and society, taught under LAS 2101 and SOC 2163, and 2 credits to the LASS Seminar. All instruction in LASS is in Spanish. The LASS Program runs every Spring term. For more information on the Latin American Studies Semester, visit <https://liberalarts.temple.edu/academics/departments-and-programs/spanish-and-portuguese/study-abroad#latin-american-studies-semester-lass>.

Spanish and Latinx Studies for the Health and Human Services Professions Certificate

Overview

The 18-credit **Certificate in Spanish and Latinx Studies for the Health and Human Services Professions** prepares undergraduate students to communicate effectively in Spanish within medical and related human-service areas. The combination of courses in this certificate program is designed to make participants especially qualified to provide health and human services to members of the Latinx community.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Program Code: LA-SLSH-CR2+

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Learn more about the undergraduate certificate in Spanish and Latinx Studies for the Health and Human Services Professions.

Requirements

To earn this certificate, students need a minimum of 18 credits.

Code	Title	Credit Hours
Spanish Language - Select three of the following:		9
SPAN 1001	Basic I	
SPAN 1002	Basic II	
SPAN 1003	Intermediate	
SPAN 2001	Conversational Review	
SPAN 2096	Composition	
SPAN 2002	Hispanic Readings	
SPAN 1076	Intensive Practice in the Four Skills ¹	
SPAN 2098	Advanced Intensive Practice in the Four Skills ¹	
SPAN 2011	Spanish for Heritage and Bilingual Speakers	
Select one of the following courses in Spanish language for health/medical professions:		3
SPAN 3601	Spanish for Health Professions	
SPAN 3602	Medical Spanish	
Select one of the following courses focused on Latin American culture:		3
LAS 1001	Perspectives on Latin America	
LAS 2101	Latin America through Film and Fiction	
SPAN 3204	Latin America through Film	
SPAN 3241	The Cultures of Latin America	
SPAN 3261	The Hispanic World	
Select one of the following courses on Latinx population in the United States:		3
LAS 0854	Latino Immigration	
or SPAN 0854	Latino Immigration	
LAS 2072	Puerto Ricans in Philadelphia	
LAS 3020	Topics in Latino Studies	
LAS 3101	Latino Identity in the United States	
SPAN 4152	U.S. Latino/a Studies	
SPAN 4885	Internship	
Total Credit Hours		18

1

SPAN 1076 or SPAN 2098 count as two courses; each is 9 s.h. and taught in connection with the Latin American Studies Semester (LASS), an immersion program offered every spring. Students who choose this option need only take one additional course from this list.

Spanish BA

Overview

The **Bachelor of Arts in Spanish** is offered by the Department of Spanish and Portuguese. The department prepares students to engage with diverse communities both at home and abroad through the development of language skills and intercultural competencies. The department provides instruction in the languages, cultures and literatures of Spain, Latin America and the Luso-Brazilian world as well as professional courses in business, criminal justice, law and healthcare. Coursework at the undergraduate level in Spanish, Portuguese or Catalan develops proficiency in the four basic skills: speaking, listening, reading and writing. Opportunities are also available for the in-depth study of Hispanic and Luso-Brazilian culture. Students may participate in special programs, such as an intensive Spanish-language immersion program in Latin American Studies; community engagement and internships in areas of healthcare, social service, government and education in Philadelphia; and diverse programs abroad.

Students selecting the Spanish major must achieve competence in Spanish language skills in conjunction with qualifications outlined in one of three options:

- The **Language, Literature and/or Linguistics** option is designed for students who wish to develop advanced language skills in the study of Latin American Literature, Peninsular Literature, and/or Linguistics.

- The **Language and Professional Studies** option is designed for students who wish to develop language and professional skills as well as an awareness of Hispanic culture.
- The **Spanish for Education** option includes the Spanish-language courses required for certification in Spanish for Secondary Education in the College of Education and Human Development at Temple University and satisfies the requirements for the Spanish major in the College of Liberal Arts.

Campus Location: Main

Program Code: LA-SPAN-BA

Student Organizations

Spanish and Portuguese organizations and activities include Sigma Delta Pi, the National Hispanic Honor Society, the scholarly publications of the Society of Spanish and Spanish-American Studies, and the Spanish and Portuguese Clubs and Film Series.

Career Options

Graduates of the Department of Spanish and Portuguese find careers in a wide range of areas, including public health, education, business, government and social services.

Distinction in Major

Distinction in Major is awarded to Spanish majors who graduate with a 3.75 GPA in Spanish courses and a cumulative GPA of at least 3.25.

Internships and Community Engagement

The internship experience provides students the opportunity to learn more about the discipline and potential career paths through a workplace experience. Students may earn up to 3 credits towards the requirements of the major through enrollment in the internship course (SPAN 4885) and an internship placement. Interested students should contact Augusto Lorenzino (galorenz@temple.edu) for more information.

Accelerated BA/MA in Spanish (4+1) Program

An accelerated 4+1 BA/MA in Spanish degree program is designed for students who wish to graduate with both an undergraduate and a graduate degree in just 5 years. The program is suitable for highly accomplished Spanish majors who have excelled in their studies during the first 3 years at the Department of Spanish and Portuguese, and who see the benefits of adding a master's degree to their academic credentials. Undergraduate students interested in the 4+1 accelerated BA/MA degree program in Spanish must declare their intent and apply to the program during their junior or fourth year. Students admitted to this program begin taking graduate courses, along with their undergraduate curriculum, in their last three undergraduate semesters. After completing their Bachelor of Arts degree, they then complete the remaining requirements of a Master of Arts in Spanish in the fifth year. Eligible students will have a GPA of 3.5 or higher in Spanish and at least a 3.25 overall GPA. For more information, contact Victor Pueyo (vpueyozo.temple.edu).

Study Abroad Opportunities

Latin American Studies Semester Program

Each spring semester, the Spanish and Portuguese Department offers a 17-credit immersion program in Latin American Studies and Spanish (LASS). The LASS program combines 9 hours of intensive Spanish with 8 hours of study focusing on geography, history, culture in Latin America and Latinos in the United States in addition to a short-term study trip to a Spanish-speaking country. Successful completion of the program is awarded with a certificate of participation. The rolling admissions application process is open from April to November for the following spring. For more information, contact the Program Director Montserrat Piera (mpiera01@temple.edu) or visit the the program's web site.

Spring in Spain Program

The Temple Semester in Spain Program takes place during spring semester in Oviedo, Spain. The 15-credit program combines coursework with faculty from the International Program at the University of Oviedo and with a Temple faculty member who directs the program. All courses are pre-approved for Temple University credit. Courses focus on aspects of Spanish language, culture and literature. The program develops Spanish skills over a semester of intensive study in a Spanish-speaking environment; it also provides the opportunity to complete a number of Spanish courses that may be used to satisfy the requirements for the Temple major or minor in Spanish. The program begins with an initial orientation week in Madrid prior to the start of the semester. In Oviedo, lodging and meals are with Spanish families. For further information, contact the Program Director Jaime Duran (jduran@temple.edu) in the Department of Spanish and Portuguese or the Office of Education Abroad and Overseas Campuses.

Summer Abroad in Spain: Spanish Language and Culture

Temple University's summer program in Oviedo, Spain, provides students with the opportunity to learn the Spanish language while being immersed in that country's unique and diverse culture. The duration of the program is five weeks; students may enroll for a total of 6 credits. For further information, contact the Program Director Jaime Duran (jduran@temple.edu) in the Department of Spanish and Portuguese or the Office of Education Abroad and Overseas Campuses.

Contact Information

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Learn more about the Bachelor of Arts in Spanish.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Requirements

This section provides the requirements for each of the following options:

- Language, Literature and/or Linguistics (p. 1168)
- Language and Professional Studies (p. 1169)
- Spanish for Education (p. 1170)

Language, Literature and/or Linguistics Option

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are SPAN 2096 or SPAN 2098, and SPAN 3096.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 83) of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999).
- **Distribution Requirement for Humanities majors:** Six upper level credits must be earned in the Social Science, Science, and/or interdisciplinary subject areas. Select from the following CLA departments and programs: Africology & African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Gender, Sexuality, and Women's Studies, Geography and Urban Studies, Global Studies, History, Jewish Studies, Latin American Studies, Lesbian, Gay, Bisexual, and Transgender Studies, Liberal Arts, Neuroscience (CLA), Political Science, Psychology, and Sociology, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in all CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Professional Development Requirement**

- All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements**
 - The requirements for the major in Spanish exceed the CLA minimum for this requirement.
 - **Notes on Foreign Language Study**
 - The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
 - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
 - See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.
- **General Electives** are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (30 credits)

- Prerequisites: SPAN 1001, SPAN 1002, and SPAN 1003.
- After completion of prerequisite courses, a total of ten courses are required for the major:

Code	Title	Credit Hours
Writing Intensive Courses		6
SPAN 2096	Composition (prerequisite for most 3000-level courses)	
SPAN 3096	Advanced Analysis and Writing Skills ¹	
Electives		24
A maximum of two electives may be selected at the 2000 level		
A maximum of three electives may be selected at the 3000 level		
A minimum of three electives must be selected at the 4000 level		
Total Credit Hours		30

1

Indicates writing capstone for the major.

Note: Up to two Catalan or Portuguese courses may be taken in place of two Spanish 2000/3000 level courses.

Language and Professional Studies Option

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are SPAN 2096 or SPAN 2098, and SPAN 3096.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 83) of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999).
- **Distribution Requirement for Humanities majors:** Six upper level credits must be earned in the Social Science, Science, and/or interdisciplinary subject areas. Select from the following CLA departments and programs: Africology & African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Gender, Sexuality, and Women's Studies, Geography and Urban Studies, Global Studies, History, Jewish Studies, Latin American Studies, Lesbian, Gay, Bisexual, and Transgender Studies, Liberal Arts, Neuroscience (CLA), Political Science, Psychology, and Sociology, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in all CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.

- **Professional Development Requirement**

- All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.

- **Foreign Language/Global Studies Requirements**

- The requirements for the major in Spanish exceed the CLA minimum for this requirement.

- **Notes on Foreign Language Study**

- The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
- Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
- See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

- **General Electives** are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (30 credits)

- Prerequisites: SPAN 1001, SPAN 1002, and SPAN 1003.
- After completion of prerequisite courses, a total of ten courses are required for the major:

Code	Title	Credit Hours
Writing Intensive Courses		6
SPAN 2096	Composition	
SPAN 3096	Advanced Analysis and Writing Skills ¹	
Electives		15
A maximum of two courses may be selected at the 2000 level		
Three Business/Medical/Legal/Translation courses (Spanish 3000-4000 level)		
Literature Course		3
Select one of the following:		
SPAN 3121	Introduction to the Literature of Spain	
SPAN 3141	Introduction to the Literature of Latin America	
Additional Electives		6
At least two Spanish elective courses numbered 4000-4999		
Total Credit Hours		30

¹

Writing capstone for the major.

Note: Up to two Portuguese or Catalan courses may be taken in place of two Spanish 2000/3000-level courses.

Spanish for Education Option

Summary of Degree Requirements

University Requirements

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are SPAN 2096 or SPAN 2098, and SPAN 3096.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 83) of the *Undergraduate Bulletin* for more details.

College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999).
- **Distribution Requirement for Humanities majors:** Six upper level credits must be earned in the Social Science, Science, and/or interdisciplinary subject areas. Select from the following CLA departments and programs: Africology & African American Studies, American Studies, Anthropology,

Asian Studies, Criminal Justice, Economics, Environmental Studies, Gender, Sexuality, and Women's Studies, Geography and Urban Studies, Global Studies, History, Jewish Studies, Latin American Studies, Lesbian, Gay, Bisexual, and Transgender Studies, Liberal Arts, Neuroscience (CLA), Political Science, Psychology, and Sociology, or any department in the College of Science and Technology.

- A minimum GPA of 2.0, cumulatively, in all CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Professional Development Requirement**
 - All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements (p. 940) page. Only one course in this category may count towards graduation.
- **Foreign Language/Global Studies Requirements**
 - The requirements for the major in Spanish exceed the CLA minimum for this requirement.
- **Notes on Foreign Language Study**
 - The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
 - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
 - See the College of Liberal Arts Policies (p. 938) section of this *Bulletin* for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.
- **General Electives** are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (30 credits)

- Prerequisites: SPAN 1001 , SPAN 1002 , and SPAN 1003 .
- After completion of prerequisite courses, a total of ten courses are required for the major:

Code	Title	Credit Hours
Writing Intensive Courses		6
SPAN 2096	Composition ¹	
SPAN 3096	Advanced Analysis and Writing Skills ²	
Composition & Conversation		3
Select one of the following:		
SPAN 1076	Intensive Practice in the Four Skills (9 credits)	
SPAN 2001	Conversational Review	
SPAN 2002	Hispanic Readings	
SPAN 2011	Spanish for Heritage and Bilingual Speakers	
SPAN 2098	Advanced Intensive Practice in the Four Skills (9 credits)	
SPAN 3001	Advanced Composition & Conversation	
SPAN 3002	Hispanic Readings II	
SPAN 3003	Advanced Grammar for Communication	
Culture & Civilization		3
Select one of the following:		
SPAN 3204	Latin America through Film	
SPAN 3221	The Cultures of Spain	
SPAN 3222	Spain through Film	
SPAN 3241	The Cultures of Latin America	
SPAN 3243	The Culture of Puerto Rico	
SPAN 3261	The Hispanic World	
SPAN 4161	Hispanic Literature through Art	
SPAN 4221	The Art of Spain	
Linguistics		3
Select one of the following:		
SPAN 4301	The Sounds of Spanish	
SPAN 4302	Introduction to Spanish Linguistics	

SPAN 4303	Spanish/English Bilingualism	
SPAN 4304	Spanish Applied Linguistics	
SPAN 4305	Evolution of the Spanish Language	
SPAN 4306	Spanish Sociolinguistics	
SPAN 4307	Language and Gender	
Contemporary Literature		3
Select one of the following:		
SPAN 4128	Hispanic Modernism	
SPAN 4132	20th &/or 21st Century Spanish Literature	
SPAN 4142	Spanish American Short Story	
SPAN 4144	Spanish American Poetry	
SPAN 4146	National Literatures of Spanish America	
SPAN 4148	Latin American Literature of Social Conflict	
SPAN 4152	U.S. Latino/a Studies	
Additional Literature		3
Select one of the following:		
SPAN 3002	Hispanic Readings II	
SPAN 3121	Introduction to the Literature of Spain	
SPAN 3141	Introduction to the Literature of Latin America	
SPAN 3142	Puerto Rican Readings	
SPAN 3160	Special Topics I	
SPAN 4121	Survey of Spanish Literature	
SPAN 4126	Cervantes	
SPAN 4141	Survey of Spanish American Literature	
SPAN 4161	Hispanic Literature through Art (or one additional contemporary literature course from the above list)	
SPAN 4401	Advanced Translation and Interpretation	
Electives		9
Three Spanish electives (SPAN 1003 may be taken as one of these)		
Total Credit Hours		30

1

SPAN 2096 is a prerequisite for many Spanish courses at the advanced levels.

2

Indicates capstone for the major.

Note: In order to complete the 10-course requirement, students must add additional courses at the 3000 or 4000 level, depending on proficiency.

Suggested Academic Plans

This section provides the academic plans for each of the following options:

- Language, Literature and/or Linguistics (p. 1172)
- Language and Professional Studies (p. 1174)
- Spanish for Education (p. 1175)

Please note that these are suggested academic plans. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Spanish: Language, Literature and/or Linguistics Option

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4

GenEd Quantitative Literacy Course ^{GQ}		4
SPAN 1001	Basic I ¹	4
GenEd Breadth Course		3
Credit Hours		15
Spring		
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
SPAN 1002	Basic II	4
GenEd Breadth Course		3
GenEd Breadth Course		3
CLA/CST 0800-4999 Elective		3
Credit Hours		16
Year 2		
Fall		
SPAN 1003	Intermediate	3
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
GenEd Breadth Course		3
CLA 1002	Professional Development for Liberal Arts Majors	1
CLA/CST 0800-4999 Elective		2
One 0800-4999 Elective in Any School or College		3
Credit Hours		15
Spring		
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
SPAN 2001	Conversational Review	3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Year 3		
Fall		
CLA/CST 2000+ Social Science/CST Course		3
SPAN 2096	Composition ²	3
SPAN 2002	Hispanic Readings	3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		3
One 0800-4999 Elective in Any School or College		2
Credit Hours		17
Spring		
CLA/CST 2000+ Social Science/CST Course		3
SPAN 3001	Advanced Composition & Conversation	3
CLA/CST 2000+ Course		3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Year 4		
Fall		
SPAN 3096	Advanced Analysis and Writing Skills	3
One 3000+ Spanish Course		3
One 3000+ Spanish Course		3
CLA/CST 0800-4999 Elective		3

CLA/CST 0800-4999 Elective	3
Credit Hours	15
Spring	
One 4000+ Spanish Course	3
One 4000+ Spanish Course	3
One 4000+ Spanish Course	3
CLA/CST 0800-4999 Elective	3
One 0800-4999 Elective in Any School or College	3
Credit Hours	15
Total Credit Hours	123

1

Please check prerequisites for all Spanish courses.

2

May be substituted with SPAN 2098.

Bachelor of Arts in Spanish: Language and Professional Studies Option

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4
SPAN 1001	Basic I ¹	4
GenEd Breadth Course		3
Credit Hours		15
Spring		
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
SPAN 1002	Basic II	4
GenEd Breadth Course		3
GenEd Breadth Course		3
CLA/CST 0800-4999 Elective		3
Credit Hours		16
Year 2		
Fall		
SPAN 1003	Intermediate	3
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
CLA 1002	Professional Development for Liberal Arts Majors	1
GenEd Breadth Course		3
CLA/CST 0800-4999 Elective		2
One 0800-4999 Elective in Any School or College		3
Credit Hours		15
Spring		
GenEd Breadth Course		3-4
GenEd Breadth Course		3
GenEd Breadth Course		3
SPAN 2001	Conversational Review	3
CLA/CST 0800-4999 Elective		3
Credit Hours		15

Year 3		
Fall		
CLA/CST 2000+ Social Science/CST Course		3
SPAN 2096	Composition ²	3
SPAN 2002	Hispanic Readings	3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		3
One 0800-4999 Elective in Any School or College		2
Credit Hours		17
Spring		
CLA/CST 2000+ Social Science/CST Course		3
SPAN 3001	Advanced Composition & Conversation	3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Year 4		
Fall		
SPAN 3096	Advanced Analysis and Writing Skills	3
Spanish 3000-4999 Business/Medical/Legal/Translation course		3
Spanish 3000-4999 Business/Medical/Legal/Translation course		3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Spring		
One 4000+ Spanish Course		3
One 4000+ Spanish Course		3
Spanish 3000-4999 Business/Medical/Legal/Translation course		3
One 0800-4999 Elective in Any School or College		3
Select one of the following:		3
SPAN 3121	Introduction to the Literature of Spain	
SPAN 3141	Introduction to the Literature of Latin America	
Credit Hours		15
Total Credit Hours		123

1

Please check prerequisites for all Spanish courses.

2

May be substituted with SPAN 2098.

Bachelor of Arts in Spanish: Spanish for Education Option

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4
SPAN 1001	Basic I ¹	4
GenEd Breadth Course		3
Credit Hours		15

Spring		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
SPAN 1002	Basic II	4
GenEd Breadth Course		3
GenEd Breadth Course		3
CLA/CST 0800-4999 Elective		3
Credit Hours		16
Year 2		
Fall		
SPAN 1003	Intermediate	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
CLA 1002	Professional Development for Liberal Arts Majors	1
GenEd Breadth Course		3
CLA/CST 0800-4999 Elective		2
One 0800-4999 Elective in Any School or College		3
Credit Hours		15
Spring		
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
SPAN 2001	Conversational Review (suggested Composition & Conversation course)	3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Year 3		
Fall		
CLA/CST 2000+ Social Science/CST Course		3
SPAN 2096	Composition ²	3
SPAN 2002	Hispanic Readings (elective)	3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		3
One 0800-4999 Elective in Any School or College		2
Credit Hours		17
Spring		
CLA/CST 2000+ Social Science/CST Course		3
SPAN 3001	Advanced Composition & Conversation (elective)	3
CLA/CST 2000+ Course		3
CLA/CST 2000+ Course		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Year 4		
Fall		
SPAN 3096	Advanced Analysis and Writing Skills	3
One Culture & Civilization Course From Approved List		3
SPAN 3003	Advanced Grammar for Communication (elective)	3
CLA/CST 0800-4999 Elective		3
CLA/CST 0800-4999 Elective		3
Credit Hours		15
Spring		
One Linguistics Course From Approved List		3
One Contemporary Literature Course From Approved List		3

One Additional Literature Course From Approved List	3
CLA/CST 0800-4999 Elective	3
One 0800-4999 Elective in Any School or College	3
Credit Hours	15
Total Credit Hours	123

1

Please check prerequisites for all Spanish courses.

2

May be substituted with SPAN 2098.

Note: Secondary Education majors should see the suggested academic plan for that major.

Spanish Certificate

Overview

The 20-credit undergraduate **Certificate in Spanish**, offered by the Department of Spanish and Portuguese, prepares students for careers in the public and private sectors, working in an array of professional areas that include education and international relations. Additionally, students with this certificate pursue graduate studies in law school, medical school and other professional degree programs.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Program Code: LA-SPAN-CR2+

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Learn more about the undergraduate certificate in Spanish.

Requirements

The certificate requires completion of six courses, beginning with SPAN 1001 and advancing to more specialized study of Spanish designed to enhance career opportunities in business, communication, government, and social service.

Code	Title	Credit Hours
SPAN 1001	Basic I	4
SPAN 1002	Basic II	4
SPAN 1003	Intermediate	3
SPAN 2001	Conversational Review	3
SPAN 2096	Composition ¹	3
Select one 3000-level Spanish elective		3
Total Credit Hours		20

1

May be substituted with SPAN 2098.

Spanish Minor

Overview

The **Minor in Spanish**, offered by the Department of Spanish and Portuguese, prepares students to engage with diverse communities both at home and abroad through the development of language skills and intercultural competencies.

Spanish and Portuguese organizations and activities include Sigma Delta Pi, the National Hispanic Honor Society, the scholarly publications of the Society of Spanish and Spanish-American Studies, and the Spanish and Portuguese Clubs and Film Series.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

Six courses (18 credits) numbered 2000-4999 are required; the distribution of courses depends on the individual student's proficiency level. See the faculty advisor in Spanish for more information.

Code	Title	Credit Hours
	A maximum of three Spanish courses at the 2000 level	0-9
	A minimum of three Spanish courses at the 3000 level or higher	9-18

Sports and Society Certificate

Overview

The four-course **Certificate in Sports and Society** is designed to appeal to students who are interested in careers in sports management, training, or writing, or who want a more in-depth understanding of the role of sports in both U.S. and global societies.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Program Code: LA-SPSO-CERT

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Learn more about the undergraduate certificate in Sports and Society.

Requirements

Code	Title	Credit Hours
Four courses, distributed as follows:		12
Select one introductory course from:		
SOC 2111	Sociology of Sports	
SRM 1211	Sport, Entertainment and Society	
Select up to two courses from the following array in Liberal Arts: ¹		
ECON 3541	The Economics of Sports	
HIST 2116	Baseball and American History	
HIST 2117	History of Global Soccer	
REL 2005	Religion and Sports	
SOC 2122	Global Sports	
Select up to two courses from the following array in Sport and Recreation Management or the College of Public Health: ²		
SRM 3221	Athletics Administration	
SRM 3222	Global Sport Management	
SRM 3224	Media and Communications in Sport and Recreation	
SRM 3225	Recreation and Leisure Service Management	
KINS 4196	Sociology of Physical Activity	

1

If SOC 2111 is selected for the required introductory course above, only one course may be taken from this array.

2

If SRM 1211 is selected for the required introductory course above, only one course may be taken from this array.

Visual Anthropology Minor

Overview

The **Minor in Visual Anthropology**, offered by the Department of Anthropology, can deepen a student's understanding of how anthropologists use and study audiovisual media with courses examining film, television, photography and other forms of audiovisual expression. Students learn how to analyze media, especially within and across various cultural contexts, and grapple with the problem of how mass media reflects and influences people's social worlds and everyday lives.

The Visual Anthropology minor is not open to Anthropology majors.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Campus Location: Main

Contact Information

Please contact the College of Liberal Arts' Center for Academic Advising for more information on minors, certificates or other CLA programs.

Requirements

Code	Title	Credit Hours
Production of Anthropological Media Requirement ¹		
Select one of the following:		3
ANTH 2409	Introduction to the Production of Anthropological Media	
ANTH 3439	Anthropology of Photography	
ANTH 3444	Advanced Production of Anthropological Media	
Visual Anthropology Electives ¹		
Select five of the following:		15
ANTH 2432	Indigenous Media	
ANTH 2434	Anthropology of Feature Films	
ANTH 3324	Anthropology and Art	
ANTH 3433	Ethnographic Film	
ANTH 3436	Anthropology of New Media	
ANTH 3438	Anthropology of Mass Media	
ANTH 3439	Anthropology of Photography	
ANTH 3444	Advanced Production of Anthropological Media	
Total Credit Hours		18

¹ If more than one course from the Production array is taken, additional courses count as Visual electives.

Low Klein College of Media and Communication

Overview

Goals and Objectives

The Low Klein College of Media and Communication generates knowledge and educates students to be ethical, analytical and creative leaders, producers and citizens in a multimedia and multicultural society. This mission is pursued through the training of students for leadership careers in media and communication, through advancing research and creative activity in these fields, and through serving the public need for free and open communication. The college is concerned not only with high standards of professional work but also with encouraging the next generation of teachers and media managers to develop an intellectual background and a sense of social responsibility. Toward this end, Klein students are encouraged to take coursework in disciplines outside the college. For some, history and political science are related areas of interest; others choose literature and the arts; still others choose business, economics, or the social sciences. In this way, the college participates in providing not only professional training but also a broad humanistic education for its students.

The faculty of the college comes from diverse backgrounds. Many come to the college through academic study, doing graduate work and continuing the practice of research and scholarship while teaching at Temple. Others have extensive professional experience as journalists, television producers, speech writers, advertising executives, and public relations practitioners.

Renowned for their research, teaching, and professional experience, our faculty prepare our graduates for a wide range of careers in media and communication industries, as well as lead graduate students towards PhD, MA, MS, and MJ degrees.

History

The study of communication began formally at Temple University with the founding of the Department of Journalism in 1927. It was the first such department in the Commonwealth of Pennsylvania.

Theater was an extracurricular activity at Temple until 1931, when formal courses were developed.

Radio-Television became an instructional division in 1947, and extensive film offerings were added in 1967. That year, Journalism and Radio-Television-Film joined Theater to form the School of Communications and Theater. In 1987 the highly respected Department of Speech moved to the school from the College of Arts and Sciences. A year later, Speech became two departments: Rhetoric and Communication, and Speech-Language-Hearing.

The school was restructured in 1995. Radio-Television-Film became the Department of Film and Media Arts and the Department of Broadcasting, Telecommunications, and Mass Media; Journalism became Journalism, Public Relations, and Advertising; Rhetoric and Communication became Speech Communication. In 1998, the Department of Communication Sciences (Speech-Language-Hearing) moved to the College of Health Professions.

Effective Fall 2004, a change occurred with the Departments of Journalism, Public Relations and Advertising, and Speech Communication. Advertising became a separate department. The Department of Speech Communication changed its name to Strategic and Organizational Communication and included Public Relations as one of three concentrations: Public Communication (formerly Speech Communication), Public Relations, and Organizational Leadership. In 2010, the Department of Strategic and Organizational Communication changed its name to the Department of Strategic Communication.

In Fall 2011, Communication Studies replaced the former Communications major.

On July 1, 2012, the School of Communications and Theater was renamed the School of Media and Communication. It housed the departments of Advertising; Journalism; Media Studies and Production (formerly Broadcasting, Telecommunications, and Mass Media); and Strategic Communication. The Communication Studies program remained a part of the School of Media and Communication. The Departments of Theater and Film and Media Arts comprised the Division of Theater, Film and Media Arts and joined Boyer College of Music and Dance and the Tyler School of Art to form the Center for the Arts.

Also in 2012, the Department of Broadcasting, Telecommunications, and Mass Media changed its name to Media Studies and Production while the Department of Strategic Communication renamed the Public Communication concentration to Rhetoric and Public Advocacy.

On March 29, 2017, the School of Media and Communication was renamed the Low Klein College of Media and Communication in tribute to broadcasting pioneer Low Klein.

Effective March 2017, the Department of Strategic Communication was renamed the Department of Communication and Social Influence. The newly named department, along with a new major of the same name, introduced a new area of study in the communication discipline. Additionally, the Communication Studies major is housed in the Department of Communication and Social Influence. The Department of Advertising was renamed the Department of Advertising and Public Relations and offers a new major in Public Relations in addition to the existing Advertising major.

In fall 2017, the following minors were added: Content Creation, Digital Media Engagement, Journalism Studies, and International Communication.

In Fall 2019, the minor in Communication and Activism was added. Also, a new Production track for Communication Studies was established and is offered only in Temple Japan. Thus, there are five options for concentrating in Communication Studies: Communication and Entrepreneurship; Contemporary Media Environments; Global Civil Society; Policy, Regulation, and Advocacy; or the Communication Thesis (Major of Distinction) track.

In 2021, Klein officially launched the Certificate in Sports Media for undergraduates. Klein College also established the Jonathan Logan Family Foundation Center for Urban Investigative Journalism in 2021. The Logan Center will focus exclusively on the issues facing Philadelphia and other large American cities, including gun violence, economic inequality, education and health disparities, crumbling infrastructure and eroding trust in institutions. Through the Logan Center, Klein students and faculty will report aggressively not only on these problems, but on potential solutions, closely examining what has worked well in other cities and across the nation and the globe.

In 2023, Klein launched the BA in Audio and Live Entertainment, the BA in Virtual Media Management, a minor in Global Communication and Media Arts, and a certificate in Children's Media.

Academic Departments

The Lew Klein College of Media and Communication currently consists of the following departments:

- Advertising and Public Relations
- Communication and Social Influence
- Journalism
- Media Studies and Production

Diversity, Equity and Inclusion

Equity and diversity play a significant role in Klein College's hiring, cross-college initiatives, coursework and student life. For example, students launched the university's first Spanish language programming on TUTV, Temple University's television station, and in 2020 added its first Mandarin programming with *Temple Moment*. The capstone course in journalism, *Philadelphia Neighborhoods*, requires students to cover underserved parts of the city that receive less attention from traditional outlets.

In 2018, Klein College of Media and Communication received the Association for Education in Journalism and Mass Communication (AEJMC) Equity and Diversity Award, honoring the College's commitment to inclusion. The AEJMC Equity and Diversity Award recognizes academic programs that are working toward, and have maintained measurable success in, increasing equity and diversity within their units. AEJMC is a nonprofit association that promotes high standards for journalism and mass communication education, communication research and multicultural society in the classroom and curriculum. It also works to defend and maintain freedom of communication to improve professional practice and create a better-informed public.

In 2019, Assistant Professor of Public Relations David W. Brown was named Klein's first Diversity Advisor to the Office of the Dean. In this role, he launched a workshop series in the Fall of 2019 called "Can We Really Talk" for faculty in partnership with the University's Center for Advanced Teaching (CAT) and the IDEAL Office (Institute for Diversity, Equity, Advocacy, and Leadership) to better equip instructors to have uncomfortable conversations about diversity and race in our classrooms.

Special Facilities

Klein College of Media and Communication is housed in buildings designed for teaching, research and production.

The College's primary location is Annenberg Hall, which houses the Departments of Advertising and Public Relations, Journalism, and Media Studies and Production. Television and film production areas (studios and editing, graphics, and film labs) occupy the first floor. The building also includes extensive video and film editing areas, a 75-seat multimedia screening room, photographic labs, two news writing labs and smart classrooms.

The Department of Communication and Social Influence is housed in Weiss Hall.

The Joe First Media Center is located on the first floor, linking Annenberg and Tomlinson Halls. The Center is a communications and media hub for the college and includes a cyber-café, a multimedia information center, and a venue for displaying student work.

Special Programs

Klein Rising

Klein College requires that all new first-year and transfer students enroll in an introductory seminar course, either KLN 1001 or an equivalent course. Students enrolled in either KLN 1001 or KLN 2001 are assigned a Klein Rising Peer Mentor—a sophomore, junior, or senior-status student who guides new students through their first semester and beyond. The Klein Rising program is anchored by the seminar, and it also includes opportunities to get engaged with student organizations and academic research. The Klein Rising program includes a workshop series for all undergraduate and graduate students to explore co-curricular engagement opportunities throughout the year.

TUTV - Temple University Television

In Fall 2010, the university launched TUTV, a new regional cable television channel with associated new media platforms, which showcases the innovative work done by Temple students, faculty, and alumni.

TUTV offices and master control are located on the first floor of Annenberg Hall and is a part of the Kal & Lucille Rudman Media Production Center. The Rudman Center also features a broadcast studio and a computer-equipped classroom. The station features news, sports, music, comedy, and documentary programs. TUTV presents content from many of the university's other professional schools plus programs produced in association with community cultural groups and professional broadcasters. Student volunteers are also accepted. For more information, contact the TUTV General Manager at paul.gluck@temple.edu.

Temple Update

Temple Update is a production course in which students can gain experience producing, reporting, and editing for a half-hour weekly news magazine format. The program airs on a cable outlet. The course gives students the opportunity to produce material for a résumé tape and provides students with valuable experience in field work, news writing, video editing, and the pressure of a live program.

Career Services

The Klein College Career Center is an exclusive professional development resource for all Klein College students and alumni. Located in Annenberg Hall, Room 7, the Career Center is dedicated to helping students prepare for a life and career they want in the field of media and communication.

Our most recent survey shows 89% of our seniors found employment or went on to graduate school within 9 months of graduation. Over 80% of full-time and part-time jobs are related to their field of study.

The Director of Career Services, Lu Ann Cahn, is an author and an eight-time Emmy Award-winning journalist who launched the Career Center after 40 years of mentoring interns during her career in TV news. All students and alumni can meet with her and peer advisors to review résumés, cover letters and plan for their future.

The Career Center calendar includes weekly workshops for creating résumés, cover letters, LinkedIn profiles, a career network and job hunt specifically for the media and communication industry.

The Career Center offers individual recruiting and hiring events with employers and typically hosts two Klein College Internship and Career Fairs each year. At the Spring fair, more than 75 media and communication employers come to campus to recruit Klein College students.

The Klein Career Center is home to KleinConnect, an exclusive media and communication internship and job database. Students and alumni with approved résumés and cover letters can apply for the hundreds of opportunities updated in KleinConnect on a daily basis. Students and employers can access KleinConnect.

Every day students receive an email from KleinConnect with the latest internship postings. Alumni receive a weekly email with full time job opportunities.

Internship Program

Although the requirements may vary, internships are available to junior and senior students of every department in the college. Internships are for academic credit and must involve professional activity related to the student's course of study. The internships must be approved by the administrator or faculty member charged with supervising internships.

Global Opportunities

The Lew Klein College of Media and Communication offers several programs for undergraduate and graduate students who are interested in studying away and strongly encourages students to participate in these programs.

Global Opportunities offers programs ranging from a week-long excursion embedded in a course to a full semester away. There are several unique short-term opportunities for those who cannot be away a full semester. Students can choose to explore the Children's Media Industry in Los Angeles or The Art of Visual Storytelling in Puerto Rico. New short-term programs are added each year.

In 2021, Klein College developed a new program called Klein on the GO for Philadelphia-based excursions. Each semester, faculty and staff from Klein College lead small group tours around the region to help students connect what they're learning in the classroom to our surrounding urban environment.

Summer programs are also an important feature of the college's Global Opportunities, and one such program is the Global Internship Program. This program offers students the opportunity to participate in 8-week full-time internship opportunities in international locations including but not limited to: Barcelona, Melbourne, Mumbai, Paris, San José, Santiago, Shanghai, Singapore, Sydney, or Toronto, or students can select a U.S. location: New York City or Washington, DC. All students, regardless of their internship location, spend time together on Temple's Main Campus studying Intercultural Communications in the Workplace as a group before they depart for their chosen destination. Students work one-on-one with an industry expert so as to secure an internship in their desired field. Each of the programs is a unique combination that includes travel, learning, and exciting events, with a résumé building internship. Knowledge of a foreign language is not required to study in any of these locations. However, some previous experience with a city's local or national language can lead to even more internship opportunities while abroad.

All of the Klein Global Opportunities coursework can be counted towards the International Communication Concentration/Minor within Klein.

All semester and summer programs are open to qualified students from other universities and colleges and to others who choose to continue their education in a less formal manner than in a prescribed program of study.

Klein is also in the process of developing new Global Opportunities. Check with the Global Opportunities office for information on these developments. Current information on the Klein programs listed here is available from Klein Global Opportunities (e-mail: kleingo@temple.edu; phone: 215-204-2354).

See Education Abroad and Overseas Campuses (p. 55) for more information about University Study Abroad options.

Student Contact

For current students seeking information about Klein College of Media and Communication, please contact the Vice Dean for Student Success at 215-204-6967. For questions regarding registration and course scheduling, contact Klein Academic Advising at advise@temple.edu or call 215-204-5273.

Administration

David Boardman, Dean
2020 N. 13th Street, Philadelphia, PA 19122
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Contact Information

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<https://klein.temple.edu/student-life/advising>
215-204-5273
advise@temple.edu

Career Services

<https://klein.temple.edu/student-life/preparing-career/career-services>

Global Opportunities

<https://klein.temple.edu/study-away>

Undergraduate Programs

- Advertising BA with Account Management Concentration (p. 1189)
- Advertising BA with Art Direction Concentration (p. 1196)
- Advertising BA with Brand Strategy and Research Concentration (p. 1204)
- Advertising BA with Copywriting Concentration (p. 1212)
- Advertising BA with Media Planning Concentration (p. 1219)
- Audio and Live Entertainment BA (p. 1227)
- Children's Media Certificate (p. 1232)
- Communication and Activism Minor (p. 1234)
- Communication and Social Influence BA (p. 1235)
- Communication Studies BA with Communication and Entrepreneurship Track (p. 1242)
- Communication Studies BA with Communication Studies Thesis Track (p. 1250)
- Communication Studies BA with Contemporary Media Environments Track (p. 1258)
- Communication Studies BA with Global Civil Society Track (p. 1266)
- Communication Studies BA with Policy, Regulation and Advocacy Track (p. 1274)
- Communication Studies BA with Production Track (TUJ) (p. 1282)
- Communication Studies Minor (p. 1290)
- Content Creation Minor (p. 1291)

- Digital Media Engagement Minor (p. 1291)
- Digital Media Technologies Minor (KCMC) (p. 1292)
- Global Communication and Media Arts Minor (p. 1294)
- International Communication Minor (p. 1295)
- Journalism BA (p. 1299)
- Journalism, Society and Culture Minor (p. 1309)
- Leadership Minor (p. 1310)
- Media Studies and Production BA with Media Analysis Concentration (p. 1311)
- Media Studies and Production BA with Media Business Concentration (p. 1320)
- Media Studies and Production BA with Media Production Concentration (p. 1329)
- Public Relations BA (p. 1338)
- Public Relations Minor (p. 1344)
- Sports Media Certificate (p. 1345)
- Virtual Media Management BA (p. 1346)

Academic Policies and Regulations

Please see the Undergraduate Academic Policies (p. 1835) section of this *Bulletin*. Students are responsible for complying with all university-wide academic policies as well as those of the Lew Klein College of Media and Communication that appear below.

Academic Standing

A matriculated undergraduate student in the university is in Academic Good Standing if enrolled in a baccalaureate degree-seeking program.

Please see the University's policy on Academic Standing (p. 1840) for detailed information about Academic Warning, Academic Probation, and Academic Dismissal.

Change of Program

Students from other Temple University schools/colleges may change their primary major to Klein if they possess a cumulative GPA of 2.0 or higher. Students interested in switching their primary major into Klein, or adding a minor, certificate, or second major, should attend a Change of Program Information Session hosted by the Academic Advising Office. To sign-up for a Change of Program Information Session, please contact advise@temple.edu.

Credits Not Applied Toward the Degree

Credits earned in the following courses are not applied toward a degree in the Lew Klein College of Media and Communication: lower-level courses in Military Science.

Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List (p. 1849) policy for specific GPA and credit-hour requirements.

Re-enrollment

Students returning to the Lew Klein College of Media and Communication after an absence of one semester (unless an approved Leave of Absence form was filed prior to the leave) must use the *Undergraduate Bulletin* in effect at the time of readmission or any subsequent *Undergraduate Bulletin*. Credits more than 10 years old require additional review in order to determine if they remain applicable toward a degree in the college. For the re-enrollment form, please visit: <https://admissions.temple.edu/apply/request-re-enroll>.

Transfer Students

Refer to the Transfer Students Admissions (p. 27) section of this *Bulletin* for general information on transferring courses to Temple. In addition to these criteria, each department in the Lew Klein College of Media and Communication will evaluate any credit to be transferred into a major. The maximum number of credit hours allowed to transfer in for use toward major requirements are: 12 hours in Advertising; 20 hours in Media Studies and Production; 24 hours in Communication Studies; 9-12 hours in Journalism; 12 hours in Public Relations; and 12 hours in Communication and Social Influence.

College Requirements for Graduation

The Lew Klein College of Media and Communication requires 124 credits to graduate; completion of the university General Education (GenEd (p. 83)) (p. 83) requirements; completion of departmental requirements, including two writing-intensive courses in the major; and a minimum of 2.00 GPA, both cumulative and in the major.

Minimum and maximum credit requirements within each major are listed with the departmental requirements. Students are also required to complete KLN 1001 Klein First-Year Seminar or an equivalent course.

Students who are planning to graduate must schedule an official graduation review with their assigned academic advisor and complete the application for graduation at least one semester prior to the anticipated graduation date. Appointments may be made on the TUportal with the student's assigned academic advisor.

Program Descriptions

1. The total number of credit hours at graduation may be greater for some students based on initial placement exams, transfer evaluations, individual curricular choices, and academic progress.
2. Students must fulfill the necessary prerequisites for any given course or course sequence. See the Prerequisites and Co-requisites Policy (p. 1860) in the university-wide Academic Policies section of this *Bulletin*.

Advising

Klein Academic Advising
9 Annenberg Hall
2020 N. 13th Street
Philadelphia, PA 19122
215-204-5273
<https://klein.temple.edu/student-life/advising>
advise@temple.edu

Students in the Lew Klein College of Media and Communication are advised by professional academic advisors and faculty advisors. Klein College students can make advising appointments on the online appointment system, which is accessible on the Klein College tab on TUportal, or by visiting the Klein Academic Advising Center, located on the ground floor of Annenberg Hall. Consult your major departmental office for assignment to an appropriate faculty advisor. Effective Fall 2021, Klein Advising implemented a caseload advising system so that every student has an assigned academic advisor.

Academic advisors attempt to avoid errors when advising students about their program requirements, but schools and colleges cannot assume liability for errors in advising. Therefore, students must assume primary responsibility for knowing the requirements for their degree and for acquiring current information about their academic status.

Most students will be eligible to register for classes online via the Registration and Planning tab on Student Tools page of TUportal. However, all students should meet with an advisor prior to the eligible registration period. Students preparing to graduate must complete an online graduation application in their graduating term but should consult with an academic advisor at least one semester prior to the graduation date for advice and clarification of graduation requirements.

Faculty

Quaiser D. Abdullah, Assistant Professor of Instruction, Department of Communication and Social Influence, Lew Klein College of Media and Communication; PhD, Temple University.

Tracy Agostarola, Assistant Professor of Instruction, Department of Advertising and Public Relations, Lew Klein College of Media and Communication; BA, Kutztown University.

Saleem Ahmed, Assistant Professor of Practice, Department of Journalism, Lew Klein College of Media and Communication; MFA, University of Hartford.

Osei Alleyne, Assistant Professor, Department of Media Studies and Production, Lew Klein College of Media and Communication; PhD, University of Pennsylvania.

Jennifer Gerard Ball, Assistant Professor, Department of Advertising and Public Relations, Lew Klein College of Media and Communication; PhD, University of Texas at Austin.

Jillian E. Bauer-Reese, Associate Professor of Practice, Department of Journalism, Lew Klein College of Media and Communication; MS, Philadelphia University.

Geoffrey Baym, Professor, Department of Media Studies and Production, Lew Klein College of Media and Communication; PhD, University of Utah.

Katherine M. Bex, Assistant Professor of Instruction, Department of Advertising and Public Relations, Lew Klein College of Media and Communication; MS, Temple University.

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Marc Lamont Hill, Professor, Department of Media Studies and Production, Lew Klein College of Media and Communication; PhD, University of Pennsylvania.

R. Lance Holbert, Professor, Department of Communication and Social Influence, Lew Klein College of Media and Communication; PhD, University of Wisconsin-Madison.

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David T.Z. Mindich, Professor, Department of Journalism, Lew Klein College of Media and Communication; PhD, New York University.

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Katherine A. Mueller, Associate Professor, Department of Advertising and Public Relations, Lew Klein College of Media and Communication; MFA, Temple University.

Patrick D. Murphy, Professor, Department of Media Studies and Production, Lew Klein College of Media and Communication; PhD, Ohio University.

Wazmah Osman, Associate Professor, Department of Media Studies and Production, Lew Klein College of Media and Communication; PhD, New York University.

Aron Pilhofer, Associate Professor and the James B. Steele Chair in Journalism Innovation, Department of Journalism, Lew Klein College of Media and Communication; BA, University of Minnesota.

Hector Postigo, Associate Professor, Department of Media Studies and Production, Lew Klein College of Media and Communication; PhD, Rensselaer Polytechnic Institute.

Deborah M. Racano, Assistant Professor of Instruction, Department of Advertising and Public Relations, Lew Klein College of Media and Communication; BFA, Moore College of Art and Design.

Clemencia Rodriguez, Professor, Department of Media Studies and Production, Lew Klein College of Media and Communication; PhD, Ohio University.

Steve K. Ryan, Assistant Professor of Instruction, Department of Advertising and Public Relations, Lew Klein College of Media and Communication; MS, Temple University.

Dana K. Saewitz, Associate Professor of Instruction, Department of Advertising and Public Relations, Lew Klein College of Media and Communication; MLA, University of Pennsylvania.

Youngji Seo, Assistant Professor of Instruction, Department of Advertising and Public Relations, Lew Klein College of Media and Communication; PhD, University of Georgia.

Adrienne Shaw, Associate Professor, Department of Media Studies and Production, Lew Klein College of Media and Communication; PhD, University of Pennsylvania.

Larry Stains, Associate Professor of Practice, Department of Journalism, Lew Klein College of Media and Communication; MJ, Columbia University.

Meghna Tallapragada, Assistant Professor, Department of Advertising and Public Relations, Lew Klein College of Media and Communication; PhD, Cornell University.

Karen M. Turner, Associate Professor, Department of Journalism, Lew Klein College of Media and Communication; JD, Northwestern University School of Law.

Barry Vacker, Associate Professor of Instruction, Department of Media Studies and Production, Lew Klein College of Media and Communication; PhD, University of Texas at Austin.

Linn Washington, Professor, Department of Journalism, Lew Klein College of Media and Communication; MSL, Yale Law School.

Kristine Trever Weatherston, Associate Professor of Instruction, Department of Media Studies and Production, Lew Klein College of Media and Communication; PhD, Virginia Commonwealth University.

Tracey Weiss, Associate Professor of Instruction, Department of Advertising and Public Relations, Lew Klein College of Media and Communication; PhD, Temple University.

Andrea D. Wenzel, Assistant Professor, Department of Journalism, Lew Klein College of Media and Communication; PhD, University of Southern California.

Thomas Wright, Associate Professor of Instruction, Department of Communication and Social Influence, Lew Klein College of Media and Communication; PhD, Purdue University.

Laura Zaylea, Associate Professor of Instruction, Department of Media Studies and Production, Lew Klein College of Media and Communication; MFA, San Francisco Art Institute.

Advertising BA with Account Management Concentration

Overview

Advertising is a competitive, creative and challenging industry that sits at the intersection of media and society. The **Bachelor of Arts in Advertising**, offered by the Department of Advertising and Public Relations, provides students with an overall understanding and appreciation of the influence advertising and marketing communications have in business and the social and economic orders. Students become acquainted with the language, processes and opportunities within the industry, including potential roles in strategic planning, research, copywriting, art direction, and media buying and planning. The major is designed to stimulate curiosity, strengthen critical thinking and create more astute consumers whether they enter the field of advertising or not.

Advertising students at Temple University fall into clearly-defined groups:

- Students interested in advertising as a career;
- Students with creative talent in art, design, writing and strategic thinking and wish to express that talent in a professional career;
- Students who are broadly interested in media and the power of advertising;
- Students interested in marketing, sales or business, but who do not wish to major in business or finance.

Students **must select one of the following concentrations**:

- Account Management,
- Art Direction,
- Brand Strategy and Research,
- Copywriting, or
- Media Planning.

An optional concentration in International Communication is also available for this major.

Account Management Concentration

The **Account Management concentration** prepares students for careers in management, which will open doors for students in a broad array of industries in today's complex, fragmented media landscape. In the three advanced Account Management courses (ADV 3031, ADV 3033, and ADV 4034) students learn about Digital Analytics and Reporting, Advertising Sales, and Account Management. Students are also required to take Introduction to Marketing (ADV 2111).

Campus Location: Main

Program Code: CO-ADV-BA

Contact Information

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Annenberg Hall, Room 300

Learn more about the Bachelor of Arts in Advertising.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

1. University requirements:
 - a. New students are required to complete the General Education (GenEd (p. 83)) curriculum.
 - b. All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are ADV 1196 and ADV 4197.
2. Lew Klein College of Media and Communication requirements (p. 1184), including KLN 1001 and KLN 1002.
3. Minimum of 48 credits in Advertising courses.
4. A grade of C or higher must be attained in all required Advertising courses.
5. An overall GPA of 2.0 must be attained in the major.
6. No more than 12 semester hours of transfer credits may be applied to Advertising major requirements.

Advertising: Account Management Requirements

Code	Title	Credit Hours
1000-Level Core Requirements		
ADV 1101	Introduction to Media and Society	3
ADV 1102	Introduction to Advertising	3
ADV 1196	Persuasive Writing	3
ADV 1103	Digital Media and Advertising	3
2000-Level Core Requirements		
ADV 2111	Introduction to Marketing	3
Select two of the following:		6
ADV 2121	Introduction to Copywriting	
ADV 2131	Introduction to Media Planning	
ADV 2141	Introduction to Brand Strategy and Research	
ADV 2151	Introduction to Art Direction: Visual Communication	
Upper-Level Requirements		
ADV 4197	Advanced Writing for Academic and Professional Communication	3
Select one of the following:		3
ADV 3002	Advertising and Society	
ADV 3006	Representation in the Media	
ADV 3007	Psychology of Advertising	
ADV 3012	Legal and Moral Issues in Advertising	
Select one of the following:		3
ADV 3171	Diamond Edge Communication ¹	
ADV 3185	Advertising Internship ¹	
Select one of the following:		3
ADV 4102	Advertising Campaigns	
ADV 4103	National Student Advertising Competition ¹	
Account Management Requirements		
ADV 3031	Digital Analytics and Reporting	3
ADV 3033	Advertising Sales	3
ADV 4034	Account Management	3
Advertising Electives		
Select a minimum of 6 credits from the following list:		6
ADV 1000	Topics in Advertising 1	
ADV 1001	Introduction to Digital Design Tools for Advertising	
ADV 2001	Intermediate Digital Design Tools for Advertising	
ADV 2052	Introduction to Typography	
ADV 2057	Creating and Filming Advertising from Script to Screen	
ADV 2102	Introduction to Pharmaceutical Advertising	
ADV 2103	Introduction to Web Design and Development for Advertising	

ADV 2104	Personal Branding
ADV 3000	Topics in Advertising 3000
ADV 3003	National Student Advertising Competition Preparation
ADV 3042	Quantitative Advertising Research
ADV 3101	Creative Thinking for Advertising

Total Credit Hours **48**

1

Requires special permission from instructor.

Internships or Diamond Edge Communications

All advertising majors are required to do either a professional internship or be involved with Diamond Edge Communications (DEC), our student-run ad agency. Both offer students valuable hands-on experience in actual advertising-related professional experiences. DEC works with local Philadelphia clients, under the supervision of an advertising professor, to develop strategic plans, research, digital and traditional creative materials, media plans and presentations. The internship program is carefully managed by our Internship Directors to help students find the best possible internship opportunities. The Internship Directors, faculty members and Klein's Director of Career Services will help students with preparation of résumés, cover letters, and LinkedIn pages. We will also guide students through the process of seeking and identifying quality internship opportunities.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Advertising with a Concentration in Account Management

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ADV 1101	Introduction to Media and Society	3
ADV 1102	Introduction to Advertising	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
KLN 1001	Klein First-Year Seminar	1
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		15
Spring		
ADV 1103	Digital Media and Advertising	3
ADV 1196	Persuasive Writing	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
KLN 1002	Klein College Introduction to Professional Development	1
GenEd Breadth Course		3-4
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
ADV 2111	Introduction to Marketing	3
Select one of the following:		3
ADV 2121	Introduction to Copywriting	
ADV 2131	Introduction to Media Planning	
ADV 2141	Introduction to Brand Strategy and Research	
ADV 2151	Introduction to Art Direction: Visual Communication	
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3

GenEd Breadth Course		3
Credit Hours		15
Spring		
Select one of the following:		3
ADV 2121	Introduction to Copywriting	
ADV 2131	Introduction to Media Planning	
ADV 2141	Introduction to Brand Strategy and Research	
ADV 2151	Introduction to Art Direction: Visual Communication	
Advertising Elective ¹		3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
Advertising Elective ¹		3
ADV 3031	Digital Analytics and Reporting	3
Electives		10
Credit Hours		16
Spring		
ADV 3033	Advertising Sales	3
Select one of the following:		3
ADV 3171	Diamond Edge Communication ²	
ADV 3185	Advertising Internship ²	
Electives		9
Credit Hours		15
Year 4		
Fall		
ADV 4197	Advanced Writing for Academic and Professional Communication	3
Select one of the following:		3
ADV 3012	Legal and Moral Issues in Advertising	
ADV 3002	Advertising and Society	
ADV 3006	Representation in the Media	
ADV 3007	Psychology of Advertising	
Electives		10
Credit Hours		16
Spring		
Select one of the following:		3
ADV 4102	Advertising Campaigns	
ADV 4103	National Student Advertising Competition ²	
ADV 4034	Account Management	3
Electives		10
Credit Hours		16
Total Credit Hours		124

1

See the list of elective options under Requirements. The courses students can take to fulfill their Advertising electives will vary from semester to semester.

2

ADV 3171, ADV 3185, and ADV 4103 require special permission from instructor.

Optional Concentration

The **optional International Communication Concentration** (ICC) provides a theoretical and practical education in international and intercultural communication and media. This program allows students to develop sought-after competencies in cultural sensitivity and intercultural communication skills by encouraging students to reflect on their own cultural lenses. Students participating in the ICC program will be exposed to multiple international perspectives through internationally- and interculturally-oriented courses offered on Temple's domestic campuses and may be supplemented with study abroad coursework.

This concentration is restricted to Klein students only.

Requirements

To earn the International Communication Concentration transcript notation, a student must successfully complete a total of 18-20 credits of International / Intercultural studies courses, a maximum 9 credits of which may come from courses transferred into Temple, across 3 areas. Each course that fulfills a requirement for the concentration must be passed with a C- or better.

Code	Title	Credit Hours
Common Course		
Select one of the following:		3
CSI 3701	Intercultural Communication	
CSI 3703	Intercultural Communication in the Workplace	
Klein International/Intercultural courses		
Select three of the following:		9
Any ADV, CMST, CSI, JRN, MSP, or PR courses taken as part of a Klein Global Opportunities Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)		
Any ADV, CMST, CSI, JRN, MSP, or PR Internship completed as part of a Klein Global Opportunities International Program		
CSI 2401	Intercultural and Cross Cultural Conflict	
CSI 3702	Communication, Culture and Identity	
CSI 3703	Intercultural Communication in the Workplace (if not used to fulfill common course requirement above)	
JRN 3254	International Reporting	
JRN 3706	Journalism and Globalization	
MSP 3471	Media and Cultural Differences	
MSP 3572	Communication and Development	
MSP 4453	Information Society	
MSP 4496	Global Media	
PR 2672	Global Communication and Leadership	
International/Intercultural Electives outside of Klein		
Note: Satisfying the GenEd World Society requirement by completing a Study Abroad does not also satisfy this requirement.		
Choose any two (2) courses of the following:		6-8
Up to any two foreign language courses		
Any non-Klein courses at the 2000-level or higher taken in a Klein Global Opportunities Int'l Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)		
Any non-Klein internship taken in a Klein Global Opportunities International Program		
Anthropology		
ANTH 2238 or ASST 2238	Visual Anthropology of Modern Japan	
ANTH 2374 or ASST 2374	The Anthropology of Modern China	
ANTH 2361 or LAS 2361	Peoples of Latin America	
ANTH 2362 or LAS 2362	Peoples and Cultures of the Caribbean	
Art History		
ARTH 2102		
ARTH 2105	Roman Art and Archaeology	

ARTH 2129	Greek and Roman Sculpture
ARTH 2431	Early Modern Italy and Spain in the 17th Century
ARTH 2432	Northern and Global Baroque Art: Art in the Age of Rubens, Rembrandt, Vermeer
ARTH 2543	Transnational Impressionisms
ARTH 2642	Modern Art, 1900-1945
ARTH 2868	Arts of Asia
ARTH 1003	History of Art in Rome (Study Abroad - Rome)
ARTH 2135	Art and Culture in Ancient Rome (Study Abroad - Rome)
ARTH 2428	Wonders of Rome: Art and Culture of the Baroque Era (Study Abroad - Rome)
ARTH 2622	Galleries and Studios of Rome (Study Abroad - Rome)
ARTH 1801	Arts of Asia (Study Abroad - Japan)
ARTH 2815	Pre-Modern Japanese Art up to the Edo Period (Study Abroad - Japan)
Asian Studies	
ASST 2001	Practical Asian Society and Culture
ASST 2011	Survey of Japanese Literature Before 1868
ASST 2015	Tokyo in Literature and Film
or JPNS 2015	Tokyo in Literature and Film
ASST 2021	Japanese Literature in Film
or JPNS 2021	Japanese Literature in Film
ASST 2351	Japan in a Changing World
ASST 2367	South Asia: Peoples, Culture, Experiences
ASST 2373	Japanese Culture
or ANTH 2373	Japanese Culture
ASST 2503	Introduction to Southeast Asia: Insular
ASST 2504	Introduction to Southeast Asia: Mainland
ASST 2511	Introduction to Asian Business
ASST 3247	Ideology and Social Change in Japan
or SOC 3247	Ideology and Social Change in Japan
ASST 3251	China: State and Society
or POLS 3251	China: State and Society
ASST 3522	Contemporary China
or HIST 3522	Contemporary China
ASST 3541	Japan Today
or HIST 3541	Japan Today
ASST 3542	Women and Society in Japan
or HIST 3542	Women and Society in Japan
Film & Media Arts	
FMA 4673	International Cinema
Geography & Urban Studies	
GUS 2032	Urban Systems in a Global Economy
GUS 2073	African Development
GUS 2074	East and South Asia
or ASST 2074	Geography of East and South Asia
GUS 3021	International Urbanization
GUS 3052	Environmental Problems in Asia
or ASST 3052	Environmental Problems in Asia
or ENST 3052	Environmental Problems in Asia
GUS 3073	Geography of Travel and Tourism
GUS 3307	Transportation & Culture
History	
HIST 2303	History of Central Europe, 1618-1871
HIST 2317	Central Europe Through Wars and Revolution, 1848-1989

HIST 2501 or ASST 2501	Introduction to East Asia: China Introduction to East Asia: China
HIST 2502 or ASST 2502	Introduction to East Asia: Japan Introduction to East Asia: Japan
HIST 2503 or ASST 2503	Introduction to Southeast Asia: Insular Introduction to Southeast Asia: Insular
HIST 2504 or ASST 2504	Introduction to Southeast Asia: Mainland Introduction to Southeast Asia: Mainland
HIST 2511	Introduction to African History
HIST 2514	Introduction to Latin America
HIST 2515 or LAS 2515	Civilization and Modernity in the Caribbean Civilization and Modernity in the Caribbean
HIST 2516	Modern Islamic History
HIST 2611	Third World Issues through Film
HIST 3321	Irish History
HIST 3331	History of England
HIST 3362	Russia: Nationality and Empire
HIST 3363	Russia: Revolution, State, and Empire
HIST 3511	Southern Africa: A History
HIST 3521	The Chinese Revolution
HIST 3531	Modern India
HIST 3551	History of Vietnam
HIST 3561 or LAS 3561	History of Brazil History of Brazil
HIST 3562 or LAS 3562	Contemporary Mexico Contemporary Mexico
HIST 3571	Israel: History, Politics and Society
HIST 3572	Modern Middle East
HIST 3675	Third World Women's Lives
Jewish Studies	
JST 2706	Jewish Diaspora/Survey of Jewish History
Latin American Studies	
LAS 2101	Latin America through Film and Fiction
LAS 2231	Comparative Political Systems in Latin America
LAS 2502 or IB 2502	Fundamentals of Latin American Business Fundamentals of Latin American Business
LAS 2514	Historical Continuity and Social Change in Latin America
LAS 3267	Sociology of Music: Nation, Race, Class and Gender in Argentina and Brazil
LAS 3601	"Other Voices" in Latin American Literature
LAS 3602	Caribbean Literature and Culture
LAS 3801	African Culture in Brazil
Political Science	
POLS 2211	Contemporary Politics of Europe
POLS 2212	Eastern Europe, Russia and the West
POLS 2231	Comparative Political Systems in Latin America
POLS 2255	Comparative Public Policy
POLS 2314	Politics of International Law
POLS 2321	Politics of the Global Economy
POLS 2331	International Organization
POLS 3212	British Government and Politics
POLS 3241	Mideast Politics
POLS 3252	East Asia and the United States

or ASST 3252	East Asia and the United States
POLS 3265	International Environmental Policy
or ENST 3265	International Environmental Policy
Religion	
REL 2002	Religion and Human Sexuality
REL 2007	Religion in Film
REL 2101	Indian Philosophies and Religions
or ASST 2101	Religions of India
REL 2102	Introduction to Buddhism
or ASST 2102	Introduction to Buddhism
REL 2201	Chinese Religions - Confucius to Mao
REL 2301	Zen Buddhism
or ASST 2301	Zen Buddhism
REL 2403	Introduction to Judaism
or JST 2403	Introduction to Judaism
REL 2447	Kabbalah and Mysticism
or JST 2447	Kabbalah and Mysticism
REL 2502	Jesus in the Media
REL 2606	Introduction to Islam
REL 2702	Religion in Contemporary Africa
REL 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
or ASST 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
REL 3201	I-Ching, Tao, and Ch'an/Zen
or ASST 3201	I-Ching, Tao, and Ch'an/Zen
REL 3301	Japanese Religions
or ASST 3301	Japanese Religions
REL 3411	The Philosophies of Judaism
or JST 3411	The Philosophies of Judaism
REL 3601	The Islamic State
REL 3602	Women in Islam
REL 3603	Islamic Mysticism
REL 3702	African Religions and New World Culture

Total Credit Hours

18-20

Contact Information

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 215-204-5823
 jklotz@temple.edu

Advertising BA with Art Direction Concentration

Overview

Advertising is a competitive, creative and challenging industry that sits at the intersection of media and society. The **Bachelor of Arts in Advertising**, offered by the Department of Advertising and Public Relations, provides students with an overall understanding and appreciation of the influence advertising and marketing communications have in business and the social and economic orders. Students become acquainted with the language, processes and opportunities within the industry, including potential roles in strategic planning, research, copywriting, art direction, and media buying and planning. The major is designed to stimulate curiosity, strengthen critical thinking and create more astute consumers whether they enter the field of advertising or not.

Advertising students at Temple University fall into clearly-defined groups:

- Students interested in advertising as a career;
- Students with creative talent in art, design, writing and strategic thinking and wish to express that talent in a professional career;

- Students who are broadly interested in media and the power of advertising;
- Students interested in marketing, sales or business, but who do not wish to major in business or finance.

Students **must select one of the following concentrations**:

- Account Management,
- Art Direction,
- Brand Strategy and Research,
- Copywriting, or
- Media Planning.

An optional concentration in International Communication is also available for this major.

Art Direction Concentration

Students in the **Art Direction concentration** develop hands-on skills in creating both digital and traditional advertising. Art Direction students must develop proficiency in the Adobe Creative Suite. Concentration courses are ADV 3052, ADV 3053 and ADV 4064. These courses must be taken consecutively and cannot be taken concurrently. The Portfolio class provides students the opportunity to work in teams with copywriters and to develop a professional-quality portfolio. ADV 2052 is a recommended elective for Art Direction students.

Note: Students must apply for acceptance in the Art Direction concentration after they have completed ADV 1001 and ADV 2151. Transfer students should apply immediately upon acceptance to Temple University. Learn more about the Portfolio Application process.

Campus Location: Main

Program Code: CO-ADV-BA

Contact Information

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kmueller@temple.edu

Michelle Rambo, Senior Administrative Specialist
215-204-4268
michelle.rambo@temple.edu

Advertising and Public Relations Department Office
Annenberg Hall, Room 300

Learn more about the Bachelor of Arts in Advertising.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

1. University requirements:
 - a. New students are required to complete the General Education (GenEd (p. 83)) curriculum.
 - b. All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are ADV 1196 and ADV 4197.
2. Lew Klein College of Media and Communication requirements (p. 1184), including KLN 1001 and KLN 1002.
3. Minimum of 48 credits in Advertising courses.
4. A grade of C or higher must be attained in all required Advertising courses.
5. An overall GPA of 2.0 must be attained in the major.
6. No more than 12 semester hours of transfer credits may be applied to Advertising major requirements.

Advertising: Art Direction Requirements

Code	Title	Credit Hours
1000-Level Core Requirements		
ADV 1101	Introduction to Media and Society	3
ADV 1102	Introduction to Advertising	3

ADV 1196	Persuasive Writing	3
ADV 1103	Digital Media and Advertising	3
2000-Level Core Requirements		
ADV 2151	Introduction to Art Direction: Visual Communication	3
Select two of the following:		
ADV 2111	Introduction to Marketing	
ADV 2121	Introduction to Copywriting	
ADV 2131	Introduction to Media Planning	
ADV 2141	Introduction to Brand Strategy and Research	
Upper-Level Requirements		
ADV 4197	Advanced Writing for Academic and Professional Communication	3
Select one of the following:		
ADV 3012	Legal and Moral Issues in Advertising	
ADV 3002	Advertising and Society	
ADV 3006	Representation in the Media	
ADV 3007	Psychology of Advertising	
Select one of the following:		
ADV 3171	Diamond Edge Communication ¹	
ADV 3185	Advertising Internship ¹	
Select one of the following:		
ADV 4102	Advertising Campaigns	
ADV 4103	National Student Advertising Competition ¹	
Art Direction Requirements		
ADV 1001	Introduction to Digital Design Tools for Advertising	3
ADV 3052	Art Direction I: Concept & Layout ²	3
ADV 3053	Art Direction II: Narrative and Multimedia ²	3
ADV 4064	Advertising Portfolio ²	3
Advertising Electives		
Select a minimum of 3 credits from the following list:		
ADV 1000	Topics in Advertising 1	
ADV 2001	Intermediate Digital Design Tools for Advertising	
ADV 2052	Introduction to Typography	
ADV 2057	Creating and Filming Advertising from Script to Screen	
ADV 2102	Introduction to Pharmaceutical Advertising	
ADV 2103	Introduction to Web Design and Development for Advertising	
ADV 2104	Personal Branding	
ADV 3000	Topics in Advertising 3000	
ADV 3003	National Student Advertising Competition Preparation	
ADV 3042	Quantitative Advertising Research	
ADV 3101	Creative Thinking for Advertising	

Total Credit Hours**48**

1

Requires special permission from instructor.

2

Sequence may not be taken concurrently.

Internships or Diamond Edge Communications

All advertising majors are required to do either a professional internship or be involved with Diamond Edge Communications (DEC), our student-run ad agency. Both offer students valuable hands-on experience in actual advertising-related professional experiences. DEC works with local Philadelphia clients, under the supervision of an advertising professor, to develop strategic plans, research, digital and traditional creative materials, media plans and presentations. The internship program is carefully managed by our Internship Directors to help students find the best possible internship opportunities.

The Internship Directors, faculty members and Klein's Director of Career Services will help students with preparation of résumés, cover letters, and LinkedIn pages. We will also guide students through the process of seeking and identifying quality internship opportunities.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Advertising with a Concentration in Art Direction

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ADV 1101	Introduction to Media and Society	3
ADV 1102	Introduction to Advertising	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
KLN 1001	Klein First-Year Seminar	1
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		15
Spring		
ADV 1196	Persuasive Writing	3
ADV 1001	Introduction to Digital Design Tools for Advertising	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
KLN 1002	Klein College Introduction to Professional Development	1
GenEd Breadth Course		3-4
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
ADV 2151	Introduction to Art Direction: Visual Communication	3
ADV 1103	Digital Media and Advertising	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
Select two of the following:		6
ADV 2111	Introduction to Marketing	
ADV 2121	Introduction to Copywriting	
ADV 2131	Introduction to Media Planning	
ADV 2141	Introduction to Brand Strategy and Research	
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
Advertising Elective ¹		3
ADV 3052	Art Direction I: Concept & Layout ²	3
Electives		10
Credit Hours		16

Spring

ADV 3053	Art Direction II: Narrative and Multimedia	3
Select one of the following:		3
ADV 3171	Diamond Edge Communication ³	
ADV 3185	Advertising Internship ³	
Electives		9
Credit Hours		15

Year 4**Fall**

ADV 4197	Advanced Writing for Academic and Professional Communication	3
Select one of the following:		3
ADV 3002	Advertising and Society	
ADV 3006	Representation in the Media	
ADV 3007	Psychology of Advertising	
ADV 3012	Legal and Moral Issues in Advertising	
Electives		10
Credit Hours		16

Spring

Select one of the following:		3
ADV 4102	Advertising Campaigns	
ADV 4103	National Student Advertising Competition ³	
ADV 4064	Advertising Portfolio	3
Electives		10
Credit Hours		16
Total Credit Hours		124

1

See the list of elective options under Requirements. The courses students can take to fulfill their Advertising electives will vary from semester to semester.

2

ADV 3052 requires application and acceptance into the Art Direction concentration.

3

ADV 3171, ADV 3185 and ADV 4103 require special permission from instructor.

Optional Concentration

The **optional International Communication Concentration (ICC)** provides a theoretical and practical education in international and intercultural communication and media. This program allows students to develop sought-after competencies in cultural sensitivity and intercultural communication skills by encouraging students to reflect on their own cultural lenses. Students participating in the ICC program will be exposed to multiple international perspectives through internationally- and interculturally-oriented courses offered on Temple's domestic campuses and may be supplemented with study abroad coursework.

This concentration is restricted to Klein students only.

Requirements

To earn the International Communication Concentration transcript notation, a student must successfully complete a total of 18-20 credits of International / Intercultural studies courses, a maximum 9 credits of which may come from courses transferred into Temple, across 3 areas. Each course that fulfills a requirement for the concentration must be passed with a C- or better.

Code	Title	Credit Hours
Common Course		
Select one of the following:		3
CSI 3701	Intercultural Communication	
CSI 3703	Intercultural Communication in the Workplace	
Klein International/Intercultural courses		

Select three of the following:

9

Any ADV, CMST, CSI, JRN, MSP, or PR courses taken as part of a Klein Global Opportunities Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)

Any ADV, CMST, CSI, JRN, MSP, or PR Internship completed as part of a Klein Global Opportunities International Program

CSI 2401 Intercultural and Cross Cultural Conflict

CSI 3702 Communication, Culture and Identity

CSI 3703 Intercultural Communication in the Workplace (if not used to fulfill common course requirement above)

JRN 3254 International Reporting

JRN 3706 Journalism and Globalization

MSP 3471 Media and Cultural Differences

MSP 3572 Communication and Development

MSP 4453 Information Society

MSP 4496 Global Media

PR 2672 Global Communication and Leadership

International/Intercultural Electives outside of Klein

Note: Satisfying the GenEd World Society requirement by completing a Study Abroad does not also satisfy this requirement.

Choose any two (2) courses of the following:

6-8

Up to any two foreign language courses

Any non-Klein courses at the 2000-level or higher taken in a Klein Global Opportunities Int'l Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)

Any non-Klein internship taken in a Klein Global Opportunities International Program

Anthropology

ANTH 2238 Visual Anthropology of Modern Japan

or ASST 2238 Visual Anthropology of Modern Japan

ANTH 2374 The Anthropology of Modern China

or ASST 2374 The Anthropology of Modern China

ANTH 2361 Peoples of Latin America

or LAS 2361 Peoples of Latin America

ANTH 2362 Peoples and Cultures of the Caribbean

or LAS 2362 Peoples and Cultures of the Caribbean

Art History

ARTH 2102

ARTH 2105 Roman Art and Archaeology

ARTH 2129 Greek and Roman Sculpture

ARTH 2431 Early Modern Italy and Spain in the 17th Century

ARTH 2432 Northern and Global Baroque Art: Art in the Age of Rubens, Rembrandt, Vermeer

ARTH 2543 Transnational Impressionisms

ARTH 2642 Modern Art, 1900-1945

ARTH 2868 Arts of Asia

ARTH 1003 History of Art in Rome (Study Abroad - Rome)

ARTH 2135 Art and Culture in Ancient Rome (Study Abroad - Rome)

ARTH 2428 Wonders of Rome: Art and Culture of the Baroque Era (Study Abroad - Rome)

ARTH 2622 Galleries and Studios of Rome (Study Abroad - Rome)

ARTH 1801 Arts of Asia (Study Abroad - Japan)

ARTH 2815 Pre-Modern Japanese Art up to the Edo Period (Study Abroad - Japan)

Asian Studies

ASST 2001 Practical Asian Society and Culture

ASST 2011 Survey of Japanese Literature Before 1868

ASST 2015 Tokyo in Literature and Film

or JPNS 2015 Tokyo in Literature and Film

ASST 2021 Japanese Literature in Film

or JPNS 2021 Japanese Literature in Film

ASST 2351	Japan in a Changing World
ASST 2367	South Asia: Peoples, Culture, Experiences
ASST 2373	Japanese Culture
or ANTH 2373	Japanese Culture
ASST 2503	Introduction to Southeast Asia: Insular
ASST 2504	Introduction to Southeast Asia: Mainland
ASST 2511	Introduction to Asian Business
ASST 3247	Ideology and Social Change in Japan
or SOC 3247	Ideology and Social Change in Japan
ASST 3251	China: State and Society
or POLS 3251	China: State and Society
ASST 3522	Contemporary China
or HIST 3522	Contemporary China
ASST 3541	Japan Today
or HIST 3541	Japan Today
ASST 3542	Women and Society in Japan
or HIST 3542	Women and Society in Japan
Film & Media Arts	
FMA 4673	International Cinema
Geography & Urban Studies	
GUS 2032	Urban Systems in a Global Economy
GUS 2073	African Development
GUS 2074	East and South Asia
or ASST 2074	Geography of East and South Asia
GUS 3021	International Urbanization
GUS 3052	Environmental Problems in Asia
or ASST 3052	Environmental Problems in Asia
or ENST 3052	Environmental Problems in Asia
GUS 3073	Geography of Travel and Tourism
GUS 3307	Transportation & Culture
History	
HIST 2303	History of Central Europe, 1618-1871
HIST 2317	Central Europe Through Wars and Revolution, 1848-1989
HIST 2501	Introduction to East Asia: China
or ASST 2501	Introduction to East Asia: China
HIST 2502	Introduction to East Asia: Japan
or ASST 2502	Introduction to East Asia: Japan
HIST 2503	Introduction to Southeast Asia: Insular
or ASST 2503	Introduction to Southeast Asia: Insular
HIST 2504	Introduction to Southeast Asia: Mainland
or ASST 2504	Introduction to Southeast Asia: Mainland
HIST 2511	Introduction to African History
HIST 2514	Introduction to Latin America
HIST 2515	Civilization and Modernity in the Caribbean
or LAS 2515	Civilization and Modernity in the Caribbean
HIST 2516	Modern Islamic History
HIST 2611	Third World Issues through Film
HIST 3321	Irish History
HIST 3331	History of England
HIST 3362	Russia: Nationality and Empire
HIST 3363	Russia: Revolution, State, and Empire
HIST 3511	Southern Africa: A History

HIST 3521	The Chinese Revolution
HIST 3531	Modern India
HIST 3551	History of Vietnam
HIST 3561	History of Brazil
or LAS 3561	History of Brazil
HIST 3562	Contemporary Mexico
or LAS 3562	Contemporary Mexico
HIST 3571	Israel: History, Politics and Society
HIST 3572	Modern Middle East
HIST 3675	Third World Women's Lives
Jewish Studies	
JST 2706	Jewish Diaspora/Survey of Jewish History
Latin American Studies	
LAS 2101	Latin America through Film and Fiction
LAS 2231	Comparative Political Systems in Latin America
LAS 2502	Fundamentals of Latin American Business
or IB 2502	Fundamentals of Latin American Business
LAS 2514	Historical Continuity and Social Change in Latin America
LAS 3267	Sociology of Music: Nation, Race, Class and Gender in Argentina and Brazil
LAS 3601	"Other Voices" in Latin American Literature
LAS 3602	Caribbean Literature and Culture
LAS 3801	African Culture in Brazil
Political Science	
POLS 2211	Contemporary Politics of Europe
POLS 2212	Eastern Europe, Russia and the West
POLS 2231	Comparative Political Systems in Latin America
POLS 2255	Comparative Public Policy
POLS 2314	Politics of International Law
POLS 2321	Politics of the Global Economy
POLS 2331	International Organization
POLS 3212	British Government and Politics
POLS 3241	Mideast Politics
POLS 3252	East Asia and the United States
or ASST 3252	East Asia and the United States
POLS 3265	International Environmental Policy
or ENST 3265	International Environmental Policy
Religion	
REL 2002	Religion and Human Sexuality
REL 2007	Religion in Film
REL 2101	Indian Philosophies and Religions
or ASST 2101	Religions of India
REL 2102	Introduction to Buddhism
or ASST 2102	Introduction to Buddhism
REL 2201	Chinese Religions - Confucius to Mao
REL 2301	Zen Buddhism
or ASST 2301	Zen Buddhism
REL 2403	Introduction to Judaism
or JST 2403	Introduction to Judaism
REL 2447	Kabbalah and Mysticism
or JST 2447	Kabbalah and Mysticism
REL 2502	Jesus in the Media
REL 2606	Introduction to Islam

REL 2702	Religion in Contemporary Africa
REL 3011 or ASST 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
REL 3201 or ASST 3201	I-Ching, Tao, and Ch'an/Zen
REL 3301 or ASST 3301	Japanese Religions
REL 3411 or JST 3411	The Philosophies of Judaism
REL 3601	The Islamic State
REL 3602	Women in Islam
REL 3603	Islamic Mysticism
REL 3702	African Religions and New World Culture

Total Credit Hours**18-20**

Contact Information

Jack Klotz, MSP Faculty Advisor
 Annenberg Hall, Room 115
 215-204-5823
 jklotz@temple.edu

Advertising BA with Brand Strategy and Research Concentration

Overview

Advertising is a competitive, creative and challenging industry that sits at the intersection of media and society. The **Bachelor of Arts in Advertising**, offered by the Department of Advertising and Public Relations, provides students with an overall understanding and appreciation of the influence advertising and marketing communications have in business and the social and economic orders. Students become acquainted with the language, processes and opportunities within the industry, including potential roles in strategic planning, research, copywriting, art direction, and media buying and planning. The major is designed to stimulate curiosity, strengthen critical thinking and create more astute consumers whether they enter the field of advertising or not.

Advertising students at Temple University fall into clearly-defined groups:

- Students interested in advertising as a career;
- Students with creative talent in art, design, writing and strategic thinking and wish to express that talent in a professional career;
- Students who are broadly interested in media and the power of advertising;
- Students interested in marketing, sales or business, but who do not wish to major in business or finance.

Students **must select one of the following concentrations**:

- Account Management,
- Art Direction,
- Brand Strategy and Research,
- Copywriting, or
- Media Planning.

An optional concentration in International Communication is also available for this major.

Brand Strategy and Research Concentration

Students following the **Brand Strategy and Research concentration** receive training that helps develop skills in strategic thinking and planning, understanding consumer behavior, conducting surveys, focus groups and other forms of research, analyzing data, testing copy and studying America's changing demographics. Strong research and strategic thinking skills will prepare students for a wide variety of careers in corporations, research firms, marketing companies and advertising agencies. Students in Brand Strategy and Research take ADV 3031, ADV 3043 and ADV 4044. ADV 3042 is a recommended elective.

Campus Location: Main

Program Code: CO-ADV-BA

Contact Information

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Annenberg Hall, Room 300

Learn more about the Bachelor of Arts in Advertising.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

1. University requirements:
 - a. New students are required to complete the General Education (GenEd (p. 83)) curriculum.
 - b. All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are ADV 1196 and ADV 4197.
2. Low Klein College of Media and Communication requirements (p. 1184), including KLN 1001 and KLN 1002.
3. Minimum of 48 credits in Advertising courses.
4. A grade of C or higher must be attained in all required Advertising courses.
5. An overall GPA of 2.0 must be attained in the major.
6. No more than 12 semester hours of transfer credits may be applied to Advertising major requirements.

Advertising: Brand Strategy and Research Requirements

Code	Title	Credit Hours
1000-Level Core Requirements		
ADV 1101	Introduction to Media and Society	3
ADV 1102	Introduction to Advertising	3
ADV 1196	Persuasive Writing	3
ADV 1103	Digital Media and Advertising	3
2000-Level Core Requirements		
ADV 2141	Introduction to Brand Strategy and Research	3
Select two of the following:		6
ADV 2111	Introduction to Marketing	
ADV 2121	Introduction to Copywriting	
ADV 2131	Introduction to Media Planning	
ADV 2151	Introduction to Art Direction: Visual Communication	
Upper-Level Requirements		
ADV 4197	Advanced Writing for Academic and Professional Communication	3
Select one of the following:		3
ADV 3012	Legal and Moral Issues in Advertising	
ADV 3002	Advertising and Society	
ADV 3006	Representation in the Media	
ADV 3007	Psychology of Advertising	
Select one of the following:		3
ADV 3171	Diamond Edge Communication ¹	
ADV 3185	Advertising Internship ¹	
Select one of the following:		3

ADV 4102	Advertising Campaigns	
ADV 4103	National Student Advertising Competition ¹	
Brand Strategy & Research Requirements		
ADV 3031	Digital Analytics and Reporting	3
ADV 3043	Qualitative Advertising Research	3
ADV 4044	Account Planning	3
Advertising Electives		
Select a minimum of 6 credits from the following list:		6
ADV 1000	Topics in Advertising 1	
ADV 1001	Introduction to Digital Design Tools for Advertising	
ADV 2001	Intermediate Digital Design Tools for Advertising	
ADV 2052	Introduction to Typography	
ADV 2057	Creating and Filming Advertising from Script to Screen	
ADV 2102	Introduction to Pharmaceutical Advertising	
ADV 2103	Introduction to Web Design and Development for Advertising	
ADV 2104	Personal Branding	
ADV 3000	Topics in Advertising 3000	
ADV 3003	National Student Advertising Competition Preparation	
ADV 3004	Klein Online Marketing Challenge	
ADV 3042	Quantitative Advertising Research	
ADV 3011	Data Visualization and Advertising	
ADV 3009	ECHO Competition	
ADV 3008	Television Promotion: On-Air, Online, On Social	
ADV 3101	Creative Thinking for Advertising	

Total Credit Hours **48**

1

Requires special permission from instructor.

Internships or Diamond Edge Communications

All advertising majors are required to do either a professional internship or be involved with Diamond Edge Communications (DEC), our student-run ad agency. Both offer students valuable hands-on experience in actual advertising-related professional experiences. DEC works with local Philadelphia clients, under the supervision of an advertising professor, to develop strategic plans, research, digital and traditional creative materials, media plans and presentations. The internship program is carefully managed by our Internship Directors to help students find the best possible internship opportunities. The Internship Directors, faculty members and Klein's Director of Career Services will help students with preparation of résumés, cover letters, and LinkedIn pages. We will also guide students through the process of seeking and identifying quality internship opportunities.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Advertising with a Concentration in Brand Strategy and Research

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
ADV 1101	Introduction to Media and Society	3
ADV 1102	Introduction to Advertising	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
KLN 1001	Klein First-Year Seminar	1
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		15
Spring		
ADV 1103	Digital Media and Advertising	3

ADV 1196	Persuasive Writing	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
KLN 1002	Klein College Introduction to Professional Development	1
GenEd Breadth Course		3-4
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
ADV 2141	Introduction to Brand Strategy and Research	3
Select one of the following:		3
ADV 2111	Introduction to Marketing	
ADV 2121	Introduction to Copywriting	
ADV 2131	Introduction to Media Planning	
ADV 2151	Introduction to Art Direction: Visual Communication	
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
Select one of the following:		3
ADV 2111	Introduction to Marketing	
ADV 2121	Introduction to Copywriting	
ADV 2131	Introduction to Media Planning	
ADV 2151	Introduction to Art Direction: Visual Communication	
Advertising Elective ¹		3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
Advertising Elective ¹		3
ADV 3043	Qualitative Advertising Research	3
Electives		10
Credit Hours		16
Spring		
ADV 3031	Digital Analytics and Reporting	3
Select one of the following:		3
ADV 3171	Diamond Edge Communication ²	
ADV 3185	Advertising Internship ²	
Electives		9
Credit Hours		15
Year 4		
Fall		
ADV 4197	Advanced Writing for Academic and Professional Communication	3
Select one of the following:		3
ADV 3012	Legal and Moral Issues in Advertising	
ADV 3002	Advertising and Society	
ADV 3006	Representation in the Media	
ADV 3007	Psychology of Advertising	

Electives		10
	Credit Hours	16
Spring		
Select one of the following:		3
ADV 4102	Advertising Campaigns	
ADV 4103	National Student Advertising Competition ²	
ADV 4044	Account Planning	3
Electives		10
	Credit Hours	16
	Total Credit Hours	124

1

See the list of elective options under Requirements. The courses students can take to fulfill their Advertising electives will vary from semester to semester.

2

ADV 3171, ADV 3185, and ADV 4103 require special permission from instructor.

Optional Concentration

The **optional International Communication Concentration (ICC)** provides a theoretical and practical education in international and intercultural communication and media. This program allows students to develop sought-after competencies in cultural sensitivity and intercultural communication skills by encouraging students to reflect on their own cultural lenses. Students participating in the ICC program will be exposed to multiple international perspectives through internationally- and interculturally-oriented courses offered on Temple's domestic campuses and may be supplemented with study abroad coursework.

This concentration is restricted to Klein students only.

Requirements

To earn the International Communication Concentration transcript notation, a student must successfully complete a total of 18-20 credits of International / Intercultural studies courses, a maximum 9 credits of which may come from courses transferred into Temple, across 3 areas. Each course that fulfills a requirement for the concentration must be passed with a C- or better.

Code	Title	Credit Hours
Common Course		
Select one of the following:		3
CSI 3701	Intercultural Communication	
CSI 3703	Intercultural Communication in the Workplace	
Klein International/Intercultural courses		
Select three of the following:		9
Any ADV, CMST, CSI, JRN, MSP, or PR courses taken as part of a Klein Global Opportunities Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)		
Any ADV, CMST, CSI, JRN, MSP, or PR Internship completed as part of a Klein Global Opportunities International Program		
CSI 2401	Intercultural and Cross Cultural Conflict	
CSI 3702	Communication, Culture and Identity	
CSI 3703	Intercultural Communication in the Workplace (if not used to fulfill common course requirement above)	
JRN 3254	International Reporting	
JRN 3706	Journalism and Globalization	
MSP 3471	Media and Cultural Differences	
MSP 3572	Communication and Development	
MSP 4453	Information Society	
MSP 4496	Global Media	
PR 2672	Global Communication and Leadership	

International/Intercultural Electives outside of Klein

Note: Satisfying the GenEd World Society requirement by completing a Study Abroad does not also satisfy this requirement.

Choose any two (2) courses of the following:

6-8

Up to any two foreign language courses

Any non-Klein courses at the 2000-level or higher taken in a Klein Global Opportunities Int'l Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)

Any non-Klein internship taken in a Klein Global Opportunities International Program

Anthropology

ANTH 2238 Visual Anthropology of Modern Japan

or ASST 2238 Visual Anthropology of Modern Japan

ANTH 2374 The Anthropology of Modern China

or ASST 2374 The Anthropology of Modern China

ANTH 2361 Peoples of Latin America

or LAS 2361 Peoples of Latin America

ANTH 2362 Peoples and Cultures of the Caribbean

or LAS 2362 Peoples and Cultures of the Caribbean

Art History

ARTH 2102

ARTH 2105 Roman Art and Archaeology

ARTH 2129 Greek and Roman Sculpture

ARTH 2431 Early Modern Italy and Spain in the 17th Century

ARTH 2432 Northern and Global Baroque Art: Art in the Age of Rubens, Rembrandt, Vermeer

ARTH 2543 Transnational Impressionisms

ARTH 2642 Modern Art, 1900-1945

ARTH 2868 Arts of Asia

ARTH 1003 History of Art in Rome (Study Abroad - Rome)

ARTH 2135 Art and Culture in Ancient Rome (Study Abroad - Rome)

ARTH 2428 Wonders of Rome: Art and Culture of the Baroque Era (Study Abroad - Rome)

ARTH 2622 Galleries and Studios of Rome (Study Abroad - Rome)

ARTH 1801 Arts of Asia (Study Abroad - Japan)

ARTH 2815 Pre-Modern Japanese Art up to the Edo Period (Study Abroad - Japan)

Asian Studies

ASST 2001 Practical Asian Society and Culture

ASST 2011 Survey of Japanese Literature Before 1868

ASST 2015 Tokyo in Literature and Film

or JPNS 2015 Tokyo in Literature and Film

ASST 2021 Japanese Literature in Film

or JPNS 2021 Japanese Literature in Film

ASST 2351 Japan in a Changing World

ASST 2367 South Asia: Peoples, Culture, Experiences

ASST 2373 Japanese Culture

or ANTH 2373 Japanese Culture

ASST 2503 Introduction to Southeast Asia: Insular

ASST 2504 Introduction to Southeast Asia: Mainland

ASST 2511 Introduction to Asian Business

ASST 3247 Ideology and Social Change in Japan

or SOC 3247 Ideology and Social Change in Japan

ASST 3251 China: State and Society

or POLS 3251 China: State and Society

ASST 3522 Contemporary China

or HIST 3522 Contemporary China

ASST 3541 Japan Today

or HIST 3541 Japan Today

ASST 3542 Women and Society in Japan

or HIST 3542 Women and Society in Japan

Film & Media Arts

FMA 4673	International Cinema
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Geography & Urban Studies

GUS 2032	Urban Systems in a Global Economy
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GUS 2073	African Development
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GUS 2074	East and South Asia
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or ASST 2074	Geography of East and South Asia
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GUS 3021	International Urbanization
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GUS 3052	Environmental Problems in Asia
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or ASST 3052	Environmental Problems in Asia
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or ENST 3052	Environmental Problems in Asia
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GUS 3073	Geography of Travel and Tourism
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GUS 3307	Transportation & Culture
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History

HIST 2303	History of Central Europe, 1618-1871
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HIST 2317	Central Europe Through Wars and Revolution, 1848-1989
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HIST 2501	Introduction to East Asia: China
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or ASST 2501	Introduction to East Asia: China
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HIST 2502	Introduction to East Asia: Japan
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or ASST 2502	Introduction to East Asia: Japan
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HIST 2503	Introduction to Southeast Asia: Insular
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or ASST 2503	Introduction to Southeast Asia: Insular
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HIST 2504	Introduction to Southeast Asia: Mainland
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or ASST 2504	Introduction to Southeast Asia: Mainland
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HIST 2511	Introduction to African History
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HIST 2514	Introduction to Latin America
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HIST 2515	Civilization and Modernity in the Caribbean
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or LAS 2515	Civilization and Modernity in the Caribbean
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HIST 2516	Modern Islamic History
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HIST 2611	Third World Issues through Film
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HIST 3321	Irish History
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HIST 3331	History of England
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HIST 3362	Russia: Nationality and Empire
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HIST 3363	Russia: Revolution, State, and Empire
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HIST 3511	Southern Africa: A History
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HIST 3521	The Chinese Revolution
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HIST 3531	Modern India
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HIST 3551	History of Vietnam
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HIST 3561	History of Brazil
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or LAS 3561	History of Brazil
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HIST 3562	Contemporary Mexico
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or LAS 3562	Contemporary Mexico
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HIST 3571	Israel: History, Politics and Society
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HIST 3572	Modern Middle East
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HIST 3675	Third World Women's Lives
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Jewish Studies

JST 2706	Jewish Diaspora/Survey of Jewish History
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Latin American Studies

LAS 2101	Latin America through Film and Fiction
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LAS 2231	Comparative Political Systems in Latin America
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LAS 2502	Fundamentals of Latin American Business
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or IB 2502	Fundamentals of Latin American Business
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LAS 2514	Historical Continuity and Social Change in Latin America
LAS 3267	Sociology of Music: Nation, Race, Class and Gender in Argentina and Brazil
LAS 3601	"Other Voices" in Latin American Literature
LAS 3602	Caribbean Literature and Culture
LAS 3801	African Culture in Brazil
Political Science	
POLS 2211	Contemporary Politics of Europe
POLS 2212	Eastern Europe, Russia and the West
POLS 2231	Comparative Political Systems in Latin America
POLS 2255	Comparative Public Policy
POLS 2314	Politics of International Law
POLS 2321	Politics of the Global Economy
POLS 2331	International Organization
POLS 3212	British Government and Politics
POLS 3241	Mideast Politics
POLS 3252	East Asia and the United States
or ASST 3252	East Asia and the United States
POLS 3265	International Environmental Policy
or ENST 3265	International Environmental Policy
Religion	
REL 2002	Religion and Human Sexuality
REL 2007	Religion in Film
REL 2101	Indian Philosophies and Religions
or ASST 2101	Religions of India
REL 2102	Introduction to Buddhism
or ASST 2102	Introduction to Buddhism
REL 2201	Chinese Religions - Confucius to Mao
REL 2301	Zen Buddhism
or ASST 2301	Zen Buddhism
REL 2403	Introduction to Judaism
or JST 2403	Introduction to Judaism
REL 2447	Kabbalah and Mysticism
or JST 2447	Kabbalah and Mysticism
REL 2502	Jesus in the Media
REL 2606	Introduction to Islam
REL 2702	Religion in Contemporary Africa
REL 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
or ASST 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
REL 3201	I-Ching, Tao, and Ch'an/Zen
or ASST 3201	I-Ching, Tao, and Ch'an/Zen
REL 3301	Japanese Religions
or ASST 3301	Japanese Religions
REL 3411	The Philosophies of Judaism
or JST 3411	The Philosophies of Judaism
REL 3601	The Islamic State
REL 3602	Women in Islam
REL 3603	Islamic Mysticism
REL 3702	African Religions and New World Culture

Total Credit Hours
18-20

Contact Information

Jack Klotz, MSP Faculty Advisor

Annenberg Hall, Room 115
215-204-5823
jklotz@temple.edu

Advertising BA with Copywriting Concentration

Overview

Advertising is a competitive, creative and challenging industry that sits at the intersection of media and society. The **Bachelor of Arts in Advertising**, offered by the Department of Advertising and Public Relations, provides students with an overall understanding and appreciation of the influence advertising and marketing communications have in business and the social and economic orders. Students become acquainted with the language, processes and opportunities within the industry, including potential roles in strategic planning, research, copywriting, art direction, and media buying and planning. The major is designed to stimulate curiosity, strengthen critical thinking and create more astute consumers whether they enter the field of advertising or not.

Advertising students at Temple University fall into clearly-defined groups:

- Students interested in advertising as a career;
- Students with creative talent in art, design, writing and strategic thinking and wish to express that talent in a professional career;
- Students who are broadly interested in media and the power of advertising;
- Students interested in marketing, sales or business, but who do not wish to major in business or finance.

Students **must select one of the following concentrations**:

- Account Management,
- Art Direction,
- Brand Strategy and Research,
- Copywriting, or
- Media Planning.

An optional concentration in International Communication is also available for this major.

Copywriting Concentration

Copywriters are responsible for the words and ideas that drive marketing communications in all its forms. Students in the **Copywriting concentration** take three advanced courses to help develop their conceptual skills and writing talents. The Portfolio class provides students the opportunity to collaborate with Art Directors and produce a professional-quality portfolio. Students following the Copywriting concentration take ADV 3022, ADV 3023 and ADV 4064.

Campus Location: Main

Program Code: CO-ADV-BA

Contact Information

Kathy Mueller, Department Chair
215-204-4262
kmueller@temple.edu

Michelle Rambo, Senior Administrative Specialist
215-204-4268
michelle.rambo@temple.edu

Advertising and Public Relations Department Office
Annenberg Hall, Room 300

Learn more about the Bachelor of Arts in Advertising.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

1. University requirements:
 - a. New students are required to complete the General Education (GenEd (p. 83)) curriculum.
 - b. All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are ADV 1196 and ADV 4197.
2. Lew Klein College of Media and Communication requirements (p. 1184), including KLN 1001 and KLN 1002.
3. Minimum of 48 credits in Advertising courses.
4. A grade of C or higher must be attained in all required Advertising courses.
5. An overall GPA of 2.0 must be attained in the major.
6. No more than 12 semester hours of transfer credits may be applied to Advertising major requirements.

Advertising: Copywriting Requirements

Code	Title	Credit Hours
1000-Level Core Requirements		
ADV 1101	Introduction to Media and Society	3
ADV 1102	Introduction to Advertising	3
ADV 1196	Persuasive Writing	3
ADV 1103	Digital Media and Advertising	3
2000-Level Core Requirements		
ADV 2121	Introduction to Copywriting	3
Select two of the following:		6
ADV 2111	Introduction to Marketing	
ADV 2131	Introduction to Media Planning	
ADV 2141	Introduction to Brand Strategy and Research	
ADV 2151	Introduction to Art Direction: Visual Communication	
Upper-Level Requirements		
ADV 4197	Advanced Writing for Academic and Professional Communication	3
Select one of the following:		3
ADV 3171	Diamond Edge Communication ¹	
ADV 3185	Advertising Internship ¹	
Select one of the following:		3
ADV 4102	Advertising Campaigns	
ADV 4103	National Student Advertising Competition ¹	
Select one of the following:		3
ADV 3012	Legal and Moral Issues in Advertising	
ADV 3002	Advertising and Society	
ADV 3006	Representation in the Media	
ADV 3007	Psychology of Advertising	
Copywriting Requirements		
ADV 3022	Copywriting for Print and Web	3
ADV 3023	Copywriting for Radio, TV and Video	3
ADV 4064	Advertising Portfolio	3
Advertising Electives		
Select a minimum of 6 credits from the following list:		6
ADV 1000	Topics in Advertising 1	
ADV 1001	Introduction to Digital Design Tools for Advertising	
ADV 2001	Intermediate Digital Design Tools for Advertising	
ADV 2052	Introduction to Typography	
ADV 2057	Creating and Filming Advertising from Script to Screen	
ADV 2102	Introduction to Pharmaceutical Advertising	
ADV 2103	Introduction to Web Design and Development for Advertising	

ADV 2104	Personal Branding
ADV 3000	Topics in Advertising 3000
ADV 3003	National Student Advertising Competition Preparation
ADV 3042	Quantitative Advertising Research
ADV 3101	Creative Thinking for Advertising
ADV 3004	Klein Online Marketing Challenge
ADV 3008	Television Promotion: On-Air, Online, On Social
ADV 3011	Data Visualization and Advertising

Total Credit Hours**48**

1

Requires special permission from instructor.

Internships or Diamond Edge Communications

All advertising majors are required to do either a professional internship or be involved with Diamond Edge Communications (DEC), our student-run ad agency. Both offer students valuable hands-on experience in actual advertising-related professional experiences. DEC works with local Philadelphia clients, under the supervision of an advertising professor, to develop strategic plans, research, digital and traditional creative materials, media plans and presentations. The internship program is carefully managed by our Internship Directors to help students find the best possible internship opportunities. The Internship Directors, faculty members and Klein's Director of Career Services will help students with preparation of résumés, cover letters, and LinkedIn pages. We will also guide students through the process of seeking and identifying quality internship opportunities.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Advertising: Copywriting Concentration**Suggested Plan for New Students Starting in the 2023-2024 Academic Year**

Year 1		Credit Hours
Fall		
ADV 1101	Introduction to Media and Society	3
ADV 1102	Introduction to Advertising	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
KLN 1001	Klein First-Year Seminar	1
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		15
Spring		
ADV 1103	Digital Media and Advertising	3
ADV 1196	Persuasive Writing	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
KLN 1002	Klein College Introduction to Professional Development	1
GenEd Breadth Course		3-4
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
ADV 2121	Introduction to Copywriting	3
Select one of the following:		3
ADV 2111	Introduction to Marketing	
ADV 2131	Introduction to Media Planning	
ADV 2141	Introduction to Brand Strategy and Research	
ADV 2151	Introduction to Art Direction: Visual Communication	

IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
Select one of the following:		3
ADV 2111	Introduction to Marketing	
ADV 2131	Introduction to Media Planning	
ADV 2141	Introduction to Brand Strategy and Research	
ADV 2151	Introduction to Art Direction: Visual Communication	
Advertising Elective ¹		3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
Advertising Elective ¹		3
ADV 3022	Copywriting for Print and Web	3
Electives		10
Credit Hours		16
Spring		
ADV 3023	Copywriting for Radio, TV and Video	3
Select one of the following:		3
ADV 3171	Diamond Edge Communication ²	
ADV 3185	Advertising Internship ²	
Electives		9
Credit Hours		15
Year 4		
Fall		
ADV 4197	Advanced Writing for Academic and Professional Communication	3
Select one of the following:		3
ADV 3012	Legal and Moral Issues in Advertising	
ADV 3002	Advertising and Society	
ADV 3006	Representation in the Media	
ADV 3007	Psychology of Advertising	
Electives		10
Credit Hours		16
Spring		
Select one of the following:		3
ADV 4102	Advertising Campaigns	
ADV 4103	National Student Advertising Competition ²	
ADV 4064	Advertising Portfolio	3
Electives		10
Credit Hours		16
Total Credit Hours		124

1

See the list of elective options under Requirements. The courses students can take to fulfill their Advertising electives will vary from semester to semester.

2

ADV 3171, ADV 3185, and ADV 4103 require special permission from instructor.

Optional Concentration

The **optional International Communication Concentration (ICC)** provides a theoretical and practical education in international and intercultural communication and media. This program allows students to develop sought-after competencies in cultural sensitivity and intercultural communication skills by encouraging students to reflect on their own cultural lenses. Students participating in the ICC program will be exposed to multiple international perspectives through internationally- and interculturally-oriented courses offered on Temple's domestic campuses and may be supplemented with study abroad coursework.

This concentration is restricted to Klein students only.

Requirements

To earn the International Communication Concentration transcript notation, a student must successfully complete a total of 18-20 credits of International / Intercultural studies courses, a maximum 9 credits of which may come from courses transferred into Temple, across 3 areas. Each course that fulfills a requirement for the concentration must be passed with a C- or better.

Code	Title	Credit Hours
Common Course		
Select one of the following:		3
CSI 3701	Intercultural Communication	
CSI 3703	Intercultural Communication in the Workplace	
Klein International/Intercultural courses		
Select three of the following:		9
Any ADV, CMST, CSI, JRN, MSP, or PR courses taken as part of a Klein Global Opportunities Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)		
Any ADV, CMST, CSI, JRN, MSP, or PR Internship completed as part of a Klein Global Opportunities International Program		
CSI 2401	Intercultural and Cross Cultural Conflict	
CSI 3702	Communication, Culture and Identity	
CSI 3703	Intercultural Communication in the Workplace (if not used to fulfill common course requirement above)	
JRN 3254	International Reporting	
JRN 3706	Journalism and Globalization	
MSP 3471	Media and Cultural Differences	
MSP 3572	Communication and Development	
MSP 4453	Information Society	
MSP 4496	Global Media	
PR 2672	Global Communication and Leadership	
International/Intercultural Electives outside of Klein		
Note: Satisfying the GenEd World Society requirement by completing a Study Abroad does not also satisfy this requirement.		
Choose any two (2) courses of the following:		6-8
Up to any two foreign language courses		
Any non-Klein courses at the 2000-level or higher taken in a Klein Global Opportunities Int'l Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)		
Any non-Klein internship taken in a Klein Global Opportunities International Program		
Anthropology		
ANTH 2238 or ASST 2238	Visual Anthropology of Modern Japan	
ANTH 2374 or ASST 2374	The Anthropology of Modern China	
ANTH 2361 or LAS 2361	Peoples of Latin America	
ANTH 2362 or LAS 2362	Peoples and Cultures of the Caribbean	

Art History

ARTH 2102	
ARTH 2105	Roman Art and Archaeology
ARTH 2129	Greek and Roman Sculpture
ARTH 2431	Early Modern Italy and Spain in the 17th Century
ARTH 2432	Northern and Global Baroque Art: Art in the Age of Rubens, Rembrandt, Vermeer
ARTH 2543	Transnational Impressionisms
ARTH 2642	Modern Art, 1900-1945
ARTH 2868	Arts of Asia
ARTH 1003	History of Art in Rome (Study Abroad - Rome)
ARTH 2135	Art and Culture in Ancient Rome (Study Abroad - Rome)
ARTH 2428	Wonders of Rome: Art and Culture of the Baroque Era (Study Abroad - Rome)
ARTH 2622	Galleries and Studios of Rome (Study Abroad - Rome)
ARTH 1801	Arts of Asia (Study Abroad - Japan)
ARTH 2815	Pre-Modern Japanese Art up to the Edo Period (Study Abroad - Japan)

Asian Studies

ASST 2001	Practical Asian Society and Culture
ASST 2011	Survey of Japanese Literature Before 1868
ASST 2015	Tokyo in Literature and Film
or JPNS 2015	Tokyo in Literature and Film
ASST 2021	Japanese Literature in Film
or JPNS 2021	Japanese Literature in Film
ASST 2351	Japan in a Changing World
ASST 2367	South Asia: Peoples, Culture, Experiences
ASST 2373	Japanese Culture
or ANTH 2373	Japanese Culture
ASST 2503	Introduction to Southeast Asia: Insular
ASST 2504	Introduction to Southeast Asia: Mainland
ASST 2511	Introduction to Asian Business
ASST 3247	Ideology and Social Change in Japan
or SOC 3247	Ideology and Social Change in Japan
ASST 3251	China: State and Society
or POLS 3251	China: State and Society
ASST 3522	Contemporary China
or HIST 3522	Contemporary China
ASST 3541	Japan Today
or HIST 3541	Japan Today
ASST 3542	Women and Society in Japan
or HIST 3542	Women and Society in Japan

Film & Media Arts

FMA 4673	International Cinema
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Geography & Urban Studies

GUS 2032	Urban Systems in a Global Economy
GUS 2073	African Development
GUS 2074	East and South Asia
or ASST 2074	Geography of East and South Asia
GUS 3021	International Urbanization
GUS 3052	Environmental Problems in Asia
or ASST 3052	Environmental Problems in Asia
or ENST 3052	Environmental Problems in Asia
GUS 3073	Geography of Travel and Tourism
GUS 3307	Transportation & Culture

History

HIST 2303	History of Central Europe, 1618-1871
HIST 2317	Central Europe Through Wars and Revolution, 1848-1989
HIST 2501 or ASST 2501	Introduction to East Asia: China
HIST 2502 or ASST 2502	Introduction to East Asia: Japan
HIST 2503 or ASST 2503	Introduction to Southeast Asia: Insular
HIST 2504 or ASST 2504	Introduction to Southeast Asia: Mainland
HIST 2511	Introduction to African History
HIST 2514	Introduction to Latin America
HIST 2515 or LAS 2515	Civilization and Modernity in the Caribbean
HIST 2516	Modern Islamic History
HIST 2611	Third World Issues through Film
HIST 3321	Irish History
HIST 3331	History of England
HIST 3362	Russia: Nationality and Empire
HIST 3363	Russia: Revolution, State, and Empire
HIST 3511	Southern Africa: A History
HIST 3521	The Chinese Revolution
HIST 3531	Modern India
HIST 3551	History of Vietnam
HIST 3561 or LAS 3561	History of Brazil
HIST 3562 or LAS 3562	Contemporary Mexico
HIST 3571	Israel: History, Politics and Society
HIST 3572	Modern Middle East
HIST 3675	Third World Women's Lives
Jewish Studies	
JST 2706	Jewish Diaspora/Survey of Jewish History
Latin American Studies	
LAS 2101	Latin America through Film and Fiction
LAS 2231	Comparative Political Systems in Latin America
LAS 2502 or IB 2502	Fundamentals of Latin American Business
LAS 2514	Historical Continuity and Social Change in Latin America
LAS 3267	Sociology of Music: Nation, Race, Class and Gender in Argentina and Brazil
LAS 3601	"Other Voices" in Latin American Literature
LAS 3602	Caribbean Literature and Culture
LAS 3801	African Culture in Brazil
Political Science	
POLS 2211	Contemporary Politics of Europe
POLS 2212	Eastern Europe, Russia and the West
POLS 2231	Comparative Political Systems in Latin America
POLS 2255	Comparative Public Policy
POLS 2314	Politics of International Law
POLS 2321	Politics of the Global Economy
POLS 2331	International Organization

POLS 3212	British Government and Politics
POLS 3241	Mideast Politics
POLS 3252	East Asia and the United States
or ASST 3252	East Asia and the United States
POLS 3265	International Environmental Policy
or ENST 3265	International Environmental Policy
Religion	
REL 2002	Religion and Human Sexuality
REL 2007	Religion in Film
REL 2101	Indian Philosophies and Religions
or ASST 2101	Religions of India
REL 2102	Introduction to Buddhism
or ASST 2102	Introduction to Buddhism
REL 2201	Chinese Religions - Confucius to Mao
REL 2301	Zen Buddhism
or ASST 2301	Zen Buddhism
REL 2403	Introduction to Judaism
or JST 2403	Introduction to Judaism
REL 2447	Kabbalah and Mysticism
or JST 2447	Kabbalah and Mysticism
REL 2502	Jesus in the Media
REL 2606	Introduction to Islam
REL 2702	Religion in Contemporary Africa
REL 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
or ASST 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
REL 3201	I-Ching, Tao, and Ch'an/Zen
or ASST 3201	I-Ching, Tao, and Ch'an/Zen
REL 3301	Japanese Religions
or ASST 3301	Japanese Religions
REL 3411	The Philosophies of Judaism
or JST 3411	The Philosophies of Judaism
REL 3601	The Islamic State
REL 3602	Women in Islam
REL 3603	Islamic Mysticism
REL 3702	African Religions and New World Culture

Total Credit Hours

18-20

Contact Information

Jack Klotz, MSP Faculty Advisor
 Annenberg Hall, Room 115
 215-204-5823
 jklotz@temple.edu

Advertising BA with Media Planning Concentration

Overview

Advertising is a competitive, creative and challenging industry that sits at the intersection of media and society. The **Bachelor of Arts in Advertising**, offered by the Department of Advertising and Public Relations, provides students with an overall understanding and appreciation of the influence advertising and marketing communications have in business and the social and economic orders. Students become acquainted with the language, processes and opportunities within the industry, including potential roles in strategic planning, research, copywriting, art direction, and media buying and planning. The major is designed to stimulate curiosity, strengthen critical thinking and create more astute consumers whether they enter the field of advertising or not.

Advertising students at Temple University fall into clearly-defined groups:

- Students interested in advertising as a career;
- Students with creative talent in art, design, writing and strategic thinking and wish to express that talent in a professional career;
- Students who are broadly interested in media and the power of advertising;
- Students interested in marketing, sales or business, but who do not wish to major in business or finance.

Students **must select one of the following concentrations**:

- Account Management,
- Art Direction,
- Brand Strategy and Research,
- Copywriting, or
- Media Planning.

An optional concentration in International Communication is also available for this major.

Media Planning Concentration

This concentration prepares students for careers in digital and traditional media buying and planning and media sales. These skills are highly valued by corporations, media companies, media sales organizations, media buying and planning firms, research companies and advertising agencies. Students study Digital Analytics and Reporting (ADV 3031), Advertising Sales (ADV 3033) and Advanced Media Planning (ADV 4054).

Campus Location: Main

Program Code: CO-ADV-BA

Contact Information

Kathy Mueller, Department Chair
215-204-4262
kmueller@temple.edu

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Advertising and Public Relations Department Office
Annenberg Hall, Room 300

Learn more about the Bachelor of Arts in Advertising.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

1. University requirements:
 - a. New students are required to complete the General Education (GenEd (p. 83)) curriculum.
 - b. All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are ADV 1196 and ADV 4197.
2. Low Klein College of Media and Communication requirements (p. 1184), including KLN 1001 and KLN 1002.
3. Minimum of 48 credits in Advertising courses.
4. A grade of C or higher must be attained in all required Advertising courses.
5. An overall GPA of 2.0 must be attained in the major.
6. No more than 12 semester hours of transfer credits may be applied to Advertising major requirements.

Advertising: Media Planning Requirements

Code	Title	Credit Hours
1000-Level Core Requirements		
ADV 1101	Introduction to Media and Society	3
ADV 1102	Introduction to Advertising	3

ADV 1196	Persuasive Writing	3
ADV 1103	Digital Media and Advertising	3
2000-Level Core Requirements		
ADV 2131	Introduction to Media Planning	3
Select two of the following:		6
ADV 2111	Introduction to Marketing	
ADV 2121	Introduction to Copywriting	
ADV 2141	Introduction to Brand Strategy and Research	
ADV 2151	Introduction to Art Direction: Visual Communication	
Upper-Level Requirements		
ADV 4197	Advanced Writing for Academic and Professional Communication	3
Select one of the following:		3
ADV 3002	Advertising and Society	
ADV 3006	Representation in the Media	
ADV 3007	Psychology of Advertising	
ADV 3012	Legal and Moral Issues in Advertising	
Select one of the following:		3
ADV 3171	Diamond Edge Communication ¹	
ADV 3185	Advertising Internship ¹	
Select one of the following:		3
ADV 4102	Advertising Campaigns	
ADV 4103	National Student Advertising Competition ¹	
Media Planning Requirements		
ADV 3031	Digital Analytics and Reporting	3
ADV 3033	Advertising Sales	3
ADV 4054	Advanced Media Planning	3
Advertising Electives		
Select a minimum of 6 credits from the following list:		6
ADV 1000	Topics in Advertising 1	
ADV 1001	Introduction to Digital Design Tools for Advertising	
ADV 2001	Intermediate Digital Design Tools for Advertising	
ADV 2052	Introduction to Typography	
ADV 2057	Creating and Filming Advertising from Script to Screen	
ADV 2102	Introduction to Pharmaceutical Advertising	
ADV 2103	Introduction to Web Design and Development for Advertising	
ADV 2104	Personal Branding	
ADV 3000	Topics in Advertising 3000	
ADV 3003	National Student Advertising Competition Preparation	
ADV 3004	Klein Online Marketing Challenge	
ADV 3008	Television Promotion: On-Air, Online, On Social	
ADV 3011	Data Visualization and Advertising	
ADV 3042	Quantitative Advertising Research	
ADV 3101	Creative Thinking for Advertising	

Total Credit Hours**48**

1

Requires special permission from instructor.

Internships or Diamond Edge Communications

All advertising majors are required to do either a professional internship or be involved with Diamond Edge Communications (DEC), our student-run ad agency. Both offer students valuable hands-on experience in actual advertising-related professional experiences. DEC works with local Philadelphia clients, under the supervision of an advertising professor, to develop strategic plans, research, digital and traditional creative materials, media plans and presentations. The internship program is carefully managed by our Internship Directors to help students find the best possible internship opportunities.

The Internship Directors, faculty members and Klein's Director of Career Services will help students with preparation of résumés, cover letters, and LinkedIn pages. We will also guide students through the process of seeking and identifying quality internship opportunities.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Advertising with a Concentration in Media Planning

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ADV 1101	Introduction to Media and Society	3
ADV 1102	Introduction to Advertising	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
KLN 1001	Klein First-Year Seminar	1
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		15
Spring		
ADV 1103	Digital Media and Advertising	3
ADV 1196	Persuasive Writing	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
KLN 1002	Klein College Introduction to Professional Development	1
GenEd Breadth Course		3-4
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
ADV 2131	Introduction to Media Planning	3
Select one of the following:		3
ADV 2111	Introduction to Marketing	
ADV 2121	Introduction to Copywriting	
ADV 2141	Introduction to Brand Strategy and Research	
ADV 2151	Introduction to Art Direction: Visual Communication	
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
Select one of the following:		3
ADV 2111	Introduction to Marketing	
ADV 2121	Introduction to Copywriting	
ADV 2141	Introduction to Brand Strategy and Research	
ADV 2151	Introduction to Art Direction: Visual Communication	
Advertising Elective ¹		3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15

Year 3		
Fall		
Advertising Elective ¹		3
ADV 3031	Digital Analytics and Reporting	3
Electives		10
Credit Hours		16
Spring		
ADV 3033	Advertising Sales	3
Select one of the following:		3
ADV 3171	Diamond Edge Communication ²	
ADV 3185	Advertising Internship ²	
Electives		9
Credit Hours		15
Year 4		
Fall		
ADV 4197	Advanced Writing for Academic and Professional Communication	3
Select one of the following:		3
ADV 3012	Legal and Moral Issues in Advertising	
ADV 3002	Advertising and Society	
ADV 3006	Representation in the Media	
ADV 3007	Psychology of Advertising	
Electives		10
Credit Hours		16
Spring		
Select one of the following:		3
ADV 4102	Advertising Campaigns	
ADV 4103	National Student Advertising Competition ²	
ADV 4054	Advanced Media Planning	3
Electives		10
Credit Hours		16
Total Credit Hours		124

1

See the list of elective options under Requirements. The courses students can take to fulfill their advertising electives will vary from semester to semester.

2

ADV 3171, ADV 3185, and ADV 4103 require special permission from instructor.

Optional Concentration

The **optional International Communication Concentration (ICC)** provides a theoretical and practical education in international and intercultural communication and media. This program allows students to develop sought-after competencies in cultural sensitivity and intercultural communication skills by encouraging students to reflect on their own cultural lenses. Students participating in the ICC program will be exposed to multiple international perspectives through internationally- and interculturally-oriented courses offered on Temple's domestic campuses and may be supplemented with study abroad coursework.

This concentration is restricted to Klein students only.

Requirements

To earn the International Communication Concentration transcript notation, a student must successfully complete a total of 18-20 credits of International / Intercultural studies courses, a maximum 9 credits of which may come from courses transferred into Temple, across 3 areas. Each course that fulfills a requirement for the concentration must be passed with a C- or better.

Code	Title	Credit Hours
Common Course		
Select one of the following:		3
CSI 3701	Intercultural Communication	
CSI 3703	Intercultural Communication in the Workplace	
Klein International/Intercultural courses		
Select three of the following:		9
Any ADV, CMST, CSI, JRN, MSP, or PR courses taken as part of a Klein Global Opportunities Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)		
Any ADV, CMST, CSI, JRN, MSP, or PR Internship completed as part of a Klein Global Opportunities International Program		
CSI 2401	Intercultural and Cross Cultural Conflict	
CSI 3702	Communication, Culture and Identity	
CSI 3703	Intercultural Communication in the Workplace (if not used to fulfill common course requirement above)	
JRN 3254	International Reporting	
JRN 3706	Journalism and Globalization	
MSP 3471	Media and Cultural Differences	
MSP 3572	Communication and Development	
MSP 4453	Information Society	
MSP 4496	Global Media	
PR 2672	Global Communication and Leadership	
International/Intercultural Electives outside of Klein		
Note: Satisfying the GenEd World Society requirement by completing a Study Abroad does not also satisfy this requirement.		
Choose any two (2) courses of the following:		6-8
Up to any two foreign language courses		
Any non-Klein courses at the 2000-level or higher taken in a Klein Global Opportunities Int'l Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)		
Any non-Klein internship taken in a Klein Global Opportunities International Program		
Anthropology		
ANTH 2238 or ASST 2238	Visual Anthropology of Modern Japan	
ANTH 2374 or ASST 2374	The Anthropology of Modern China	
ANTH 2361 or LAS 2361	Peoples of Latin America	
ANTH 2362 or LAS 2362	Peoples and Cultures of the Caribbean	
Art History		
ARTH 2102		
ARTH 2105	Roman Art and Archaeology	
ARTH 2129	Greek and Roman Sculpture	
ARTH 2431	Early Modern Italy and Spain in the 17th Century	
ARTH 2432	Northern and Global Baroque Art: Art in the Age of Rubens, Rembrandt, Vermeer	
ARTH 2543	Transnational Impressionisms	
ARTH 2642	Modern Art, 1900-1945	
ARTH 2868	Arts of Asia	
ARTH 1003	History of Art in Rome (Study Abroad - Rome)	
ARTH 2135	Art and Culture in Ancient Rome (Study Abroad - Rome)	
ARTH 2428	Wonders of Rome: Art and Culture of the Baroque Era (Study Abroad - Rome)	
ARTH 2622	Galleries and Studios of Rome (Study Abroad - Rome)	
ARTH 1801	Arts of Asia (Study Abroad - Japan)	
ARTH 2815	Pre-Modern Japanese Art up to the Edo Period (Study Abroad - Japan)	
Asian Studies		

ASST 2001	Practical Asian Society and Culture
ASST 2011	Survey of Japanese Literature Before 1868
ASST 2015	Tokyo in Literature and Film
or JPNS 2015	Tokyo in Literature and Film
ASST 2021	Japanese Literature in Film
or JPNS 2021	Japanese Literature in Film
ASST 2351	Japan in a Changing World
ASST 2367	South Asia: Peoples, Culture, Experiences
ASST 2373	Japanese Culture
or ANTH 2373	Japanese Culture
ASST 2503	Introduction to Southeast Asia: Insular
ASST 2504	Introduction to Southeast Asia: Mainland
ASST 2511	Introduction to Asian Business
ASST 3247	Ideology and Social Change in Japan
or SOC 3247	Ideology and Social Change in Japan
ASST 3251	China: State and Society
or POLS 3251	China: State and Society
ASST 3522	Contemporary China
or HIST 3522	Contemporary China
ASST 3541	Japan Today
or HIST 3541	Japan Today
ASST 3542	Women and Society in Japan
or HIST 3542	Women and Society in Japan
Film & Media Arts	
FMA 4673	International Cinema
Geography & Urban Studies	
GUS 2032	Urban Systems in a Global Economy
GUS 2073	African Development
GUS 2074	East and South Asia
or ASST 2074	Geography of East and South Asia
GUS 3021	International Urbanization
GUS 3052	Environmental Problems in Asia
or ASST 3052	Environmental Problems in Asia
or ENST 3052	Environmental Problems in Asia
GUS 3073	Geography of Travel and Tourism
GUS 3307	Transportation & Culture
History	
HIST 2303	History of Central Europe, 1618-1871
HIST 2317	Central Europe Through Wars and Revolution, 1848-1989
HIST 2501	Introduction to East Asia: China
or ASST 2501	Introduction to East Asia: China
HIST 2502	Introduction to East Asia: Japan
or ASST 2502	Introduction to East Asia: Japan
HIST 2503	Introduction to Southeast Asia: Insular
or ASST 2503	Introduction to Southeast Asia: Insular
HIST 2504	Introduction to Southeast Asia: Mainland
or ASST 2504	Introduction to Southeast Asia: Mainland
HIST 2511	Introduction to African History
HIST 2514	Introduction to Latin America
HIST 2515	Civilization and Modernity in the Caribbean
or LAS 2515	Civilization and Modernity in the Caribbean
HIST 2516	Modern Islamic History

HIST 2611	Third World Issues through Film
HIST 3321	Irish History
HIST 3331	History of England
HIST 3362	Russia: Nationality and Empire
HIST 3363	Russia: Revolution, State, and Empire
HIST 3511	Southern Africa: A History
HIST 3521	The Chinese Revolution
HIST 3531	Modern India
HIST 3551	History of Vietnam
HIST 3561	History of Brazil
or LAS 3561	History of Brazil
HIST 3562	Contemporary Mexico
or LAS 3562	Contemporary Mexico
HIST 3571	Israel: History, Politics and Society
HIST 3572	Modern Middle East
HIST 3675	Third World Women's Lives
Jewish Studies	
JST 2706	Jewish Diaspora/Survey of Jewish History
Latin American Studies	
LAS 2101	Latin America through Film and Fiction
LAS 2231	Comparative Political Systems in Latin America
LAS 2502	Fundamentals of Latin American Business
or IB 2502	Fundamentals of Latin American Business
LAS 2514	Historical Continuity and Social Change in Latin America
LAS 3267	Sociology of Music: Nation, Race, Class and Gender in Argentina and Brazil
LAS 3601	"Other Voices" in Latin American Literature
LAS 3602	Caribbean Literature and Culture
LAS 3801	African Culture in Brazil
Political Science	
POLS 2211	Contemporary Politics of Europe
POLS 2212	Eastern Europe, Russia and the West
POLS 2231	Comparative Political Systems in Latin America
POLS 2255	Comparative Public Policy
POLS 2314	Politics of International Law
POLS 2321	Politics of the Global Economy
POLS 2331	International Organization
POLS 3212	British Government and Politics
POLS 3241	Mideast Politics
POLS 3252	East Asia and the United States
or ASST 3252	East Asia and the United States
POLS 3265	International Environmental Policy
or ENST 3265	International Environmental Policy
Religion	
REL 2002	Religion and Human Sexuality
REL 2007	Religion in Film
REL 2101	Indian Philosophies and Religions
or ASST 2101	Religions of India
REL 2102	Introduction to Buddhism
or ASST 2102	Introduction to Buddhism
REL 2201	Chinese Religions - Confucius to Mao
REL 2301	Zen Buddhism
or ASST 2301	Zen Buddhism

REL 2403	Introduction to Judaism
or JST 2403	Introduction to Judaism
REL 2447	Kabbalah and Mysticism
or JST 2447	Kabbalah and Mysticism
REL 2502	Jesus in the Media
REL 2606	Introduction to Islam
REL 2702	Religion in Contemporary Africa
REL 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
or ASST 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
REL 3201	I-Ching, Tao, and Ch'an/Zen
or ASST 3201	I-Ching, Tao, and Ch'an/Zen
REL 3301	Japanese Religions
or ASST 3301	Japanese Religions
REL 3411	The Philosophies of Judaism
or JST 3411	The Philosophies of Judaism
REL 3601	The Islamic State
REL 3602	Women in Islam
REL 3603	Islamic Mysticism
REL 3702	African Religions and New World Culture

Total Credit Hours

18-20

Contact Information

Jack Klotz, MSP Faculty Advisor
 Annenberg Hall, Room 115
 215-204-5823
 jklotz@temple.edu

Audio and Live Entertainment BA

Overview

During the first two decades of this millennium, the entertainment industries have undergone a profound transformation. Audio and popular music, in particular, have become more intertwined with and dependent upon media industries. Music consumers have shifted their focus from ownership to access and from artifacts to experiences. The recording industry has evolved away from marketing products to the consumer in favor of licensing the use of recordings to media platforms and outlets, and a focus on providing live music experiences has intensified, just as corporate events have grown increasingly media intensive. As social media provide performing artists with new channels for connecting with potential audiences, and as streaming services present new outlets and revenue streams (albeit small ones) for recorded music content, the number of popular music-oriented media properties (e.g., *American Idol*, *The Masked Singer*, *A Star Is Born*, *Bohemian Rhapsody*, *Rocket Man*, etc.) has dramatically increased.

Popular music is, now more than ever, part of the media landscape, and those earning their livelihoods in the popular music industries have never been more heavily invested in and dependent on media to provide sources of revenue.

To better prepare the next generation of media professionals for this new landscape, the **Bachelor of Arts in Audio and Live Entertainment (ALE)** is located at the intersection of media, live events, music and business. Offered by the Department of Media Studies and Production, its curriculum involves coursework in the Lew Klein College of Media and Communication, the School of Sport, Tourism and Hospitality Management, the Boyer College of Music and Dance, and the Fox School of Business and Management.

This program is ideal for students aspiring to be audio engineers, content creators, managers, mastering engineers, media entrepreneurs, publishers, promoters or recording artists. Students are immersed in the conception, creation, distribution, management and marketing of recorded audiobooks, concerts, music, nightclub performances, podcasts and more.

Campus Location: Main

Program Code: CO-ALE-BA

Contact Information

Jack Klotz, Media Studies and Production Vice Chair
 Annenberg Hall, Room 205
 215-204-5823

jack.klotz@temple.edu

Learn more about the Bachelor of Arts in Audio and Live Entertainment.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The degree of Bachelor of Arts may be conferred upon a student majoring in Audio and Live Entertainment (ALE) by the recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours of credit with a cumulative grade point average of 2.0 or higher overall and in the major.

Students must meet:

1. University requirements
 - All students are required to complete the General Education (GenEd (p. 83)) curriculum.
 - All students must take a minimum of two writing-intensive (WI) courses in the major at Temple University. Whenever possible, it is recommended that students select these WI courses from courses that directly satisfy a specific ALE requirement to ease the path to program completion.
2. Lew Klein College of Media and Communication requirements (p. 1184), including KLN 1001 and KLN 1002.
3. Minimum of 47 credits in the major / maximum of 68 credits in the major (total of MSP, MUST, HRM, LGLS, SGM, and STHM).
4. Each course that fulfills a requirement for the major must be passed with a C- or better.
5. All prerequisites must be met unless exempted in writing.
6. No more than 20 transfer credits may be applied to the Audio and Live Entertainment major.
7. Total number of credits taken in internship, practicum, independent study, and independent project courses may not exceed 12 credits total.

Audio and Live Entertainment Major Requirements

Code	Title	Credit Hours
Foundation Courses ¹		
MSP 1701	Introduction to Media Production	3
MUST 1701	Music Theory for Non-Music Majors	2
MSP 2663	The Recording Industry and Music Business	3
Music and Media History		
Select a minimum of one of the following:		3
MSP 3297	History of Electronic Media (WI)	
MUST 2113	History of Pop	
Audio Production		
Select a minimum of one of the following:		3-4
MSP 2751	Audio for Media	
MUST 4713	Sound Recording	
Entertainment Industries Fundamentals		
Select a minimum of one of the following:		3
MSP 1655	Introduction to Media Business	
STHM 1113	Foundations of Experience Design and Management	
Professional Development Requirements		
MSP 4039	Senior Seminar ²	3
Select one of the following Experiential Learning Options: ³		3-4
MSP 4687	Recording Industry Practicum	
MSP 4785	Internship	
Professional Focus Courses		
Select a minimum of 24 credit hours from the following courses, including no more than two (2) courses at the 1000 or 2000 level. ³		24
In Audio and Live Entertainment		
ALE 3565	Music Publishing	
ALE 4565	Artist Management	
ALE 4571	International Studies in Media and Communication	

ALE 4755	Advanced Live Sound
In Media Studies and Production	
MSP 2741	Introduction to Internet Studies and Web Authoring
MSP 3663	Marketing Music and Media
MSP 3705	Sound for Visual Media
MSP 3751	Studio Music Recording Techniques
MSP 3755	Live Sound Production
MSP 3771	Podcast and Radio Production
MSP 4614	Creating a Media Business
MSP 4663	Art and Business of Recording
MSP 4687	Recording Industry Practicum
MSP 4696	Communication in Media Organizations
MSP 4741	Emergent Media Production
MSP 4751	Audio Mixing
MSP 4753	Audio Mastering
In the School of Sport, Tourism, and Hospitality Management	
STHM 2401	Foundations of Event and Entertainment Management
STHM 3424	Business of Social Events and Weddings
STHM 3425	Event and Entertainment Operations
STHM 3428	Event and Entertainment Revenues
STHM 3429	Entertainment Management
STHM 4401	Digital Portfolio Creation
STHM 4415	The Event Experience
THM 3396	Marketing in Tourism and Hospitality (WI)
THM 4398	Contemporary Issues in Tourism, Hospitality and Event Management (WI)
Note: STHM 2401, STHM 3425, STHM 3428, and STHM 4415 combine for an Event and Entertainment Management Certificate in STHM that is available to ALE students. Limiting electives to 30 credits will provide sufficient space to complete this certificate without counting any course for more than one requirement.	
Note also: STHM 2401, STHM 3424, STHM 3425, STHM 3428, STHM 3429, and STHM 4415 combine for an Event and Entertainment Management Minor in STHM that is available to ALE students. Limiting electives to 24 credits will provide sufficient space to complete this minor without counting any course for more than one requirement.	
In the Boyer College of Music and Dance	
MUST 1705	Music Theory for Non-Music Majors II
MUST 4713	Sound Recording
MUST 4714	Sound Editing
MUST 4725	Advanced Audio Production
MUST 4762	Introduction to Music Technology for Non-Majors
Note: MUST 4713, MUST 4714, MUST 4725, and MUST 4762 combine for a Music Technology Certificate in Boyer that is available to ALE students. Limiting electives to 30 credits will provide sufficient space to complete this certificate without counting any course for more than one requirement.	
Note also: The Boyer College of Music and Dance welcomes ALE students to participate in Boyer's non-major, non-auditioned ensembles: OWLchestra, Temple University Night Owls Campus Community Band (TUNO), Temple University Swinging Owls 6 & 8, and Temple University Singing Owls Community Choir.	
In the Fox School of Business	
BA 2196	Business Communications
HRM 1101	Leadership and Organizational Management
LGLS 3509	Entertainment Law
SGM 3501	Entrepreneurial and Innovative Thinking
SGM 3503	Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas

Total Credit Hours**47-49**

1

Foundation courses must be completed within the first 45 credits at Temple University. Students transferring into Temple must complete at least one Audio and Live Entertainment foundation course at Temple, unless exempted in writing by the chair of the department.

2

Taken during final 30 credits.

3

It is recommended that these are chosen in consultation with an Advisor.

Note: Courses offered in various categories can only be counted once.

About the Professional Development Requirements

The academic experience for all Audio and Live Entertainment majors culminates with the Professional Development requirements, which include MSP 4039 Senior Seminar (3 s.h.) and one of the Experiential Learning Options (3-4 credits). Together, these courses provide students with hands-on and practical training in the field while allowing them the opportunity to explore their potential professional futures.

Experiential Learning Option: MSP 4785 Internship

Internship opportunities exist locally (at virtually every media-oriented organization in the greater Philadelphia region), nationally (in New York City, Los Angeles, Chicago, and other U.S. media markets), and internationally (in London, Dublin, Paris, Barcelona, Hong Kong, and Tokyo through the Lew Klein College of Media and Communication's Global Opportunities Program and Temple's Education Abroad Office). Students who wish to enroll in a second internship as an elective can take MSP 4786 for 1 to 3 credit hours. NOTE: To be eligible for an internship, students must obtain an appropriate internship placement for the term of registration (assistance is available), have Junior or Senior standing, a minimum GPA of 3.00, have completed all three ALE foundation courses with a minimum grade of C-, and official approval by the MSP Internship Coordinator via submission of the Internship Verification Form, and once determined eligible, the Site Verification Form.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Audio and Live Entertainment

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MSP 1701	Introduction to Media Production	3
MUST 1701	Music Theory for Non-Music Majors	2
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
GenEd Breadth Course		3
KLN 1001	Klein First-Year Seminar	1
Credit Hours		16
Spring		
MSP 2663	The Recording Industry and Music Business	3
ALE Audio Production Requirement		3-4
GenEd Breadth Course		3
GenEd Breadth Course		3
KLN 1002	Klein College Introduction to Professional Development	1
ALE or Non-ALE Electives		3-2
Credit Hours		16
Year 2		
Fall		
ALE Professional Focus (Option 1) ¹		3
ALE Music & Media History Requirement ¹		3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		16

Spring

ALE Professional Focus (Option 2) ¹		3
ALE Entertainment Industries Fundamentals Requirement		3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15

Year 3**Fall**

ALE Professional Focus (Option 3) ¹		3
ALE Professional Focus (Option 4) ¹		3
Non-ALE Electives		9
Credit Hours		15

Spring

ALE Professional Focus (Option 5) ¹		3
ALE Professional Focus (Option 6) ¹		3
ALE or Non-ALE Electives		9
Credit Hours		15

Year 4**Fall**

ALE Professional Focus (Option 7) ¹		3
MSP 4039	Senior Seminar	3
ALE or Non-ALE Electives		9
Credit Hours		15

Spring

ALE Professional Focus (Option 8) ¹		3
Experiential Learning Option (Internship or Practicum) ²		3-4
Non-ALE Electives		10-9
Credit Hours		16
Total Credit Hours		124

1

All students are required to take at least two writing-intensive (WI) courses in their major. This course area includes at least one WI course option. Whenever possible, it is recommended that students select these WI courses from those that also directly satisfy one of their specific ALE requirements, since that will provide a more efficient use of credits and ease the path to program completion.

2

To be eligible for an internship, students must obtain an appropriate internship placement for the term of registration (assistance is available), have Junior or Senior standing, a minimum GPA of 3.00, have completed all three ALE foundation courses with a minimum grade of C-, and official approval by the MSP Internship Coordinator via submission of the Internship Verification Form, and once determined eligible, the Site Verification Form.

Suggested Academic Plan for Transfer Students with 60+ Credits

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Year 1**Fall**

		Credit Hours
MSP 1701	Introduction to Media Production	3
MUST 1701	Music Theory for Non-Music Majors	2
ALE Professional Focus (Option 1) ¹		3
ALE Professional Focus (Option 2) ¹		3
ALE Music & Media History Requirement ¹		3
KLN 2001	Klein College Experience	1
Credit Hours		15

Spring

MSP 2663	The Recording Industry and Music Business	3
ALE Audio Production Requirement		3-4
ALE Professional Focus (Option 3) ¹		3
ALE Professional Focus (Option 4) ¹		3
ALE Entertainment Industries Fundamentals Requirement		3
KLN 1002	Klein College Introduction to Professional Development	1
Credit Hours		16-17

Year 2**Fall**

ALE Professional Focus (Option 5) ¹		3
ALE Professional Focus (Option 6) ¹		3
ALE Professional Focus (Option 7) ¹		3
MSP 4039	Senior Seminar	3
Electives or Remaining GenEd Requirement		5-4
Credit Hours		17-16

Spring

ALE Professional Focus (Option 8) ¹		3
Experiential Learning Option (Internship or Practicum) ²		3-4
Electives or Remaining GenEd Requirement		10-9
Credit Hours		16
Total Credit Hours		64

1

All students are required to take at least two writing-intensive (WI) courses in their major. This course area includes at least one WI course option. Whenever possible, it is recommended that students select these WI courses from those that also directly satisfy one of their specific ALE requirements, since that will provide a more efficient use of credits and ease the path to program completion.

2

To be eligible for an internship, students must obtain an appropriate internship placement for the term of registration (assistance is available), have Junior or Senior standing, a minimum GPA of 3.00, have completed all three ALE foundation courses with a minimum grade of C-, and official approval by the MSP Internship Coordinator via submission of the Internship Verification Form, and once determined eligible, the Site Verification Form.

Children's Media Certificate

Overview

The **Certificate in Children's Media**, offered by the Department of Media Studies and Production, gives Temple University students the opportunity to gain experience and expertise in the fields of journalism, advertising, public relations, media and communication by completing a minimum of 13 credit hours in courses that focus on children, child development and children's media.

The Children's Media Certificate is open to all students. In addition to Klein College students, students majoring in education, psychology and other areas focused on children may be interested in the certificate.

Campus Location: Main

Program Code: CO-CHME-CERT

Contact Information

Sherri Hope Culver
215-204-9716
sherri.hope.culver@temple.edu

Learn more about the undergraduate certificate in Children's Media.

Requirements

The Certificate in Children's Media requires a minimum of 13 credit hours. Four courses are required: three courses (3 credits per course) plus a capstone (1 credit), for a total of 10 credits. In addition, one course must be selected from the list of electives. The elective course must be outside the student's major. Required courses may count toward the student's major or toward the certificate, but not toward both.

Students must have a sophomore standing to begin work on the certificate. All students must be in good academic standing with a 3.0 cumulative average to pursue the certificate.

Code	Title	Credit Hours
Required Courses		
MSP 1251	The Children's Media Industry	3
MSP 2451	The Influence of Media on Children	3
or ADV 2451	The Influence of Media on Children	
ADV 3006	Representation in the Media	3
MSP 4259	Capstone in Children's Media	1
Electives		
Select one (1) course outside your major from the following options:		3
Within Klein College:		
KLN 0873	Media in a Hyper-Mediated World	
CSI 3702	Communication, Culture and Identity	
JRN 2702	News Literacy	
JRN 3101	Journalism Law and Ethics	
JRN 3704	Ethical Issues in Journalism	
MSP 1001	Video Production for Non-Majors	
MSP 2701	Intermediate Video Production	
MSP 2751	Audio for Media	
MSP 2889	Field Experience in Youth Media and Media Literacy	
MSP 3225	Educational Multimedia Production	
MSP 3471	Media and Cultural Differences	
MSP 3771	Podcast and Radio Production	
MSP 4182	Independent Study	
MSP 4252	Law and Ethics of Digital Media	
MSP 4497	Media and Children	
MSP 4741	Emergent Media Production	
MSP 3590	Intermediate Topics in Media (The Children's Media Industry: Trends and Opportunities [Study Away])	
PR 2551	Research Methods	
Outside of Klein College:		
SOC 2168	Sociology of Popular Culture	
ENG 2112	Children's Literature and Folklore	
PSY 1001	Introduction to Psychology	
ANTH 0817	Youth Cultures	
or SOC 0817	Youth Cultures	
or EDUC 0817	Youth Cultures	
or EDUC 0917	Honors Youth Cultures	
EDUC 0819	Tweens and Teens	
ECED 2101	Child Development, Birth to Nine	
ECED 4106	The Learning Community: Family and Community Relationships	
EDUC 4441	Discourse Practices in Diverse Communities	
JPNS 2017	Stories of Parents and Children in Japanese Literature and Film	
SPED 2231	Introduction to Special Education	
Total Credit Hours		13

Communication and Activism Minor

Overview

The **Minor in Communication and Activism**, offered by the Department of Communication and Social Influence, provides students with theories and skills necessary for becoming effective, conscientious, civically minded agents of social change who are capable of communicating across a variety of issues and contexts and within a multicultural and multi-ethnic society.

The Communication and Activism minor is for students who are interested in public advocacy, politics, campaign management, community organizing and community relations, government communication, law and judiciary careers, organizational development, social movement leadership, and political and nonprofit lobbying. The minor complements such majors as sociology, political science, criminal justice, social work, civil engineering, environmental studies, and community development.

Upon completing this minor, students should be able to:

- Identify, analyze, and address important social, cultural, political, and/or economic issues that are in need of remediation.
- Develop strategies and tactics for improving, solving, and/or intervening into those issues.
- Develop various messages and use various modes of communication for addressing a diversity of audiences across a variety of contexts.
- Develop a social justice sensibility that demonstrates concern for communities and populations that are under-served, under-sourced, and/or under-represented.

The minor is open to all Temple undergraduate students with a cumulative GPA of 2.5 or better. Students majoring in Communication and Social Influence (CSI) are not eligible for the minor. However, students enrolled in the minor can choose to roll over their minor credits if they want to change their major to CSI. Students with a Communication Studies major (CMST) are eligible for the minor.

Campus Location: Main

Contact Information

Heather LaMarre, PhD, Chair
Weiss Hall, Room 216A
215-204-3152

Learn more about the Communication and Activism minor.

Requirements

Code	Title	Credit Hours
CSI 1113	Persuasion	3
CSI 2111	Argumentation and Advocacy	3
Choose one of the following:		3
CSI 2403	Civil Disobedience	
CSI 2296	Resistance, Protests, and Social Movements	
CSI 3401	Social Activism and Community Organizing	3
Choose two of the following:		6
CSI 2201	The Meaningful Enjoyment of Civic Life	
CSI 2401	Intercultural and Cross Cultural Conflict	
CSI 2602	Rhetoric of Hate and Violence	
CSI 2696	Risk Communication	
CSI 3100	Special Topics in Communication and Social Influence	
CSI 3187	Practicum	
CSI 3189	Field Experience	
CSI 3201	Rhetoric and Civic Culture	
CSI 3296	Speechwriting	
CSI 3601	Misperceptions and Misinformation	
CSI 3602	Communicating Science in Today's World	
CSI 3702	Communication, Culture and Identity	
CSI 4402	Multiparty Conflict Processes: Dialogue, Facilitation and Multiparty Mediation	

CSI 4601

Narrative Persuasion

Total Credit Hours

18

Communication and Social Influence BA

Overview

Utilizing Temple's unique setting as an urban institution, the **Bachelor of Arts in Communication and Social Influence** (CSI), which is offered by the Department of Communication and Social Influence, prepares students to be public communication leaders in urban settings defined by their civic engagement, risk and conflict management. The civic engagement area focuses on communication of socio-political activities and community advocacy. The risk area deals with communication about health, science, environment, and security. The conflict area focuses on community, institutional, organizational, and conflict analyses and appropriate conflict management. Infused across these areas is a core aspect of urban environments—social justice and diversity. The Communication and Social Influence major shapes tomorrow's communication professionals who wish to help bring about positive social change, and prepares students for law school and graduate programs, as well as working in the public, private and non-profit sectors.

An optional concentration in International Communication is available for this major.

Campus Location: Main

Program Code: CO-CSI-BA

Contact Information

R. Lance Holbert, Chair
Thomas Wright, Assistant Chair

Demaris A. Watford, Senior Administrative Specialist
dwatford@temple.edu

Communication and Social Influence Department Office
Weiss Hall, Room 216
215-204-7540

Learn more about the Bachelor of Arts in Communication and Social Influence.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The degree of Bachelor of Arts may be conferred upon a student majoring in Communication and Social Influence by the recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours of credit with a cumulative grade point average of 2.0 overall and in the major.

Students must meet:

- University requirements:
 - All students are required to complete the General Education (GenEd (p. 83)) curriculum.
 - All students must take a minimum of two writing-intensive courses in their major at Temple University. The specific writing-intensive course options for this major are CSI 2296, CSI 2696, CSI 3296, and CSI 3896.
- Levin College of Media and Communication requirements (p. 1184), including KLN 1001 and KLN 1002.
- Minimum 45 credit hours in Communication and Social Influence.
- Maximum 59 credit hours may be taken in Communication and Social Influence courses.
- A grade of C- or higher must be attained in all required Communication and Social Influence courses.
- No more than 12 semester hours of transfer credits may be applied to Communication and Social Influence requirements.
- No more than 8 credits may be taken in Kinesiology and Dance activities courses.

Communication and Social Influence Requirements

Code	Title	Credit Hours
CSI Core Courses		
CSI 1111 or CSI 1911	Introduction to Public Speaking Honors Introduction to Public Speaking	3

CSI 1112	Introduction to Communication and Social Influence	3
CSI 1113	Persuasion	3
CSI 2111	Argumentation and Advocacy	3
CSI 2112	Social Influence Inquiry	3

Subject Areas

Select six courses from the three subject areas of Civic Engagement, Conflict Communication, and Risk Communication. 18

One course in each of the three subject areas (9 credits)

Three other courses in any subject areas (9 credits)

Course levels for the six subject area courses should be selected as follows:

One 1000-level course

Two 2000-level courses ¹

Two 3000-level courses ¹

One 4000-level course

Civic Engagement Courses

CSI 1201 Communication and Civic Engagement

CSI 2201 The Meaningful Enjoyment of Civic Life

CSI 2296 Resistance, Protests, and Social Movements (WI)

CSI 3201 Rhetoric and Civic Culture

CSI 3296 Speechwriting (WI)

CSI 4201 Communication, Attitudes, and Opinion

Conflict Communication Courses

CSI 1401 Conflict and Communication Behavior

CSI 2401 Intercultural and Cross Cultural Conflict

CSI 2403 Civil Disobedience

CSI 3401 Social Activism and Community Organizing

CSI 3402 Conflict and Influence: Identity, Emotion and Power

CSI 4402 Multiparty Conflict Processes: Dialogue, Facilitation and Multiparty Mediation

Risk Communication Courses

CSI 1601 Communication and Behavior Change

CSI 2602 Rhetoric of Hate and Violence

CSI 2696 Risk Communication (WI)

CSI 3601 Misperceptions and Misinformation

CSI 3602 Communicating Science in Today's World

CSI 4601 Narrative Persuasion

Supporting Areas

At least 1 culture course 3

CSI 3701 Intercultural Communication

CSI 3702 Communication, Culture and Identity

At least 1 method course 3

CSI 3801 Social Science Research Methods of Social Influence

CSI 3896 Rhetorical Criticism (WI)

Experience Course

Select one of the following: 3

CSI 3085 Study Away Internship

CSI 3185 Internship

CSI 3187 Practicum

CSI 3191 Directed Research

Senior Seminar

CSI 4111 Senior Seminar 3

Total Credit Hours

45

1

If CSI 3896 is selected as the method course, one writing-intensive (WI) course must be selected from among the subject area course choices. If CSI 3896 is not selected, then two WI courses must be selected.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Communication and Social Influence

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
CSI 1111 or CSI 1911	Introduction to Public Speaking or Honors Introduction to Public Speaking	3
CSI 1112	Introduction to Communication and Social Influence	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ}		4
KLN 1001	Klein First-Year Seminar	1
Credit Hours		15
Spring		
CSI 1113	Persuasion	3
CSI 2111	Argumentation and Advocacy	3
KLN 1002	Klein College Introduction to Professional Development	1
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
CSI 2112	Social Influence Inquiry	3
CSI 1000-level Subject Area Course		3
CSI 2000-level Subject Area Course ¹		3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Credit Hours		15
Spring		
CSI 2000-level Subject Area Course ¹		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Electives		6
Credit Hours		15
Year 3		
Fall		
CSI 3000-level Subject Area Course ¹		3
CSI 3000-level Subject Area Course ¹		3
CSI Supporting Area Course (Method)		3
Electives		6
Credit Hours		15

Spring

CSI Supporting Area Course (Culture)	3
CSI Experience Course	3
GenEd Breadth Course	3
GenEd Breadth Course	3
Electives	4

Credit Hours	16
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Year 4**Fall**

CSI 4000-level Subject Area Course	3
Electives	13

Credit Hours	16
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Spring

CSI 4111	Senior Seminar	3
Electives		13

Credit Hours	16
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Total Credit Hours	124
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1

If CSI 3896 is selected as the method course, one writing-intensive (WI) course must be selected from among the subject area course choices. If CSI 3896 is not selected, then two WI courses must be selected.

Optional Concentration

The **optional International Communication Concentration (ICC)** provides a theoretical and practical education in international and intercultural communication and media. This program allows students to develop sought-after competencies in cultural sensitivity and intercultural communication skills by encouraging students to reflect on their own cultural lenses. Students participating in the ICC program will be exposed to multiple international perspectives through internationally- and interculturally-oriented courses offered on Temple's domestic campuses and may be supplemented with study abroad coursework.

This concentration is restricted to Klein students only.

Requirements

To earn the International Communication Concentration transcript notation, a student must successfully complete a total of 18-20 credits of International / Intercultural studies courses, a maximum 9 credits of which may come from courses transferred into Temple, across 3 areas. Each course that fulfills a requirement for the concentration must be passed with a C- or better.

Code	Title	Credit Hours
Common Course		
Select one of the following:		3
CSI 3701	Intercultural Communication	
CSI 3703	Intercultural Communication in the Workplace	
Klein International/Intercultural courses		
Select three of the following:		9
Any ADV, CMST, CSI, JRN, MSP, or PR courses taken as part of a Klein Global Opportunities Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)		
Any ADV, CMST, CSI, JRN, MSP, or PR Internship completed as part of a Klein Global Opportunities International Program		
CSI 2401	Intercultural and Cross Cultural Conflict	
CSI 3702	Communication, Culture and Identity	
CSI 3703	Intercultural Communication in the Workplace (if not used to fulfill common course requirement above)	
JRN 3254	International Reporting	
JRN 3706	Journalism and Globalization	
MSP 3471	Media and Cultural Differences	
MSP 3572	Communication and Development	
MSP 4453	Information Society	

MSP 4496	Global Media
PR 2672	Global Communication and Leadership

International/Intercultural Electives outside of Klein

Note: Satisfying the GenEd World Society requirement by completing a Study Abroad does not also satisfy this requirement.

Choose any two (2) courses of the following:

6-8

Up to any two foreign language courses

Any non-Klein courses at the 2000-level or higher taken in a Klein Global Opportunities Int'l Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)

Any non-Klein internship taken in a Klein Global Opportunities International Program

Anthropology

ANTH 2238	Visual Anthropology of Modern Japan
or ASST 2238	Visual Anthropology of Modern Japan
ANTH 2374	The Anthropology of Modern China
or ASST 2374	The Anthropology of Modern China
ANTH 2361	Peoples of Latin America
or LAS 2361	Peoples of Latin America
ANTH 2362	Peoples and Cultures of the Caribbean
or LAS 2362	Peoples and Cultures of the Caribbean

Art History

ARTH 2102	
ARTH 2105	Roman Art and Archaeology
ARTH 2129	Greek and Roman Sculpture
ARTH 2431	Early Modern Italy and Spain in the 17th Century
ARTH 2432	Northern and Global Baroque Art: Art in the Age of Rubens, Rembrandt, Vermeer
ARTH 2543	Transnational Impressionisms
ARTH 2642	Modern Art, 1900-1945
ARTH 2868	Arts of Asia
ARTH 1003	History of Art in Rome (Study Abroad - Rome)
ARTH 2135	Art and Culture in Ancient Rome (Study Abroad - Rome)
ARTH 2428	Wonders of Rome: Art and Culture of the Baroque Era (Study Abroad - Rome)
ARTH 2622	Galleries and Studios of Rome (Study Abroad - Rome)
ARTH 1801	Arts of Asia (Study Abroad - Japan)
ARTH 2815	Pre-Modern Japanese Art up to the Edo Period (Study Abroad - Japan)

Asian Studies

ASST 2001	Practical Asian Society and Culture
ASST 2011	Survey of Japanese Literature Before 1868
ASST 2015	Tokyo in Literature and Film
or JPNS 2015	Tokyo in Literature and Film
ASST 2021	Japanese Literature in Film
or JPNS 2021	Japanese Literature in Film
ASST 2351	Japan in a Changing World
ASST 2367	South Asia: Peoples, Culture, Experiences
ASST 2373	Japanese Culture
or ANTH 2373	Japanese Culture
ASST 2503	Introduction to Southeast Asia: Insular
ASST 2504	Introduction to Southeast Asia: Mainland
ASST 2511	Introduction to Asian Business
ASST 3247	Ideology and Social Change in Japan
or SOC 3247	Ideology and Social Change in Japan
ASST 3251	China: State and Society
or POLS 3251	China: State and Society
ASST 3522	Contemporary China

or HIST 3522	Contemporary China
ASST 3541	Japan Today
or HIST 3541	Japan Today
ASST 3542	Women and Society in Japan
or HIST 3542	Women and Society in Japan
Film & Media Arts	
FMA 4673	International Cinema
Geography & Urban Studies	
GUS 2032	Urban Systems in a Global Economy
GUS 2073	African Development
GUS 2074	East and South Asia
or ASST 2074	Geography of East and South Asia
GUS 3021	International Urbanization
GUS 3052	Environmental Problems in Asia
or ASST 3052	Environmental Problems in Asia
or ENST 3052	Environmental Problems in Asia
GUS 3073	Geography of Travel and Tourism
GUS 3307	Transportation & Culture
History	
HIST 2303	History of Central Europe, 1618-1871
HIST 2317	Central Europe Through Wars and Revolution, 1848-1989
HIST 2501	Introduction to East Asia: China
or ASST 2501	Introduction to East Asia: China
HIST 2502	Introduction to East Asia: Japan
or ASST 2502	Introduction to East Asia: Japan
HIST 2503	Introduction to Southeast Asia: Insular
or ASST 2503	Introduction to Southeast Asia: Insular
HIST 2504	Introduction to Southeast Asia: Mainland
or ASST 2504	Introduction to Southeast Asia: Mainland
HIST 2511	Introduction to African History
HIST 2514	Introduction to Latin America
HIST 2515	Civilization and Modernity in the Caribbean
or LAS 2515	Civilization and Modernity in the Caribbean
HIST 2516	Modern Islamic History
HIST 2611	Third World Issues through Film
HIST 3321	Irish History
HIST 3331	History of England
HIST 3362	Russia: Nationality and Empire
HIST 3363	Russia: Revolution, State, and Empire
HIST 3511	Southern Africa: A History
HIST 3521	The Chinese Revolution
HIST 3531	Modern India
HIST 3551	History of Vietnam
HIST 3561	History of Brazil
or LAS 3561	History of Brazil
HIST 3562	Contemporary Mexico
or LAS 3562	Contemporary Mexico
HIST 3571	Israel: History, Politics and Society
HIST 3572	Modern Middle East
HIST 3675	Third World Women's Lives
Jewish Studies	
JST 2706	Jewish Diaspora/Survey of Jewish History

Latin American Studies

LAS 2101	Latin America through Film and Fiction
LAS 2231	Comparative Political Systems in Latin America
LAS 2502	Fundamentals of Latin American Business
or IB 2502	Fundamentals of Latin American Business
LAS 2514	Historical Continuity and Social Change in Latin America
LAS 3267	Sociology of Music: Nation, Race, Class and Gender in Argentina and Brazil
LAS 3601	"Other Voices" in Latin American Literature
LAS 3602	Caribbean Literature and Culture
LAS 3801	African Culture in Brazil

Political Science

POLS 2211	Contemporary Politics of Europe
POLS 2212	Eastern Europe, Russia and the West
POLS 2231	Comparative Political Systems in Latin America
POLS 2255	Comparative Public Policy
POLS 2314	Politics of International Law
POLS 2321	Politics of the Global Economy
POLS 2331	International Organization
POLS 3212	British Government and Politics
POLS 3241	Mideast Politics
POLS 3252	East Asia and the United States
or ASST 3252	East Asia and the United States
POLS 3265	International Environmental Policy
or ENST 3265	International Environmental Policy

Religion

REL 2002	Religion and Human Sexuality
REL 2007	Religion in Film
REL 2101	Indian Philosophies and Religions
or ASST 2101	Religions of India
REL 2102	Introduction to Buddhism
or ASST 2102	Introduction to Buddhism
REL 2201	Chinese Religions - Confucius to Mao
REL 2301	Zen Buddhism
or ASST 2301	Zen Buddhism
REL 2403	Introduction to Judaism
or JST 2403	Introduction to Judaism
REL 2447	Kabbalah and Mysticism
or JST 2447	Kabbalah and Mysticism
REL 2502	Jesus in the Media
REL 2606	Introduction to Islam
REL 2702	Religion in Contemporary Africa
REL 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
or ASST 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
REL 3201	I-Ching, Tao, and Ch'an/Zen
or ASST 3201	I-Ching, Tao, and Ch'an/Zen
REL 3301	Japanese Religions
or ASST 3301	Japanese Religions
REL 3411	The Philosophies of Judaism
or JST 3411	The Philosophies of Judaism
REL 3601	The Islamic State
REL 3602	Women in Islam
REL 3603	Islamic Mysticism

Contact Information

Jack Klotz, MSP Faculty Advisor
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215-204-5823
jklotz@temple.edu

Communication Studies BA with Communication and Entrepreneurship Track

Overview

The **Bachelor of Arts in Communication Studies** is a studies-based interdisciplinary major. It features the academic (aesthetic, analytical, critical, historical, theoretical) and interdisciplinary study of communication as represented by the departments included within the Lew Klein College of Media and Communication.

Designed to ensure flexibility and choice, Communication Studies allows students a chance to fully investigate multiple fields in the communications discipline. Emphasis is placed on providing an overview of Communication while also accentuating personal academic growth. Personal choice and options allow students a chance to complete the degree in a timely manner.

In this interdisciplinary program, Communication Studies students **must select one of the following tracks** as a distinctive area of investigation:

- Communication and Entrepreneurship
- Contemporary Media Environments
- Global Civil Society
- Policy, Regulation and Advocacy
- Production (for Temple Japan students only)
- Communication Studies Thesis (the Major of Distinction track, which is available for advanced scholars)

An optional concentration in International Communication is also available.

The flexibility of the Communication Studies program offers students access to the field experiences, internships and study away experiences vital to a comprehensive education. Students with a number of skill sets and academic interest areas are often drawn to this innovative program and graduates are poised for a number of professional and academic possibilities, such as graduate, law or professional school. Graduates of this program will be well-suited to pursue a variety of positions across numerous aspects of the communications field.

Students receive cross-curricular expertise through foundation and core courses. Academic rigor and student choice are at the very core of the program. Choices allow a student flexibility, and curricular oversight ensures a solid, academically robust education. Courses are designed to allow student progress to be monitored at yearly intervals. Experiential learning is promoted, particularly during the junior and senior years. Cross cultural exchanges and experiences are integral aspects of the program's design. Advanced scholars have a distinct and individualized track.

Communication and Entrepreneurship Track

The **Communication and Entrepreneurship track** focuses on the intersection between the field of communication and entrepreneurship. Classes will reflect the communicative and functional aspect of entrepreneurship by focusing on and critiquing organizational development. Developed from principles of digital convergence and innovation, this track reflects the need for a host of skills that will function in the digital workplace and will allow students to consider means of developing a more nuanced understanding of capitalism and its impacts.

Campus Location: Main

Program Code: CO-CMST-BA

Contact Information

Scott Gratson, PhD, Program Director
Annenberg Hall, Room 9C
215-204-6434
sgratson@temple.edu

Learn more about the Bachelor of Arts in Communication Studies.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The degree of Bachelor of Arts may be conferred upon a student majoring in Communication Studies by the recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours (s.h.) of credit with a cumulative grade point average of 2.0 overall and in the major.

Students must meet:

- University requirements
 - All students are required to complete the General Education (GenEd (p. 83)) curriculum.
 - All students must take a minimum of two writing-intensive courses in the major at Temple University.
- Low Klein College of Media and Communication requirements (p. 1184), including KLN 1001 and KLN 1002.
- Minimum of 42 s.h. in Communication Studies.
- Each course that fulfills a requirement for the major must be passed with a C- or better.
- Maximum of 30 s.h. in any one Klein department may be counted toward the major.
- A maximum of 4 s.h. of Internship credit may be counted toward the degree.
- A maximum of 8 s.h. combined of Independent Study and/or Special Projects may be counted toward the degree.
- No more than 8 s.h. in Kinesiology and Dance activities courses.
- Students may participate in study away programs.
- Transfer students are required to complete a minimum of 24 s.h. of major courses at Temple.
- Communication Studies majors may minor in established Klein minors. The Communication Studies student who declares a minor must complete the entire program requirements for both the major and the minor. Courses listed for both the Communication Studies major and Klein minor will only apply towards one of the curriculums. If the class is part of an array of courses, students will be required to take a different course to satisfy the major requirement.

Communication Studies: Communication and Entrepreneurship Track Requirements

- All Communication Studies majors must take the following two foundation courses:

Code	Title	Credit Hours
CMST 1111	Communication and Public Life	3
MSP 1021	Introduction to Media Analysis	3
Total Credit Hours		6

- All majors will take five additional core courses. Students will select one course each from the categories below (15 credits). Students should plan to meet the prerequisites for courses in their selected track (see below) by taking appropriate core courses.

Code	Title	Credit Hours
Core Courses		
CMST 2111	Communications Seminar ¹	3
Communication Theory		
Select one of the following:		3
ADV 1101	Introduction to Media and Society	
ADV 1102	Introduction to Advertising	
JRN 1111	Journalism and Society	
MSP 1011	Introduction to Media Theory	
Research Methods		
Select one of the following:		3
ADV 2141	Introduction to Brand Strategy and Research ²	
JRN 2101	Journalism Research	
MSP 2141	Media Research ¹	
Analysis		
Select one of the following:		3
ADV 2151	Introduction to Art Direction: Visual Communication ²	
MSP 2421	Media Popular Culture ¹	

CSI 1111	Introduction to Public Speaking	
or CSI 1911	Honors Introduction to Public Speaking	

Cross-Cultural Perspectives

Select one of the following: 3

CSI 3701	Intercultural Communication	
CSI 3702	Communication, Culture and Identity	

Total Credit Hours 15

1

Course has prerequisites.

2

Courses in various categories can only be counted once.

3. In consultation with a faculty advisor, a student must take seven courses (minimum 21 credits) from the list below.

- Within the track, a student must take at least one course from at least three different departments.
- At least four courses in the track must be taken at the 3000 or 4000 level. At least one of these four must be taken at the 4000 level.
- Students must have met the prerequisites for courses in their track by taking the appropriate core courses (see above).
- All students must take a minimum of two writing-intensive courses in the major. Writing-intensive courses end in the numbers 96, 97 and 98 and are noted (WI) in the list below.

Code	Title	Credit Hours
Communication and Entrepreneurship Track Options		21
ADV 2111	Introduction to Marketing	3
ADV 2141	Introduction to Brand Strategy and Research ¹	3
ADV 2151	Introduction to Art Direction: Visual Communication ¹	3
ADV 3101	Creative Thinking for Advertising	3
JRN 3401	Photography	4
JRN 3403	Documentary Photography	3
JRN 3505	Experimental Journalism	3
JRN 3704	Ethical Issues in Journalism	3
JRN 3708	Newsroom Management	3
JRN 3709	The Entrepreneurial Journalist	3
MSP 3153	Media Criticism	3
MSP 3324	The Video Game Industry and Game Culture	3
MSP 3421	Technology and Culture	3
MSP 3663	Marketing Music and Media	3
MSP 4226	Public Media	3
MSP 4252	Law and Ethics of Digital Media	3
MSP 4446	Psychological Processing of Media	3
MSP 4454	Public Information Media Campaigns	3
MSP 4496	Global Media (WI)	3
MSP 4497	Media and Children (WI)	3
MSP 4541	Mobile Media	3
MSP 4614	Creating a Media Business	3
MSP 4657	Current Issues in Media Management	3
MSP 4696	Communication in Media Organizations (WI)	3

1

Courses in various categories can only be counted once.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Communication Studies with a Track in Communication and Entrepreneurship

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
CMST 1111	Communication and Public Life	3
Select one of the following (Communication Theory):		3
ADV 1101	Introduction to Media and Society	
ADV 1102	Introduction to Advertising	
JRN 1111	Journalism and Society	
MSP 1011	Introduction to Media Theory	
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4
KLN 1001	Klein First-Year Seminar	1
Credit Hours		15
Spring		
KLN 1002	Klein College Introduction to Professional Development	1
MSP 1021	Introduction to Media Analysis	3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Elective		3
Credit Hours		16
Year 2		
Fall		
CMST 2111	Communications Seminar	3
Select one of the following (Analysis):		3
ADV 2151	Introduction to Art Direction: Visual Communication	
MSP 2421	Media Popular Culture	
CSI 1111	Introduction to Public Speaking	
or CSI 1911	or Honors Introduction to Public Speaking	
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
GenEd Breadth Course		3-4
GenEd Breadth Course		3
Credit Hours		15
Spring		
Select one of the following (Research Methods):		3
ADV 2141	Introduction to Brand Strategy and Research	
JRN 2101	Journalism Research	
MSP 2141	Media Research	
Select one of the following (Cross-Cultural Perspectives):		3
CSI 3701	Intercultural Communication	
CSI 3702	Communication, Culture and Identity	
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15

Year 3**Fall**

One CE Track Course - any level	3
One Writing-Intensive CE Track Course - any level	3
Electives	9
Credit Hours	15

Spring

One 3000-4999 CE Track Course	3
One 3000-4999 CE Track Course	3
Electives	10
Credit Hours	16

Year 4**Fall**

One 3000-4999 Writing-Intensive CE Track Course	3
One CE Track Course - any level	3
Electives	10
Credit Hours	16

Spring

One 4000-4999 CE Track Course	3
Electives	13
Credit Hours	16
Total Credit Hours	124

Optional Concentration

The **optional International Communication Concentration (ICC)** provides a theoretical and practical education in international and intercultural communication and media. This program allows students to develop sought-after competencies in cultural sensitivity and intercultural communication skills by encouraging students to reflect on their own cultural lenses. Students participating in the ICC program will be exposed to multiple international perspectives through internationally- and interculturally-oriented courses offered on Temple's domestic campuses and may be supplemented with study abroad coursework.

This concentration is restricted to Klein students only.

Requirements

To earn the International Communication Concentration transcript notation, a student must successfully complete a total of 18-20 credits of International / Intercultural studies courses, a maximum 9 credits of which may come from courses transferred into Temple, across 3 areas. Each course that fulfills a requirement for the concentration must be passed with a C- or better.

Code	Title	Credit Hours
Common Course		
Select one of the following:		3
CSI 3701	Intercultural Communication	
CSI 3703	Intercultural Communication in the Workplace	
Klein International/Intercultural courses		
Select three of the following:		9
Any ADV, CMST, CSI, JRN, MSP, or PR courses taken as part of a Klein Global Opportunities Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)		
Any ADV, CMST, CSI, JRN, MSP, or PR Internship completed as part of a Klein Global Opportunities International Program		
CSI 2401	Intercultural and Cross Cultural Conflict	
CSI 3702	Communication, Culture and Identity	
CSI 3703	Intercultural Communication in the Workplace (if not used to fulfill common course requirement above)	
JRN 3254	International Reporting	
JRN 3706	Journalism and Globalization	
MSP 3471	Media and Cultural Differences	

MSP 3572	Communication and Development
MSP 4453	Information Society
MSP 4496	Global Media
PR 2672	Global Communication and Leadership

International/Intercultural Electives outside of Klein

Note: Satisfying the GenEd World Society requirement by completing a Study Abroad does not also satisfy this requirement.

Choose any two (2) courses of the following:

6-8

Up to any two foreign language courses

Any non-Klein courses at the 2000-level or higher taken in a Klein Global Opportunities Int'l Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)

Any non-Klein internship taken in a Klein Global Opportunities International Program

Anthropology

ANTH 2238	Visual Anthropology of Modern Japan
or ASST 2238	Visual Anthropology of Modern Japan
ANTH 2374	The Anthropology of Modern China
or ASST 2374	The Anthropology of Modern China
ANTH 2361	Peoples of Latin America
or LAS 2361	Peoples of Latin America
ANTH 2362	Peoples and Cultures of the Caribbean
or LAS 2362	Peoples and Cultures of the Caribbean

Art History

ARTH 2102	
ARTH 2105	Roman Art and Archaeology
ARTH 2129	Greek and Roman Sculpture
ARTH 2431	Early Modern Italy and Spain in the 17th Century
ARTH 2432	Northern and Global Baroque Art: Art in the Age of Rubens, Rembrandt, Vermeer
ARTH 2543	Transnational Impressionisms
ARTH 2642	Modern Art, 1900-1945
ARTH 2868	Arts of Asia
ARTH 1003	History of Art in Rome (Study Abroad - Rome)
ARTH 2135	Art and Culture in Ancient Rome (Study Abroad - Rome)
ARTH 2428	Wonders of Rome: Art and Culture of the Baroque Era (Study Abroad - Rome)
ARTH 2622	Galleries and Studios of Rome (Study Abroad - Rome)
ARTH 1801	Arts of Asia (Study Abroad - Japan)
ARTH 2815	Pre-Modern Japanese Art up to the Edo Period (Study Abroad - Japan)

Asian Studies

ASST 2001	Practical Asian Society and Culture
ASST 2011	Survey of Japanese Literature Before 1868
ASST 2015	Tokyo in Literature and Film
or JPNS 2015	Tokyo in Literature and Film
ASST 2021	Japanese Literature in Film
or JPNS 2021	Japanese Literature in Film
ASST 2351	Japan in a Changing World
ASST 2367	South Asia: Peoples, Culture, Experiences
ASST 2373	Japanese Culture
or ANTH 2373	Japanese Culture
ASST 2503	Introduction to Southeast Asia: Insular
ASST 2504	Introduction to Southeast Asia: Mainland
ASST 2511	Introduction to Asian Business
ASST 3247	Ideology and Social Change in Japan
or SOC 3247	Ideology and Social Change in Japan
ASST 3251	China: State and Society

or POLS 3251	China: State and Society
ASST 3522	Contemporary China
or HIST 3522	Contemporary China
ASST 3541	Japan Today
or HIST 3541	Japan Today
ASST 3542	Women and Society in Japan
or HIST 3542	Women and Society in Japan
Film & Media Arts	
FMA 4673	International Cinema
Geography & Urban Studies	
GUS 2032	Urban Systems in a Global Economy
GUS 2073	African Development
GUS 2074	East and South Asia
or ASST 2074	Geography of East and South Asia
GUS 3021	International Urbanization
GUS 3052	Environmental Problems in Asia
or ASST 3052	Environmental Problems in Asia
or ENST 3052	Environmental Problems in Asia
GUS 3073	Geography of Travel and Tourism
GUS 3307	Transportation & Culture
History	
HIST 2303	History of Central Europe, 1618-1871
HIST 2317	Central Europe Through Wars and Revolution, 1848-1989
HIST 2501	Introduction to East Asia: China
or ASST 2501	Introduction to East Asia: China
HIST 2502	Introduction to East Asia: Japan
or ASST 2502	Introduction to East Asia: Japan
HIST 2503	Introduction to Southeast Asia: Insular
or ASST 2503	Introduction to Southeast Asia: Insular
HIST 2504	Introduction to Southeast Asia: Mainland
or ASST 2504	Introduction to Southeast Asia: Mainland
HIST 2511	Introduction to African History
HIST 2514	Introduction to Latin America
HIST 2515	Civilization and Modernity in the Caribbean
or LAS 2515	Civilization and Modernity in the Caribbean
HIST 2516	Modern Islamic History
HIST 2611	Third World Issues through Film
HIST 3321	Irish History
HIST 3331	History of England
HIST 3362	Russia: Nationality and Empire
HIST 3363	Russia: Revolution, State, and Empire
HIST 3511	Southern Africa: A History
HIST 3521	The Chinese Revolution
HIST 3531	Modern India
HIST 3551	History of Vietnam
HIST 3561	History of Brazil
or LAS 3561	History of Brazil
HIST 3562	Contemporary Mexico
or LAS 3562	Contemporary Mexico
HIST 3571	Israel: History, Politics and Society
HIST 3572	Modern Middle East
HIST 3675	Third World Women's Lives

Jewish Studies

JST 2706 Jewish Diaspora/Survey of Jewish History

Latin American Studies

LAS 2101 Latin America through Film and Fiction

LAS 2231 Comparative Political Systems in Latin America

LAS 2502 Fundamentals of Latin American Business

or IB 2502 Fundamentals of Latin American Business

LAS 2514 Historical Continuity and Social Change in Latin America

LAS 3267 Sociology of Music: Nation, Race, Class and Gender in Argentina and Brazil

LAS 3601 "Other Voices" in Latin American Literature

LAS 3602 Caribbean Literature and Culture

LAS 3801 African Culture in Brazil

Political Science

POLS 2211 Contemporary Politics of Europe

POLS 2212 Eastern Europe, Russia and the West

POLS 2231 Comparative Political Systems in Latin America

POLS 2255 Comparative Public Policy

POLS 2314 Politics of International Law

POLS 2321 Politics of the Global Economy

POLS 2331 International Organization

POLS 3212 British Government and Politics

POLS 3241 Mideast Politics

POLS 3252 East Asia and the United States

or ASST 3252 East Asia and the United States

POLS 3265 International Environmental Policy

or ENST 3265 International Environmental Policy

Religion

REL 2002 Religion and Human Sexuality

REL 2007 Religion in Film

REL 2101 Indian Philosophies and Religions

or ASST 2101 Religions of India

REL 2102 Introduction to Buddhism

or ASST 2102 Introduction to Buddhism

REL 2201 Chinese Religions - Confucius to Mao

REL 2301 Zen Buddhism

or ASST 2301 Zen Buddhism

REL 2403 Introduction to Judaism

or JST 2403 Introduction to Judaism

REL 2447 Kabbalah and Mysticism

or JST 2447 Kabbalah and Mysticism

REL 2502 Jesus in the Media

REL 2606 Introduction to Islam

REL 2702 Religion in Contemporary Africa

REL 3011 Monks, Masters, and Magicians: Religion in Premodern Chinese Literature

or ASST 3011 Monks, Masters, and Magicians: Religion in Premodern Chinese Literature

REL 3201 I-Ching, Tao, and Ch'an/Zen

or ASST 3201 I-Ching, Tao, and Ch'an/Zen

REL 3301 Japanese Religions

or ASST 3301 Japanese Religions

REL 3411 The Philosophies of Judaism

or JST 3411 The Philosophies of Judaism

REL 3601 The Islamic State

REL 3602	Women in Islam
REL 3603	Islamic Mysticism
REL 3702	African Religions and New World Culture

Total Credit Hours**18-20**

Contact Information

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 215-204-5823
 jklotz@temple.edu

Communication Studies BA with Communication Studies Thesis Track

Overview

The **Bachelor of Arts in Communication Studies** is a studies-based interdisciplinary major. It features the academic (aesthetic, analytical, critical, historical, theoretical) and interdisciplinary study of communication as represented by the departments included within the Lew Klein College of Media and Communication.

Designed to ensure flexibility and choice, Communication Studies allows students a chance to fully investigate multiple fields in the communications discipline. Emphasis is placed on providing an overview of Communication while also accentuating personal academic growth. Personal choice and options allow students a chance to complete the degree in a timely manner.

In this interdisciplinary program, Communication Studies students **must select one of the following tracks** as a distinctive area of investigation:

- Communication and Entrepreneurship
- Contemporary Media Environments
- Global Civil Society
- Policy, Regulation and Advocacy
- Production (for Temple Japan students only)
- Communication Studies Thesis (the Major of Distinction track, which is available for advanced scholars)

An optional concentration in International Communication is also available.

The flexibility of the Communication Studies program offers students access to the field experiences, internships and study away experiences vital to a comprehensive education. Students with a number of skill sets and academic interest areas are often drawn to this innovative program and graduates are poised for a number of professional and academic possibilities, such as graduate, law or professional school. Graduates of this program will be well-suited to pursue a variety of positions across numerous aspects of the communications field.

Students receive cross-curricular expertise through foundation and core courses. Academic rigor and student choice are at the very core of the program. Choices allow a student flexibility, and curricular oversight ensures a solid, academically robust education. Courses are designed to allow student progress to be monitored at yearly intervals. Experiential learning is promoted, particularly during the junior and senior years. Cross cultural exchanges and experiences are integral aspects of the program's design. Advanced scholars have a distinct and individualized track.

Communication Studies Thesis (Major of Distinction) Track

The **Communication Studies Thesis track**, also referred to as the Major of Distinction track, is an academically rigorous program for students who wish to construct an interdisciplinary curriculum that meets their individual interests across the Klein departments. In the Major of Distinction, each student works individually with a faculty advisor from a relevant Klein department to build a curriculum that goes beyond the offered tracks. The student completes five courses, four of which must be at the 3000 or 4000 level, and in the senior year completes a two-semester thesis. A student in the Major of Distinction must have completed three semesters of a foreign language (or equivalent with the approval of the Director of Communication Studies) by the time of graduation. If appropriate to the student's research, an advanced methods or theory course may be required by the student's faculty advisor.

Students apply for a Major of Distinction in the second semester of their sophomore year. To be considered, students must be on schedule to complete their Foundational and Core Communications courses by the end of their sophomore year. Also, students must have earned at least a 3.5 cumulative grade point average (GPA) in their Foundational and Core Communications courses along with a 3.25 overall GPA. Students must submit an application to the Director of Communication Studies that includes a statement of student's interest, a proposed curriculum, and a support letter from a full-time Klein faculty member willing to act as the student's faculty advisor.

Once accepted into the Major of Distinction and in consultation with his or her faculty advisor and the Director of Communication Studies, each student constructs his or her own curriculum. The curriculum must contain five courses, four of which must be at the 3000 or 4000 level, and include courses from at least three of the Klein majors. Courses selected should be designed to lead to the senior-year thesis.

Campus Locations: Main and Japan

Program Code: CO-CMST-BA

Contact Information

Main Campus

Scott Gratson, PhD, Program Director
Annenberg Hall, Room 9C
215-204-6434
sgratson@temple.edu

Temple Japan Campus

Ron Carr, MFA, Major Coordinator
carr@tuj.temple.edu

Learn more about the Bachelor of Arts in Communication Studies.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The degree of Bachelor of Arts may be conferred upon a student majoring in Communication Studies by the recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours (s.h.) of credit with a cumulative grade point average of 2.0 overall and in the major.

Students must meet:

- University requirements
 - All students are required to complete the General Education (GenEd (p. 83)) curriculum.
 - All students must take a minimum of two writing-intensive courses in the major at Temple University.
- Low Klein College of Media and Communication requirements (p. 1184), including KLN 1002 and KLN 1002.
- Minimum of 42 s.h. in Communication Studies.
- Each course that fulfills a requirement for the major must be passed with a C- or better.
- Maximum of 30 s.h. in any one Klein department may be counted toward the major.
- A maximum of 4 s.h. of Internship credit may be counted toward the degree.
- A maximum of 8 s.h. combined of Independent Study and/or Special Projects may be counted toward the degree.
- No more than 8 s.h. in Kinesiology and Dance activities courses.
- Students may participate in study away programs.
- Transfer students are required to complete a minimum of 24 s.h. of major courses at Temple.
- Communication Studies majors may minor in established Klein minors. The Communication Studies student who declares a minor must complete the entire program requirements for both the major and the minor. Courses listed for both the Communication Studies major and Klein minor will only apply towards one of the curriculums. If the class is part of an array of courses, students will be required to take a different course to satisfy the major requirement.

Communication Studies: Communication Studies Thesis (Major of Distinction) Requirements

- All Communication Studies majors must take the following two foundation courses:

Code	Title	Credit Hours
CMST 1111	Communication and Public Life	3
MSP 1021	Introduction to Media Analysis	3
Total Credit Hours		6

- All majors will take five additional core courses. Students will select one course each from the categories below (15 credits). Students should plan to meet the prerequisites for courses in their selected track (see below) by taking appropriate core courses.

Code	Title	Credit Hours
Core Courses		
CMST 2111	Communications Seminar ¹	3

Communication Theory

Select one of the following:	3
ADV 1101	Introduction to Media and Society
ADV 1102	Introduction to Advertising
JRN 1111	Journalism and Society
MSP 1011	Introduction to Media Theory

Research Methods

Select one of the following:	3
ADV 2141	Introduction to Brand Strategy and Research
JRN 2101	Journalism Research
MSP 2141	Media Research ¹

Analysis

Select one of the following:	3
ADV 2151	Introduction to Art Direction: Visual Communication
MSP 2421	Media Popular Culture ¹
CSI 1111 or CSI 1911	Introduction to Public Speaking Honors Introduction to Public Speaking

Cross-Cultural Perspectives

Select one of the following:	3
CSI 3701	Intercultural Communication
CSI 3702	Communication, Culture and Identity

Total Credit Hours **15**

1

Course has prerequisites.

3. In the Communication Studies Thesis (Major of Distinction), each student works individually with a faculty advisor from a relevant Klein department to build a curriculum that goes beyond that offered by the established tracks.

Code	Title	Credit Hours
Major of Distinction Coursework		21
One Klein course at any level		3
Four 3000+ Klein courses		12
CMST Thesis Hours		6
Language Proficiency		
Language 1001 level		
Language 1002 level		
Language 1003 level		

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Communication Studies with Track in Communication Studies Thesis (Major of Distinction)**Suggested Plan for New Students Starting in the 2023-2024 Academic Year**

Year 1		Credit Hours
Fall		
CMST 1111	Communication and Public Life	3
MSP 1021	Introduction to Media Analysis	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
KLN 1001	Klein First-Year Seminar	1

Foreign Language 1001 level		4
Credit Hours		15
Spring		
KLN 1002	Klein College Introduction to Professional Development	1
Select one of the following (Communication Theory):		3
ADV 1101	Introduction to Media and Society	
ADV 1102	Introduction to Advertising	
JRN 1111	Journalism and Society	
MSP 1011	Introduction to Media Theory	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Quantitative Literacy Course ^{GQ}		4
GenEd Breadth Course		3
Foreign Language 1002 Level		4
Credit Hours		18
Year 2		
Fall		
CMST 2111	Communications Seminar	3
Select one of the following (Analysis):		3
ADV 2151	Introduction to Art Direction: Visual Communication	
MSP 2421	Media Popular Culture	
CSI 1111 or CSI 1911	Introduction to Public Speaking or Honors Introduction to Public Speaking	
GenEd Breadth Course		3-4
GenEd Breadth Course		3
Foreign Language 1003 Level		3
Credit Hours		15
Spring		
Select one of the following (Research Methods):		3
ADV 2141	Introduction to Brand Strategy and Research	
JRN 2101	Journalism Research	
MSP 2141	Media Research	
Select one of the following (Cross-Cultural Perspectives):		3
CSI 3701	Intercultural Communication	
CSI 3702	Communication, Culture and Identity	
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
One Writing-Intensive Klein Course - any level		3
One 3000-4999 Klein Course		3
GenEd Breadth Course		3
Electives		6
Credit Hours		15
Spring		
One 3000-4999 Writing-Intensive Klein Course		3
One 4000-4999 Klein Course		3
GenEd Breadth Course		3

Electives	7
Credit Hours	16
Year 4	
Fall	
Thesis Hours	3
One 3000-4999 Klein Course	3
Electives	9
Credit Hours	15
Spring	
Thesis Hours	3
Electives	12
Credit Hours	15
Total Credit Hours	124

Optional Concentration

The **optional International Communication Concentration** (ICC) provides a theoretical and practical education in international and intercultural communication and media. This program allows students to develop sought-after competencies in cultural sensitivity and intercultural communication skills by encouraging students to reflect on their own cultural lenses. Students participating in the ICC program will be exposed to multiple international perspectives through internationally- and interculturally-oriented courses offered on Temple's domestic campuses and may be supplemented with study abroad coursework.

This concentration is restricted to Klein students only.

Requirements

To earn the International Communication Concentration transcript notation, a student must successfully complete a total of 18-20 credits of International / Intercultural studies courses, a maximum 9 credits of which may come from courses transferred into Temple, across 3 areas. Each course that fulfills a requirement for the concentration must be passed with a C- or better.

Code	Title	Credit Hours
Common Course		
Select one of the following:		3
CSI 3701	Intercultural Communication	
CSI 3703	Intercultural Communication in the Workplace	
Klein International/Intercultural courses		
Select three of the following:		9
Any ADV, CMST, CSI, JRN, MSP, or PR courses taken as part of a Klein Global Opportunities Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)		
Any ADV, CMST, CSI, JRN, MSP, or PR Internship completed as part of a Klein Global Opportunities International Program		
CSI 2401	Intercultural and Cross Cultural Conflict	
CSI 3702	Communication, Culture and Identity	
CSI 3703	Intercultural Communication in the Workplace (if not used to fulfill common course requirement above)	
JRN 3254	International Reporting	
JRN 3706	Journalism and Globalization	
MSP 3471	Media and Cultural Differences	
MSP 3572	Communication and Development	
MSP 4453	Information Society	
MSP 4496	Global Media	
PR 2672	Global Communication and Leadership	
International/Intercultural Electives outside of Klein		
Note: Satisfying the GenEd World Society requirement by completing a Study Abroad does not also satisfy this requirement.		
Choose any two (2) courses of the following:		6-8
Up to any two foreign language courses		

Any non-Klein courses at the 2000-level or higher taken in a Klein Global Opportunities Int'l Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)

Any non-Klein internship taken in a Klein Global Opportunities International Program

Anthropology

ANTH 2238 or ASST 2238	Visual Anthropology of Modern Japan Visual Anthropology of Modern Japan
ANTH 2374 or ASST 2374	The Anthropology of Modern China The Anthropology of Modern China
ANTH 2361 or LAS 2361	Peoples of Latin America Peoples of Latin America
ANTH 2362 or LAS 2362	Peoples and Cultures of the Caribbean Peoples and Cultures of the Caribbean

Art History

ARTH 2102	
ARTH 2105	Roman Art and Archaeology
ARTH 2129	Greek and Roman Sculpture
ARTH 2431	Early Modern Italy and Spain in the 17th Century
ARTH 2432	Northern and Global Baroque Art: Art in the Age of Rubens, Rembrandt, Vermeer
ARTH 2543	Transnational Impressionisms
ARTH 2642	Modern Art, 1900-1945
ARTH 2868	Arts of Asia
ARTH 1003	History of Art in Rome (Study Abroad - Rome)
ARTH 2135	Art and Culture in Ancient Rome (Study Abroad - Rome)
ARTH 2428	Wonders of Rome: Art and Culture of the Baroque Era (Study Abroad - Rome)
ARTH 2622	Galleries and Studios of Rome (Study Abroad - Rome)
ARTH 1801	Arts of Asia (Study Abroad - Japan)
ARTH 2815	Pre-Modern Japanese Art up to the Edo Period (Study Abroad - Japan)

Asian Studies

ASST 2001	Practical Asian Society and Culture
ASST 2011	Survey of Japanese Literature Before 1868
ASST 2015 or JPNS 2015	Tokyo in Literature and Film Tokyo in Literature and Film
ASST 2021 or JPNS 2021	Japanese Literature in Film Japanese Literature in Film
ASST 2351	Japan in a Changing World
ASST 2367	South Asia: Peoples, Culture, Experiences
ASST 2373 or ANTH 2373	Japanese Culture Japanese Culture
ASST 2503	Introduction to Southeast Asia: Insular
ASST 2504	Introduction to Southeast Asia: Mainland
ASST 2511	Introduction to Asian Business
ASST 3247 or SOC 3247	Ideology and Social Change in Japan Ideology and Social Change in Japan
ASST 3251 or POLS 3251	China: State and Society China: State and Society
ASST 3522 or HIST 3522	Contemporary China Contemporary China
ASST 3541 or HIST 3541	Japan Today Japan Today
ASST 3542 or HIST 3542	Women and Society in Japan Women and Society in Japan

Film & Media Arts

FMA 4673	International Cinema
Geography & Urban Studies	
GUS 2032	Urban Systems in a Global Economy
GUS 2073	African Development
GUS 2074	East and South Asia
or ASST 2074	Geography of East and South Asia
GUS 3021	International Urbanization
GUS 3052	Environmental Problems in Asia
or ASST 3052	Environmental Problems in Asia
or ENST 3052	Environmental Problems in Asia
GUS 3073	Geography of Travel and Tourism
GUS 3307	Transportation & Culture
History	
HIST 2303	History of Central Europe, 1618-1871
HIST 2317	Central Europe Through Wars and Revolution, 1848-1989
HIST 2501	Introduction to East Asia: China
or ASST 2501	Introduction to East Asia: China
HIST 2502	Introduction to East Asia: Japan
or ASST 2502	Introduction to East Asia: Japan
HIST 2503	Introduction to Southeast Asia: Insular
or ASST 2503	Introduction to Southeast Asia: Insular
HIST 2504	Introduction to Southeast Asia: Mainland
or ASST 2504	Introduction to Southeast Asia: Mainland
HIST 2511	Introduction to African History
HIST 2514	Introduction to Latin America
HIST 2515	Civilization and Modernity in the Caribbean
or LAS 2515	Civilization and Modernity in the Caribbean
HIST 2516	Modern Islamic History
HIST 2611	Third World Issues through Film
HIST 3321	Irish History
HIST 3331	History of England
HIST 3362	Russia: Nationality and Empire
HIST 3363	Russia: Revolution, State, and Empire
HIST 3511	Southern Africa: A History
HIST 3521	The Chinese Revolution
HIST 3531	Modern India
HIST 3551	History of Vietnam
HIST 3561	History of Brazil
or LAS 3561	History of Brazil
HIST 3562	Contemporary Mexico
or LAS 3562	Contemporary Mexico
HIST 3571	Israel: History, Politics and Society
HIST 3572	Modern Middle East
HIST 3675	Third World Women's Lives
Jewish Studies	
JST 2706	Jewish Diaspora/Survey of Jewish History
Latin American Studies	
LAS 2101	Latin America through Film and Fiction
LAS 2231	Comparative Political Systems in Latin America
LAS 2502	Fundamentals of Latin American Business
or IB 2502	Fundamentals of Latin American Business
LAS 2514	Historical Continuity and Social Change in Latin America

LAS 3267	Sociology of Music: Nation, Race, Class and Gender in Argentina and Brazil
LAS 3601	"Other Voices" in Latin American Literature
LAS 3602	Caribbean Literature and Culture
LAS 3801	African Culture in Brazil
Political Science	
POLS 2211	Contemporary Politics of Europe
POLS 2212	Eastern Europe, Russia and the West
POLS 2231	Comparative Political Systems in Latin America
POLS 2255	Comparative Public Policy
POLS 2314	Politics of International Law
POLS 2321	Politics of the Global Economy
POLS 2331	International Organization
POLS 3212	British Government and Politics
POLS 3241	Mideast Politics
POLS 3252	East Asia and the United States
or ASST 3252	East Asia and the United States
POLS 3265	International Environmental Policy
or ENST 3265	International Environmental Policy
Religion	
REL 2002	Religion and Human Sexuality
REL 2007	Religion in Film
REL 2101	Indian Philosophies and Religions
or ASST 2101	Religions of India
REL 2102	Introduction to Buddhism
or ASST 2102	Introduction to Buddhism
REL 2201	Chinese Religions - Confucius to Mao
REL 2301	Zen Buddhism
or ASST 2301	Zen Buddhism
REL 2403	Introduction to Judaism
or JST 2403	Introduction to Judaism
REL 2447	Kabbalah and Mysticism
or JST 2447	Kabbalah and Mysticism
REL 2502	Jesus in the Media
REL 2606	Introduction to Islam
REL 2702	Religion in Contemporary Africa
REL 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
or ASST 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
REL 3201	I-Ching, Tao, and Ch'an/Zen
or ASST 3201	I-Ching, Tao, and Ch'an/Zen
REL 3301	Japanese Religions
or ASST 3301	Japanese Religions
REL 3411	The Philosophies of Judaism
or JST 3411	The Philosophies of Judaism
REL 3601	The Islamic State
REL 3602	Women in Islam
REL 3603	Islamic Mysticism
REL 3702	African Religions and New World Culture

Total Credit Hours
18-20

Contact Information

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Communication Studies BA with Contemporary Media Environments Track

Overview

The **Bachelor of Arts in Communication Studies** is a studies-based interdisciplinary major. It features the academic (aesthetic, analytical, critical, historical, theoretical) and interdisciplinary study of communication as represented by the departments included within the Lew Klein College of Media and Communication.

Designed to ensure flexibility and choice, Communication Studies allows students a chance to fully investigate multiple fields in the communications discipline. Emphasis is placed on providing an overview of Communication while also accentuating personal academic growth. Personal choice and options allow students a chance to complete the degree in a timely manner.

In this interdisciplinary program, Communication Studies students **must select one of the following tracks** as a distinctive area of investigation:

- Communication and Entrepreneurship
- Contemporary Media Environments
- Global Civil Society
- Policy, Regulation and Advocacy
- Production (for Temple Japan students only)
- Communication Studies Thesis (the Major of Distinction track, which is available for advanced scholars)

An optional concentration in International Communication is also available.

The flexibility of the Communication Studies program offers students access to the field experiences, internships and study away experiences vital to a comprehensive education. Students with a number of skill sets and academic interest areas are often drawn to this innovative program and graduates are poised for a number of professional and academic possibilities, such as graduate, law or professional school. Graduates of this program will be well-suited to pursue a variety of positions across numerous aspects of the communications field.

Students receive cross-curricular expertise through foundation and core courses. Academic rigor and student choice are at the very core of the program. Choices allow a student flexibility, and curricular oversight ensures a solid, academically robust education. Courses are designed to allow student progress to be monitored at yearly intervals. Experiential learning is promoted, particularly during the junior and senior years. Cross cultural exchanges and experiences are integral aspects of the program's design. Advanced scholars have a distinct and individualized track.

Contemporary Media Environments Track

The **Contemporary Media Environments track** provides an historical overview of communication technologies—from papyrus to moveable type, from the rotary press to broadcasting and the Internet—and the ways that they shape public life. It will introduce theories on the relationship between technology and society, focusing on the intersection between communication technologies and the public sphere.

Campus Locations: Main and Japan

Program Code: CO-CMST-BA

Contact Information

Main Campus

Scott Gratson, PhD, Program Director
Annenberg Hall, Room 9C
215-204-6434
sgratson@temple.edu

Temple Japan Campus

Ron Carr, MFA, Major Coordinator
carr@tuj.temple.edu

Learn more about the Bachelor of Arts in Communication Studies.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The degree of Bachelor of Arts may be conferred upon a student majoring in Communication Studies by the recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours (s.h.) of credit with a cumulative grade point average of 2.0 overall and in the major.

Students must meet:

- University requirements
 - All students are required to complete the General Education (GenEd (p. 83)) curriculum.
 - All students must take a minimum of two writing-intensive courses in the major at Temple University.
- Low Klein College of Media and Communication requirements (p. 1184), including KLN 1001 and KLN 1002.
- Minimum of 42 s.h. in Communication Studies.
- Each course that fulfills a requirement for the major must be passed with a C- or better.
- Maximum of 30 s.h. in any one Klein department may be counted toward the major.
- A maximum of 4 s.h. of Internship credit may be counted toward the degree.
- A maximum of 8 s.h. combined of Independent Study and/or Special Projects may be counted toward the degree.
- No more than 8 s.h. in Kinesiology and Dance activities courses.
- Students may participate in study away programs.
- Transfer students are required to complete a minimum of 24 s.h. of major courses at Temple.
- Communication Studies majors may minor in established Klein minors. The Communication Studies student who declares a minor must complete the entire program requirements for both the major and the minor. Courses listed for both the Communication Studies major and Klein minor will only apply towards one of the curriculums. If the class is part of an array of courses, students will be required to take a different course to satisfy the major requirement.

Communication Studies: Contemporary Media Environments Track Requirements

- All Communication Studies majors must take the following two foundation courses:

Code	Title	Credit Hours
CMST 1111	Communication and Public Life	3
MSP 1021	Introduction to Media Analysis	3
Total Credit Hours		6

- All majors will take five additional core courses. Students will select one course each from the categories below (15 credits). Students should plan to meet the prerequisites for courses in their selected track by taking appropriate core courses.

Code	Title	Credit Hours
Core Courses		
CMST 2111	Communications Seminar ¹	3
Communication Theory		
Select one of the following:		3
ADV 1101	Introduction to Media and Society	
ADV 1102	Introduction to Advertising	
JRN 1111	Journalism and Society	
MSP 1011	Introduction to Media Theory	
Research Methods		
Select one of the following:		3
ADV 2141	Introduction to Brand Strategy and Research	
JRN 2101	Journalism Research	
MSP 2141	Media Research ¹	
Analysis		
Select one of the following:		3
ADV 2151	Introduction to Art Direction: Visual Communication	
MSP 2421	Media Popular Culture ¹	
CSI 1111	Introduction to Public Speaking	
or CSI 1911	Honors Introduction to Public Speaking	

Cross-Cultural Perspectives

Select one of the following:		3
CSI 3701	Intercultural Communication	
CSI 3702	Communication, Culture and Identity	

Total Credit Hours **15**

1

Course has prerequisites.

3. In consultation with a faculty advisor, a student must take seven courses (minimum 21 credits) from the list below.
- Within the track, a student must take at least one course from at least three different departments.
 - At least four courses in the track must be taken at the 3000 or 4000 level. At least one of these four must be taken at the 4000 level.
 - Students must have met the prerequisites for courses in their track by taking the appropriate core courses (see above).
 - All students must take a minimum of two writing-intensive courses in the major. Writing-intensive courses end in the numbers 96, 97 and 98 and are noted (WI) in the list below.

Code	Title	Credit Hours
Contemporary Media Environments Track Options		21
ADV 2151	Introduction to Art Direction: Visual Communication ¹	3
JRN 2301	Introduction to Magazines	3
JRN 3401	Photography	4
JRN 3403	Documentary Photography	3
JRN 3505	Experimental Journalism	3
JRN 3701	Contemporary Issues in Journalism	3
JRN 3702	Race and Racism in the News	3
JRN 3703	History of Journalism	3
JRN 3704	Ethical Issues in Journalism	3
JRN 3705	Gender and American Mass Media	3
JRN 3708	Newsroom Management	3
JRN 3709	The Entrepreneurial Journalist	3
MSP 3153	Media Criticism	3
MSP 3297	History of Electronic Media (WI)	3
MSP 3324	The Video Game Industry and Game Culture	3
MSP 3421	Technology and Culture	3
MSP 3445	Media Images and Analysis	3
MSP 4226	Public Media	3
MSP 4252	Law and Ethics of Digital Media	3
MSP 4446	Psychological Processing of Media	3
MSP 4453	Information Society	3
MSP 4454	Public Information Media Campaigns	3
MSP 4496	Global Media (WI)	3
MSP 4497	Media and Children (WI)	3
MSP 4541	Mobile Media	3

1

ADV 2151 will apply towards Contemporary Media Environments track to satisfy a distribution requirement. For students completing this track, they will be required to take MSP 2421, CSI 1111, or CSI 1911 to satisfy the Analysis requirement.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Communication Studies with a Track in Contemporary Media Environments

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
CMST 1111	Communication and Public Life	3
Select one of the following (Communication Theory):		3
ADV 1101	Introduction to Media and Society	
ADV 1102	Introduction to Advertising	
JRN 1111	Journalism and Society	
MSP 1011	Introduction to Media Theory	
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4
KLN 1001	Klein First-Year Seminar	1
Credit Hours		15
Spring		
KLN 1002	Klein College Introduction to Professional Development	1
MSP 1021	Introduction to Media Analysis	3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Elective		3
Credit Hours		16
Year 2		
Fall		
CMST 2111	Communications Seminar	3
Select one of the following (Analysis):		3
ADV 2151	Introduction to Art Direction: Visual Communication	
MSP 2421	Media Popular Culture	
CSI 1111	Introduction to Public Speaking	
or CSI 1911	or Honors Introduction to Public Speaking	
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
GenEd Breadth Course		3-4
GenEd Breadth Course		3
Credit Hours		15
Spring		
Select one of the following (Cross-Cultural Perspectives):		3
CSI 3701	Intercultural Communication	
CSI 3702	Communication, Culture and Identity	
Select one of the following (Research Methods):		3
ADV 2141	Introduction to Brand Strategy and Research	
JRN 2101	Journalism Research	
MSP 2141	Media Research	
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15

Year 3**Fall**

One CME Track Course - any level	3
One Writing-Intensive CME Track Course - any level	3
Electives	9
Credit Hours	15

Spring

One 3000-4999 CME Track Course	3
One 3000-4999 CME Track Course	3
Electives	10
Credit Hours	16

Year 4**Fall**

One 3000-4999 Writing-Intensive CME Track Course	3
One CME Track Course - any level	3
Electives	10
Credit Hours	16

Spring

One 4000-4999 CME Track Course	3
Electives	13
Credit Hours	16
Total Credit Hours	124

Optional Concentration

The **optional International Communication Concentration (ICC)** provides a theoretical and practical education in international and intercultural communication and media. This program allows students to develop sought-after competencies in cultural sensitivity and intercultural communication skills by encouraging students to reflect on their own cultural lenses. Students participating in the ICC program will be exposed to multiple international perspectives through internationally- and interculturally-oriented courses offered on Temple's domestic campuses and may be supplemented with study abroad coursework.

This concentration is restricted to Klein students only.

Requirements

To earn the International Communication Concentration transcript notation, a student must successfully complete a total of 18-20 credits of International / Intercultural studies courses, a maximum 9 credits of which may come from courses transferred into Temple, across 3 areas. Each course that fulfills a requirement for the concentration must be passed with a C- or better.

Code	Title	Credit Hours
Common Course		
Select one of the following:		3
CSI 3701	Intercultural Communication	
CSI 3703	Intercultural Communication in the Workplace	
Klein International/Intercultural courses		
Select three of the following:		9
Any ADV, CMST, CSI, JRN, MSP, or PR courses taken as part of a Klein Global Opportunities Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)		
Any ADV, CMST, CSI, JRN, MSP, or PR Internship completed as part of a Klein Global Opportunities International Program		
CSI 2401	Intercultural and Cross Cultural Conflict	
CSI 3702	Communication, Culture and Identity	
CSI 3703	Intercultural Communication in the Workplace (if not used to fulfill common course requirement above)	
JRN 3254	International Reporting	
JRN 3706	Journalism and Globalization	
MSP 3471	Media and Cultural Differences	

MSP 3572	Communication and Development
MSP 4453	Information Society
MSP 4496	Global Media
PR 2672	Global Communication and Leadership

International/Intercultural Electives outside of Klein

Note: Satisfying the GenEd World Society requirement by completing a Study Abroad does not also satisfy this requirement.

Choose any two (2) courses of the following:

6-8

Up to any two foreign language courses

Any non-Klein courses at the 2000-level or higher taken in a Klein Global Opportunities Int'l Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)

Any non-Klein internship taken in a Klein Global Opportunities International Program

Anthropology

ANTH 2238	Visual Anthropology of Modern Japan
or ASST 2238	Visual Anthropology of Modern Japan
ANTH 2374	The Anthropology of Modern China
or ASST 2374	The Anthropology of Modern China
ANTH 2361	Peoples of Latin America
or LAS 2361	Peoples of Latin America
ANTH 2362	Peoples and Cultures of the Caribbean
or LAS 2362	Peoples and Cultures of the Caribbean

Art History

ARTH 2102	
ARTH 2105	Roman Art and Archaeology
ARTH 2129	Greek and Roman Sculpture
ARTH 2431	Early Modern Italy and Spain in the 17th Century
ARTH 2432	Northern and Global Baroque Art: Art in the Age of Rubens, Rembrandt, Vermeer
ARTH 2543	Transnational Impressionisms
ARTH 2642	Modern Art, 1900-1945
ARTH 2868	Arts of Asia
ARTH 1003	History of Art in Rome (Study Abroad - Rome)
ARTH 2135	Art and Culture in Ancient Rome (Study Abroad - Rome)
ARTH 2428	Wonders of Rome: Art and Culture of the Baroque Era (Study Abroad - Rome)
ARTH 2622	Galleries and Studios of Rome (Study Abroad - Rome)
ARTH 1801	Arts of Asia (Study Abroad - Japan)
ARTH 2815	Pre-Modern Japanese Art up to the Edo Period (Study Abroad - Japan)

Asian Studies

ASST 2001	Practical Asian Society and Culture
ASST 2011	Survey of Japanese Literature Before 1868
ASST 2015	Tokyo in Literature and Film
or JPNS 2015	Tokyo in Literature and Film
ASST 2021	Japanese Literature in Film
or JPNS 2021	Japanese Literature in Film
ASST 2351	Japan in a Changing World
ASST 2367	South Asia: Peoples, Culture, Experiences
ASST 2373	Japanese Culture
or ANTH 2373	Japanese Culture
ASST 2503	Introduction to Southeast Asia: Insular
ASST 2504	Introduction to Southeast Asia: Mainland
ASST 2511	Introduction to Asian Business
ASST 3247	Ideology and Social Change in Japan
or SOC 3247	Ideology and Social Change in Japan
ASST 3251	China: State and Society

or POLS 3251	China: State and Society
ASST 3522	Contemporary China
or HIST 3522	Contemporary China
ASST 3541	Japan Today
or HIST 3541	Japan Today
ASST 3542	Women and Society in Japan
or HIST 3542	Women and Society in Japan
Film & Media Arts	
FMA 4673	International Cinema
Geography & Urban Studies	
GUS 2032	Urban Systems in a Global Economy
GUS 2073	African Development
GUS 2074	East and South Asia
or ASST 2074	Geography of East and South Asia
GUS 3021	International Urbanization
GUS 3052	Environmental Problems in Asia
or ASST 3052	Environmental Problems in Asia
or ENST 3052	Environmental Problems in Asia
GUS 3073	Geography of Travel and Tourism
GUS 3307	Transportation & Culture
History	
HIST 2303	History of Central Europe, 1618-1871
HIST 2317	Central Europe Through Wars and Revolution, 1848-1989
HIST 2501	Introduction to East Asia: China
or ASST 2501	Introduction to East Asia: China
HIST 2502	Introduction to East Asia: Japan
or ASST 2502	Introduction to East Asia: Japan
HIST 2503	Introduction to Southeast Asia: Insular
or ASST 2503	Introduction to Southeast Asia: Insular
HIST 2504	Introduction to Southeast Asia: Mainland
or ASST 2504	Introduction to Southeast Asia: Mainland
HIST 2511	Introduction to African History
HIST 2514	Introduction to Latin America
HIST 2515	Civilization and Modernity in the Caribbean
or LAS 2515	Civilization and Modernity in the Caribbean
HIST 2516	Modern Islamic History
HIST 2611	Third World Issues through Film
HIST 3321	Irish History
HIST 3331	History of England
HIST 3362	Russia: Nationality and Empire
HIST 3363	Russia: Revolution, State, and Empire
HIST 3511	Southern Africa: A History
HIST 3521	The Chinese Revolution
HIST 3531	Modern India
HIST 3551	History of Vietnam
HIST 3561	History of Brazil
or LAS 3561	History of Brazil
HIST 3562	Contemporary Mexico
or LAS 3562	Contemporary Mexico
HIST 3571	Israel: History, Politics and Society
HIST 3572	Modern Middle East
HIST 3675	Third World Women's Lives

Jewish Studies

JST 2706 Jewish Diaspora/Survey of Jewish History

Latin American Studies

LAS 2101 Latin America through Film and Fiction

LAS 2231 Comparative Political Systems in Latin America

LAS 2502 Fundamentals of Latin American Business

or IB 2502 Fundamentals of Latin American Business

LAS 2514 Historical Continuity and Social Change in Latin America

LAS 3267 Sociology of Music: Nation, Race, Class and Gender in Argentina and Brazil

LAS 3601 "Other Voices" in Latin American Literature

LAS 3602 Caribbean Literature and Culture

LAS 3801 African Culture in Brazil

Political Science

POLS 2211 Contemporary Politics of Europe

POLS 2212 Eastern Europe, Russia and the West

POLS 2231 Comparative Political Systems in Latin America

POLS 2255 Comparative Public Policy

POLS 2314 Politics of International Law

POLS 2321 Politics of the Global Economy

POLS 2331 International Organization

POLS 3212 British Government and Politics

POLS 3241 Mideast Politics

POLS 3252 East Asia and the United States

or ASST 3252 East Asia and the United States

POLS 3265 International Environmental Policy

or ENST 3265 International Environmental Policy

Religion

REL 2002 Religion and Human Sexuality

REL 2007 Religion in Film

REL 2101 Indian Philosophies and Religions

or ASST 2101 Religions of India

REL 2102 Introduction to Buddhism

or ASST 2102 Introduction to Buddhism

REL 2201 Chinese Religions - Confucius to Mao

REL 2301 Zen Buddhism

or ASST 2301 Zen Buddhism

REL 2403 Introduction to Judaism

or JST 2403 Introduction to Judaism

REL 2447 Kabbalah and Mysticism

or JST 2447 Kabbalah and Mysticism

REL 2502 Jesus in the Media

REL 2606 Introduction to Islam

REL 2702 Religion in Contemporary Africa

REL 3011 Monks, Masters, and Magicians: Religion in Premodern Chinese Literature

or ASST 3011 Monks, Masters, and Magicians: Religion in Premodern Chinese Literature

REL 3201 I-Ching, Tao, and Ch'an/Zen

or ASST 3201 I-Ching, Tao, and Ch'an/Zen

REL 3301 Japanese Religions

or ASST 3301 Japanese Religions

REL 3411 The Philosophies of Judaism

or JST 3411 The Philosophies of Judaism

REL 3601 The Islamic State

REL 3602	Women in Islam
REL 3603	Islamic Mysticism
REL 3702	African Religions and New World Culture

Total Credit Hours**18-20**

Contact Information

Jack Klotz, MSP Faculty Advisor
 Annenberg Hall, Room 115
 215-204-5823
 jklotz@temple.edu

Communication Studies BA with Global Civil Society Track

Overview

The **Bachelor of Arts in Communication Studies** is a studies-based interdisciplinary major. It features the academic (aesthetic, analytical, critical, historical, theoretical) and interdisciplinary study of communication as represented by the departments included within the Lew Klein College of Media and Communication.

Designed to ensure flexibility and choice, Communication Studies allows students a chance to fully investigate multiple fields in the communications discipline. Emphasis is placed on providing an overview of Communication while also accentuating personal academic growth. Personal choice and options allow students a chance to complete the degree in a timely manner.

In this interdisciplinary program, Communication Studies students **must select one of the following tracks** as a distinctive area of investigation:

- Communication and Entrepreneurship
- Contemporary Media Environments
- Global Civil Society
- Policy, Regulation and Advocacy
- Production (for Temple Japan students only)
- Communication Studies Thesis (the Major of Distinction track, which is available for advanced scholars)

An optional concentration in International Communication is also available.

The flexibility of the Communication Studies program offers students access to the field experiences, internships and study away experiences vital to a comprehensive education. Students with a number of skill sets and academic interest areas are often drawn to this innovative program and graduates are poised for a number of professional and academic possibilities, such as graduate, law or professional school. Graduates of this program will be well-suited to pursue a variety of positions across numerous aspects of the communications field.

Students receive cross-curricular expertise through foundation and core courses. Academic rigor and student choice are at the very core of the program. Choices allow a student flexibility, and curricular oversight ensures a solid, academically robust education. Courses are designed to allow student progress to be monitored at yearly intervals. Experiential learning is promoted, particularly during the junior and senior years. Cross cultural exchanges and experiences are integral aspects of the program's design. Advanced scholars have a distinct and individualized track.

Global Civil Society Track

The **Global Civil Society track** will survey evidence on the emergence of global civil society including social movements, historical development and the growing international public sphere. Courses will address such topics as public diplomacy, global mediascapes, international and public opinion.

Campus Location: Main

Program Code: CO-CMST-BA

Contact Information

Scott Gratson, PhD, Program Director
 Annenberg Hall, Room 9C
 215-204-6434
 sgratson@temple.edu

Learn more about the Bachelor of Arts in Communication Studies.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The degree of Bachelor of Arts may be conferred upon a student majoring in Communication Studies by the recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours (s.h.) of credit with a cumulative grade point average of 2.0 overall and in the major.

Students must meet:

- University requirements
 - All students are required to complete the General Education (GenEd (p. 83)) curriculum.
 - All students must take a minimum of two writing-intensive courses in the major at Temple University.
- Low Klein College of Media and Communication requirements (p. 1184), including KLN 1001 and KLN 1002.
- Minimum of 42 s.h. in Communication Studies.
- Each course that fulfills a requirement for the major must be passed with a C- or better.
- Maximum of 30 s.h. in any one Klein department may be counted toward the major.
- A maximum of 4 s.h. of Internship credit may be counted toward the degree.
- A maximum of 8 s.h. combined of Independent Study and/or Special Projects may be counted toward the degree.
- No more than 8 s.h. in Kinesiology and Dance activities courses.
- Students may participate in study away programs.
- Transfer students are required to complete a minimum of 24 s.h. of major courses at Temple.
- Communication Studies majors may minor in established Klein minors. The Communication Studies student who declares a minor must complete the entire program requirements for both the major and the minor. Courses listed for both the Communication Studies major and Klein minor will only apply towards one of the curriculums. If the class is part of an array of courses, students will be required to take a different course to satisfy the major requirement.

Communication Studies: Global Civil Society Track Requirements

- All Communication Studies majors must take the following two foundation courses:

Code	Title	Credit Hours
CMST 1111	Communication and Public Life	3
MSP 1021	Introduction to Media Analysis	3
Total Credit Hours		6

- All majors will take five additional core courses. Students will select one course each from the categories below. Students should plan to meet the prerequisites for courses in their selected track by taking appropriate core courses.

Code	Title	Credit Hours
Core Courses		
CMST 2111	Communications Seminar ¹	3
Communication Theory		
Select one of the following:		3
ADV 1101	Introduction to Media and Society	
ADV 1102	Introduction to Advertising	
JRN 1111	Journalism and Society	
MSP 1011	Introduction to Media Theory	
Research Methods		
Select one of the following:		3
ADV 2141	Introduction to Brand Strategy and Research	
JRN 2101	Journalism Research	
MSP 2141	Media Research ¹	
Analysis		
Select one of the following:		3
ADV 2151	Introduction to Art Direction: Visual Communication	
MSP 2421	Media Popular Culture ¹	

CSI 1111 or CSI 1911	Introduction to Public Speaking Honors Introduction to Public Speaking	
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Cross-Cultural Perspectives

Select one of the following: 3

CSI 3701	Intercultural Communication	
CSI 3702	Communication, Culture and Identity	

Total Credit Hours 15

1

Course has prerequisites.

3. In consultation with a faculty advisor, a student must take seven courses (minimum 21 credits) from the list below.
- Within the track, a student must take at least one course from at least three different departments.
 - At least four courses in the track must be taken at the 3000 or 4000 level. At least one of these four must be taken at the 4000 level.
 - Students must have met the prerequisites for courses in their track by taking the appropriate core courses (see above).
 - All students must take a minimum of two writing-intensive courses in the major. Writing-intensive courses end in the numbers 96, 97 and 98 and are noted (WI) in the list below.

Code	Title	Credit Hours
Global Civil Society Track Options		21
CSI 3702	Communication, Culture and Identity ¹	3
JRN 3401	Photography	4
JRN 3403	Documentary Photography	3
JRN 3505	Experimental Journalism	3
JRN 3702	Race and Racism in the News	3
JRN 3705	Gender and American Mass Media	3
JRN 3706	Journalism and Globalization	3
JRN 3709	The Entrepreneurial Journalist	3
JRN 3751	Foreign Studies in Journalism	3 to 6
MSP 3153	Media Criticism	3
MSP 3296	Travel Writing (WI) ²	3
MSP 3324	The Video Game Industry and Game Culture	3
MSP 3421	Technology and Culture	3
MSP 3445	Media Images and Analysis	3
MSP 3471	Media and Cultural Differences	3
MSP 3473	Media and the Environment	3
MSP 3572	Communication and Development	3
MSP 4252	Law and Ethics of Digital Media	3
MSP 4446	Psychological Processing of Media	3
MSP 4453	Information Society	3
MSP 4496	Global Media (WI)	3
MSP 4497	Media and Children (WI)	3
MSP 4541	Mobile Media	3
MSP 4572	British Media and Telecommunication	3 to 6
PR 2662	Leading Groups and Team Building	3

1

Courses in various categories can only be counted once.

2

Permission of Klein Study Away Director or Assistant Director required.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Communication Studies with a Track in Global Civil Society

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
CMST 1111	Communication and Public Life	3
Select one of the following (Communication Theory):		3
ADV 1101	Introduction to Media and Society	
ADV 1102	Introduction to Advertising	
JRN 1111	Journalism and Society	
MSP 1011	Introduction to Media Theory	
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4
KLN 1001	Klein First-Year Seminar	1
Credit Hours		15
Spring		
KLN 1002	Klein College Introduction to Professional Development	1
MSP 1021	Introduction to Media Analysis	3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3-4
Elective		3
Credit Hours		16
Year 2		
Fall		
CMST 2111	Communications Seminar	3
Select one of the following (Analysis):		3
ADV 2151	Introduction to Art Direction: Visual Communication	
MSP 2421	Media Popular Culture	
CSI 1111	Introduction to Public Speaking	
or CSI 1911	or Honors Introduction to Public Speaking	
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
Select one of the following (Cross-Cultural Perspectives):		3
CSI 3701	Intercultural Communication	
CSI 3702	Communication, Culture and Identity	
Select one of the following (Research Methods):		3
ADV 2141	Introduction to Brand Strategy and Research	
JRN 2101	Journalism Research	
MSP 2141	Media Research	
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15

Year 3**Fall**

One GCS Track Course - any level	3
One Writing-Intensive GCS Track Course - any level	3
Electives	9
Credit Hours	15

Spring

One 3000-4999 GCS Track Course	3
One 3000-4999 GCS Track Course	3
Electives	10
Credit Hours	16

Year 4**Fall**

One 3000-4999 Writing-Intensive GCS Track Course	3
One GCS Track Course - any level	3
Electives	10
Credit Hours	16

Spring

One 4000-4999 GCS Track Course	3
Electives	13
Credit Hours	16
Total Credit Hours	124

Optional Concentration

The **optional International Communication Concentration (ICC)** provides a theoretical and practical education in international and intercultural communication and media. This program allows students to develop sought-after competencies in cultural sensitivity and intercultural communication skills by encouraging students to reflect on their own cultural lenses. Students participating in the ICC program will be exposed to multiple international perspectives through internationally- and interculturally-oriented courses offered on Temple's domestic campuses and may be supplemented with study abroad coursework.

This concentration is restricted to Klein students only.

Requirements

To earn the International Communication Concentration transcript notation, a student must successfully complete a total of 18-20 credits of International / Intercultural studies courses, a maximum 9 credits of which may come from courses transferred into Temple, across 3 areas. Each course that fulfills a requirement for the concentration must be passed with a C- or better.

Code	Title	Credit Hours
Common Course		
Select one of the following:		3
CSI 3701	Intercultural Communication	
CSI 3703	Intercultural Communication in the Workplace	
Klein International/Intercultural courses		
Select three of the following:		9
Any ADV, CMST, CSI, JRN, MSP, or PR courses taken as part of a Klein Global Opportunities Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)		
Any ADV, CMST, CSI, JRN, MSP, or PR Internship completed as part of a Klein Global Opportunities International Program		
CSI 2401	Intercultural and Cross Cultural Conflict	
CSI 3702	Communication, Culture and Identity	
CSI 3703	Intercultural Communication in the Workplace (if not used to fulfill common course requirement above)	
JRN 3254	International Reporting	
JRN 3706	Journalism and Globalization	
MSP 3471	Media and Cultural Differences	

MSP 3572	Communication and Development
MSP 4453	Information Society
MSP 4496	Global Media
PR 2672	Global Communication and Leadership

International/Intercultural Electives outside of Klein

Note: Satisfying the GenEd World Society requirement by completing a Study Abroad does not also satisfy this requirement.

Choose any two (2) courses of the following:

6-8

Up to any two foreign language courses

Any non-Klein courses at the 2000-level or higher taken in a Klein Global Opportunities Int'l Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)

Any non-Klein internship taken in a Klein Global Opportunities International Program

Anthropology

ANTH 2238	Visual Anthropology of Modern Japan
or ASST 2238	Visual Anthropology of Modern Japan
ANTH 2374	The Anthropology of Modern China
or ASST 2374	The Anthropology of Modern China
ANTH 2361	Peoples of Latin America
or LAS 2361	Peoples of Latin America
ANTH 2362	Peoples and Cultures of the Caribbean
or LAS 2362	Peoples and Cultures of the Caribbean

Art History

ARTH 2102	
ARTH 2105	Roman Art and Archaeology
ARTH 2129	Greek and Roman Sculpture
ARTH 2431	Early Modern Italy and Spain in the 17th Century
ARTH 2432	Northern and Global Baroque Art: Art in the Age of Rubens, Rembrandt, Vermeer
ARTH 2543	Transnational Impressionisms
ARTH 2642	Modern Art, 1900-1945
ARTH 2868	Arts of Asia
ARTH 1003	History of Art in Rome (Study Abroad - Rome)
ARTH 2135	Art and Culture in Ancient Rome (Study Abroad - Rome)
ARTH 2428	Wonders of Rome: Art and Culture of the Baroque Era (Study Abroad - Rome)
ARTH 2622	Galleries and Studios of Rome (Study Abroad - Rome)
ARTH 1801	Arts of Asia (Study Abroad - Japan)
ARTH 2815	Pre-Modern Japanese Art up to the Edo Period (Study Abroad - Japan)

Asian Studies

ASST 2001	Practical Asian Society and Culture
ASST 2011	Survey of Japanese Literature Before 1868
ASST 2015	Tokyo in Literature and Film
or JPNS 2015	Tokyo in Literature and Film
ASST 2021	Japanese Literature in Film
or JPNS 2021	Japanese Literature in Film
ASST 2351	Japan in a Changing World
ASST 2367	South Asia: Peoples, Culture, Experiences
ASST 2373	Japanese Culture
or ANTH 2373	Japanese Culture
ASST 2503	Introduction to Southeast Asia: Insular
ASST 2504	Introduction to Southeast Asia: Mainland
ASST 2511	Introduction to Asian Business
ASST 3247	Ideology and Social Change in Japan
or SOC 3247	Ideology and Social Change in Japan
ASST 3251	China: State and Society

or POLS 3251	China: State and Society
ASST 3522	Contemporary China
or HIST 3522	Contemporary China
ASST 3541	Japan Today
or HIST 3541	Japan Today
ASST 3542	Women and Society in Japan
or HIST 3542	Women and Society in Japan
Film & Media Arts	
FMA 4673	International Cinema
Geography & Urban Studies	
GUS 2032	Urban Systems in a Global Economy
GUS 2073	African Development
GUS 2074	East and South Asia
or ASST 2074	Geography of East and South Asia
GUS 3021	International Urbanization
GUS 3052	Environmental Problems in Asia
or ASST 3052	Environmental Problems in Asia
or ENST 3052	Environmental Problems in Asia
GUS 3073	Geography of Travel and Tourism
GUS 3307	Transportation & Culture
History	
HIST 2303	History of Central Europe, 1618-1871
HIST 2317	Central Europe Through Wars and Revolution, 1848-1989
HIST 2501	Introduction to East Asia: China
or ASST 2501	Introduction to East Asia: China
HIST 2502	Introduction to East Asia: Japan
or ASST 2502	Introduction to East Asia: Japan
HIST 2503	Introduction to Southeast Asia: Insular
or ASST 2503	Introduction to Southeast Asia: Insular
HIST 2504	Introduction to Southeast Asia: Mainland
or ASST 2504	Introduction to Southeast Asia: Mainland
HIST 2511	Introduction to African History
HIST 2514	Introduction to Latin America
HIST 2515	Civilization and Modernity in the Caribbean
or LAS 2515	Civilization and Modernity in the Caribbean
HIST 2516	Modern Islamic History
HIST 2611	Third World Issues through Film
HIST 3321	Irish History
HIST 3331	History of England
HIST 3362	Russia: Nationality and Empire
HIST 3363	Russia: Revolution, State, and Empire
HIST 3511	Southern Africa: A History
HIST 3521	The Chinese Revolution
HIST 3531	Modern India
HIST 3551	History of Vietnam
HIST 3561	History of Brazil
or LAS 3561	History of Brazil
HIST 3562	Contemporary Mexico
or LAS 3562	Contemporary Mexico
HIST 3571	Israel: History, Politics and Society
HIST 3572	Modern Middle East
HIST 3675	Third World Women's Lives

Jewish Studies

JST 2706	Jewish Diaspora/Survey of Jewish History
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Latin American Studies

LAS 2101	Latin America through Film and Fiction
LAS 2231	Comparative Political Systems in Latin America
LAS 2502	Fundamentals of Latin American Business
or IB 2502	Fundamentals of Latin American Business
LAS 2514	Historical Continuity and Social Change in Latin America
LAS 3267	Sociology of Music: Nation, Race, Class and Gender in Argentina and Brazil
LAS 3601	"Other Voices" in Latin American Literature
LAS 3602	Caribbean Literature and Culture
LAS 3801	African Culture in Brazil

Political Science

POLS 2211	Contemporary Politics of Europe
POLS 2212	Eastern Europe, Russia and the West
POLS 2231	Comparative Political Systems in Latin America
POLS 2255	Comparative Public Policy
POLS 2314	Politics of International Law
POLS 2321	Politics of the Global Economy
POLS 2331	International Organization
POLS 3212	British Government and Politics
POLS 3241	Mideast Politics
POLS 3252	East Asia and the United States
or ASST 3252	East Asia and the United States
POLS 3265	International Environmental Policy
or ENST 3265	International Environmental Policy

Religion

REL 2002	Religion and Human Sexuality
REL 2007	Religion in Film
REL 2101	Indian Philosophies and Religions
or ASST 2101	Religions of India
REL 2102	Introduction to Buddhism
or ASST 2102	Introduction to Buddhism
REL 2201	Chinese Religions - Confucius to Mao
REL 2301	Zen Buddhism
or ASST 2301	Zen Buddhism
REL 2403	Introduction to Judaism
or JST 2403	Introduction to Judaism
REL 2447	Kabbalah and Mysticism
or JST 2447	Kabbalah and Mysticism
REL 2502	Jesus in the Media
REL 2606	Introduction to Islam
REL 2702	Religion in Contemporary Africa
REL 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
or ASST 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
REL 3201	I-Ching, Tao, and Ch'an/Zen
or ASST 3201	I-Ching, Tao, and Ch'an/Zen
REL 3301	Japanese Religions
or ASST 3301	Japanese Religions
REL 3411	The Philosophies of Judaism
or JST 3411	The Philosophies of Judaism
REL 3601	The Islamic State

REL 3602	Women in Islam
REL 3603	Islamic Mysticism
REL 3702	African Religions and New World Culture

Total Credit Hours**18-20**

Contact Information

Jack Klotz, MSP Faculty Advisor
 Annenberg Hall, Room 115
 215-204-5823
 jklotz@temple.edu

Communication Studies BA with Policy, Regulation and Advocacy Track

Overview

The **Bachelor of Arts in Communication Studies** is a studies-based interdisciplinary major. It features the academic (aesthetic, analytical, critical, historical, theoretical) and interdisciplinary study of communication as represented by the departments included within the Lew Klein College of Media and Communication.

Designed to ensure flexibility and choice, Communication Studies allows students a chance to fully investigate multiple fields in the communications discipline. Emphasis is placed on providing an overview of Communication while also accentuating personal academic growth. Personal choice and options allow students a chance to complete the degree in a timely manner.

In this interdisciplinary program, Communication Studies students **must select one of the following tracks** as a distinctive area of investigation:

- Communication and Entrepreneurship
- Contemporary Media Environments
- Global Civil Society
- Policy, Regulation and Advocacy
- Production (for Temple Japan students only)
- Communication Studies Thesis (the Major of Distinction track, which is available for advanced scholars)

An optional concentration in International Communication is also available.

The flexibility of the Communication Studies program offers students access to the field experiences, internships and study away experiences vital to a comprehensive education. Students with a number of skill sets and academic interest areas are often drawn to this innovative program and graduates are poised for a number of professional and academic possibilities, such as graduate, law or professional school. Graduates of this program will be well-suited to pursue a variety of positions across numerous aspects of the communications field.

Students receive cross-curricular expertise through foundation and core courses. Academic rigor and student choice are at the very core of the program. Choices allow a student flexibility, and curricular oversight ensures a solid, academically robust education. Courses are designed to allow student progress to be monitored at yearly intervals. Experiential learning is promoted, particularly during the junior and senior years. Cross cultural exchanges and experiences are integral aspects of the program's design. Advanced scholars have a distinct and individualized track.

Policy, Regulation and Advocacy Track

The **Policy, Regulation and Advocacy track** focuses on citizen advocacy in the field of communication as related to and shaped by communication policy and regulation. Students are introduced to historical and recent examples of citizen advocacy in communication policy through the examination of social movements, civic journalism, art and performance, and special interest groups tied to issues of race, gender, ethnicity, sexual orientation and the environment.

Campus Location: Main

Program Code: CO-CMST-BA

Contact Information

Scott Gratson, PhD, Program Director
 Annenberg Hall, Room 9C
 215-204-6434
 sgratson@temple.edu

Learn more about the Bachelor of Arts in Communication Studies.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The degree of Bachelor of Arts may be conferred upon a student majoring in Communication Studies by the recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours (s.h.) of credit with a cumulative grade point average of 2.0 overall and in the major.

Students must meet:

1. University requirements
 - All students are required to complete the General Education (GenEd (p. 83)) curriculum.
 - All students must take a minimum of two writing-intensive courses in the major at Temple University.
2. Low Klein College of Media and Communication requirements (p. 1184), including KLN 1001 and KLN 1002.
3. Minimum of 42 s.h. in Communication Studies.
4. Each course that fulfills a requirement for the major must be passed with a C- or better.
5. Maximum of 30 s.h. in any one Klein department may be counted toward the major.
6. A maximum of 4 s.h. of Internship credit may be counted toward the degree.
7. A maximum of 8 s.h. combined of Independent Study and/or Special Projects may be counted toward the degree.
8. No more than 8 s.h. in Kinesiology and Dance activities courses.
9. Students may participate in study away programs.
10. Transfer students are required to complete a minimum of 24 s.h. of major courses at Temple.
11. Communication Studies majors may minor in established Klein minors. The Communication Studies student who declares a minor must complete the entire program requirements for both the major and the minor. Courses listed for both the Communication Studies major and Klein minor will only apply towards one of the curriculums. If the class is part of an array of courses, students will be required to take a different course to satisfy the major requirement.

Communication Studies: Policy, Regulation and Advocacy Track Requirements

1. All Communication Studies majors must take the following two foundation courses:

Code	Title	Credit Hours
CMST 1111	Communication and Public Life	3
MSP 1021	Introduction to Media Analysis	3
Total Credit Hours		6

2. All majors will take five additional core courses. Students will select one course each from the categories below (15 credits). Students should plan to meet the prerequisites for courses in their selected track by taking appropriate core courses.

Code	Title	Credit Hours
Core Courses		
CMST 2111	Communications Seminar ¹	3
Communication Theory		
Select one of the following:		3
ADV 1101	Introduction to Media and Society	
ADV 1102	Introduction to Advertising	
JRN 1111	Journalism and Society	
MSP 1011	Introduction to Media Theory	
Research Methods		
Select one of the following:		3
ADV 2141	Introduction to Brand Strategy and Research	
JRN 2101	Journalism Research	
MSP 2141	Media Research ¹	
Analysis		
Select one of the following:		3

ADV 2151	Introduction to Art Direction: Visual Communication	
MSP 2421	Media Popular Culture ¹	
CSI 1111 or CSI 1911	Introduction to Public Speaking Honors Introduction to Public Speaking	
Cross-Cultural Perspectives		
Select one of the following:		3
CSI 3701	Intercultural Communication	
CSI 3702	Communication, Culture and Identity	
Total Credit Hours		15

1

Course has prerequisites.

3. In consultation with a faculty advisor, a student must take seven courses (minimum 21 credits) from the list below.
- Within the track, a student must take at least one course from at least three different departments.
 - At least four courses in the track must be taken at the 3000 or 4000 level. At least one of these four must be taken at the 4000 level.
 - Students must have met the prerequisites for courses in their track by taking the appropriate core courses (see above).
 - All students must take a minimum of two writing-intensive courses in the major, at least one must be taken at the 3000+ level. Writing-intensive courses end in the numbers 96, 97 and 98 and are noted (WI) in the list below.

Code	Title	Credit Hours
Policy, Regulation and Advocacy Track Options		21
ADV 4197	Advanced Writing for Academic and Professional Communication	3
CSI 1113	Persuasion	3
CSI 2111	Argumentation and Advocacy	3
CSI 2296	Resistance, Protests, and Social Movements (WI)	3
CSI 3201	Rhetoric and Civic Culture	3
CSI 3296	Speechwriting (WI)	3
CSI 3896	Rhetorical Criticism (WI)	3
JRN 3101	Journalism Law and Ethics	3
JRN 3401	Photography	4
JRN 3403	Documentary Photography	3
JRN 3505	Experimental Journalism	3
JRN 3702	Race and Racism in the News	3
JRN 3704	Ethical Issues in Journalism	3
JRN 3705	Gender and American Mass Media	3
JRN 3709	The Entrepreneurial Journalist	3
MSP 3153	Media Criticism	3
MSP 3324	The Video Game Industry and Game Culture	3
MSP 3421	Technology and Culture	3
MSP 3445	Media Images and Analysis	3
MSP 3471	Media and Cultural Differences	3
MSP 3473	Media and the Environment	3
MSP 3572	Communication and Development	3
MSP 4221	Information Technology Policy	3
MSP 4226	Public Media	3
MSP 4252	Law and Ethics of Digital Media	3
MSP 4425	Lesbian, Gay, Bisexual and Transgender Representation in Popular Media	3
MSP 4446	Psychological Processing of Media	3
MSP 4453	Information Society	3
MSP 4454	Public Information Media Campaigns	3
MSP 4496	Global Media (WI)	3

MSP 4497	Media and Children (WI)	3
MSP 4541	Mobile Media	3

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Communication Studies with a Track in Policy, Regulation and Advocacy Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
CMST 1111	Communication and Public Life	3
Select one of the following (Communication Theory):		3
ADV 1101	Introduction to Media and Society	
ADV 1102	Introduction to Advertising	
JRN 1111	Journalism and Society	
MSP 1011	Introduction to Media Theory	
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ}		4
KLN 1001	Klein First-Year Seminar	1
Credit Hours		15
Spring		
KLN 1002	Klein College Introduction to Professional Development	1
MSP 1021	Introduction to Media Analysis	3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3-4
Elective		3
Credit Hours		16
Year 2		
Fall		
CMST 2111	Communications Seminar	3
Select one of the following (Analysis):		3
ADV 2151	Introduction to Art Direction: Visual Communication	
MSP 2421	Media Popular Culture	
CSI 1111 or CSI 1911	Introduction to Public Speaking or Honors Introduction to Public Speaking	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
Select one of the following (Cross-Cultural Perspectives):		3
CSI 3701	Intercultural Communication	
CSI 3702	Communication, Culture and Identity	
Select one of the following (Research Methods):		3
ADV 2141	Introduction to Brand Strategy and Research	
JRN 2101	Journalism Research	
MSP 2141	Media Research	

IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
One PRA Track Course - any level		3
One Writing-Intensive PRA Track Course - any level		3
Electives		9
Credit Hours		15
Spring		
One 3000-4999 PRA Track Course		3
One 3000-4999 PRA Track Course		3
Electives		10
Credit Hours		16
Year 4		
Fall		
One 3000-4999 Writing-Intensive PRA Track Course		3
One PRA Track Course - any level		3
Electives		10
Credit Hours		16
Spring		
One 4000-4999 PRA Track Course		3
Electives		13
Credit Hours		16
Total Credit Hours		124

Optional Concentration

The **optional International Communication Concentration (ICC)** provides a theoretical and practical education in international and intercultural communication and media. This program allows students to develop sought-after competencies in cultural sensitivity and intercultural communication skills by encouraging students to reflect on their own cultural lenses. Students participating in the ICC program will be exposed to multiple international perspectives through internationally- and interculturally-oriented courses offered on Temple's domestic campuses and may be supplemented with study abroad coursework.

This concentration is restricted to Klein students only.

Requirements

To earn the International Communication Concentration transcript notation, a student must successfully complete a total of 18-20 credits of International / Intercultural studies courses, a maximum 9 credits of which may come from courses transferred into Temple, across 3 areas. Each course that fulfills a requirement for the concentration must be passed with a C- or better.

Code	Title	Credit Hours
Common Course		
Select one of the following:		3
CSI 3701	Intercultural Communication	
CSI 3703	Intercultural Communication in the Workplace	
Klein International/Intercultural courses		
Select three of the following:		9
Any ADV, CMST, CSI, JRN, MSP, or PR courses taken as part of a Klein Global Opportunities Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)		
Any ADV, CMST, CSI, JRN, MSP, or PR Internship completed as part of a Klein Global Opportunities International Program		
CSI 2401	Intercultural and Cross Cultural Conflict	

CSI 3702	Communication, Culture and Identity
CSI 3703	Intercultural Communication in the Workplace (if not used to fulfill common course requirement above)
JRN 3254	International Reporting
JRN 3706	Journalism and Globalization
MSP 3471	Media and Cultural Differences
MSP 3572	Communication and Development
MSP 4453	Information Society
MSP 4496	Global Media
PR 2672	Global Communication and Leadership

International/Intercultural Electives outside of Klein

Note: Satisfying the GenEd World Society requirement by completing a Study Abroad does not also satisfy this requirement.

Choose any two (2) courses of the following:

6-8

Up to any two foreign language courses

Any non-Klein courses at the 2000-level or higher taken in a Klein Global Opportunities Int'l Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)

Any non-Klein internship taken in a Klein Global Opportunities International Program

Anthropology

ANTH 2238 or ASST 2238	Visual Anthropology of Modern Japan
ANTH 2374 or ASST 2374	The Anthropology of Modern China
ANTH 2361 or LAS 2361	Peoples of Latin America
ANTH 2362 or LAS 2362	Peoples and Cultures of the Caribbean

Art History

ARTH 2102	
ARTH 2105	Roman Art and Archaeology
ARTH 2129	Greek and Roman Sculpture
ARTH 2431	Early Modern Italy and Spain in the 17th Century
ARTH 2432	Northern and Global Baroque Art: Art in the Age of Rubens, Rembrandt, Vermeer
ARTH 2543	Transnational Impressionisms
ARTH 2642	Modern Art, 1900-1945
ARTH 2868	Arts of Asia
ARTH 1003	History of Art in Rome (Study Abroad - Rome)
ARTH 2135	Art and Culture in Ancient Rome (Study Abroad - Rome)
ARTH 2428	Wonders of Rome: Art and Culture of the Baroque Era (Study Abroad - Rome)
ARTH 2622	Galleries and Studios of Rome (Study Abroad - Rome)
ARTH 1801	Arts of Asia (Study Abroad - Japan)
ARTH 2815	Pre-Modern Japanese Art up to the Edo Period (Study Abroad - Japan)

Asian Studies

ASST 2001	Practical Asian Society and Culture
ASST 2011	Survey of Japanese Literature Before 1868
ASST 2015 or JPNS 2015	Tokyo in Literature and Film
ASST 2021 or JPNS 2021	Japanese Literature in Film
ASST 2351	Japan in a Changing World
ASST 2367	South Asia: Peoples, Culture, Experiences
ASST 2373 or ANTH 2373	Japanese Culture
ASST 2503	Introduction to Southeast Asia: Insular

ASST 2504	Introduction to Southeast Asia: Mainland
ASST 2511	Introduction to Asian Business
ASST 3247 or SOC 3247	Ideology and Social Change in Japan Ideology and Social Change in Japan
ASST 3251 or POLS 3251	China: State and Society China: State and Society
ASST 3522 or HIST 3522	Contemporary China Contemporary China
ASST 3541 or HIST 3541	Japan Today Japan Today
ASST 3542 or HIST 3542	Women and Society in Japan Women and Society in Japan
Film & Media Arts	
FMA 4673	International Cinema
Geography & Urban Studies	
GUS 2032	Urban Systems in a Global Economy
GUS 2073	African Development
GUS 2074 or ASST 2074	East and South Asia Geography of East and South Asia
GUS 3021	International Urbanization
GUS 3052 or ASST 3052 or ENST 3052	Environmental Problems in Asia Environmental Problems in Asia Environmental Problems in Asia
GUS 3073	Geography of Travel and Tourism
GUS 3307	Transportation & Culture
History	
HIST 2303	History of Central Europe, 1618-1871
HIST 2317	Central Europe Through Wars and Revolution, 1848-1989
HIST 2501 or ASST 2501	Introduction to East Asia: China Introduction to East Asia: China
HIST 2502 or ASST 2502	Introduction to East Asia: Japan Introduction to East Asia: Japan
HIST 2503 or ASST 2503	Introduction to Southeast Asia: Insular Introduction to Southeast Asia: Insular
HIST 2504 or ASST 2504	Introduction to Southeast Asia: Mainland Introduction to Southeast Asia: Mainland
HIST 2511	Introduction to African History
HIST 2514	Introduction to Latin America
HIST 2515 or LAS 2515	Civilization and Modernity in the Caribbean Civilization and Modernity in the Caribbean
HIST 2516	Modern Islamic History
HIST 2611	Third World Issues through Film
HIST 3321	Irish History
HIST 3331	History of England
HIST 3362	Russia: Nationality and Empire
HIST 3363	Russia: Revolution, State, and Empire
HIST 3511	Southern Africa: A History
HIST 3521	The Chinese Revolution
HIST 3531	Modern India
HIST 3551	History of Vietnam
HIST 3561 or LAS 3561	History of Brazil History of Brazil

HIST 3562 or LAS 3562	Contemporary Mexico Contemporary Mexico
HIST 3571	Israel: History, Politics and Society
HIST 3572	Modern Middle East
HIST 3675	Third World Women's Lives
Jewish Studies	
JST 2706	Jewish Diaspora/Survey of Jewish History
Latin American Studies	
LAS 2101	Latin America through Film and Fiction
LAS 2231	Comparative Political Systems in Latin America
LAS 2502 or IB 2502	Fundamentals of Latin American Business Fundamentals of Latin American Business
LAS 2514	Historical Continuity and Social Change in Latin America
LAS 3267	Sociology of Music: Nation, Race, Class and Gender in Argentina and Brazil
LAS 3601	"Other Voices" in Latin American Literature
LAS 3602	Caribbean Literature and Culture
LAS 3801	African Culture in Brazil
Political Science	
POLS 2211	Contemporary Politics of Europe
POLS 2212	Eastern Europe, Russia and the West
POLS 2231	Comparative Political Systems in Latin America
POLS 2255	Comparative Public Policy
POLS 2314	Politics of International Law
POLS 2321	Politics of the Global Economy
POLS 2331	International Organization
POLS 3212	British Government and Politics
POLS 3241	Mideast Politics
POLS 3252 or ASST 3252	East Asia and the United States East Asia and the United States
POLS 3265 or ENST 3265	International Environmental Policy International Environmental Policy
Religion	
REL 2002	Religion and Human Sexuality
REL 2007	Religion in Film
REL 2101 or ASST 2101	Indian Philosophies and Religions Religions of India
REL 2102 or ASST 2102	Introduction to Buddhism Introduction to Buddhism
REL 2201	Chinese Religions - Confucius to Mao
REL 2301 or ASST 2301	Zen Buddhism Zen Buddhism
REL 2403 or JST 2403	Introduction to Judaism Introduction to Judaism
REL 2447 or JST 2447	Kabbalah and Mysticism Kabbalah and Mysticism
REL 2502	Jesus in the Media
REL 2606	Introduction to Islam
REL 2702	Religion in Contemporary Africa
REL 3011 or ASST 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
REL 3201 or ASST 3201	I-Ching, Tao, and Ch'an/Zen I-Ching, Tao, and Ch'an/Zen

REL 3301	Japanese Religions
or ASST 3301	Japanese Religions
REL 3411	The Philosophies of Judaism
or JST 3411	The Philosophies of Judaism
REL 3601	The Islamic State
REL 3602	Women in Islam
REL 3603	Islamic Mysticism
REL 3702	African Religions and New World Culture

Total Credit Hours**18-20**

Contact Information

Jack Klotz, MSP Faculty Advisor
 Annenberg Hall, Room 115
 215-204-5823
 jklotz@temple.edu

Communication Studies BA with Production Track (TUJ)

Overview

The **Bachelor of Arts in Communication Studies** is a studies-based interdisciplinary major. It features the academic (aesthetic, analytical, critical, historical, theoretical) and interdisciplinary study of communication as represented by the departments included within the Lew Klein College of Media and Communication.

Designed to ensure flexibility and choice, Communication Studies allows students a chance to fully investigate multiple fields in the communications discipline. Emphasis is placed on providing an overview of Communication while also accentuating personal academic growth. Personal choice and options allow students a chance to complete the degree in a timely manner.

In this interdisciplinary program, Communication Studies students **must select one of the following tracks** as a distinctive area of investigation:

- Communication and Entrepreneurship
- Contemporary Media Environments
- Global Civil Society
- Policy, Regulation and Advocacy
- Production (for Temple Japan students only)
- Communication Studies Thesis (the Major of Distinction track, which is available for advanced scholars)

An optional concentration in International Communication is also available.

The flexibility of the Communication Studies program offers students access to the field experiences, internships and study away experiences vital to a comprehensive education. Students with a number of skill sets and academic interest areas are often drawn to this innovative program and graduates are poised for a number of professional and academic possibilities, such as graduate, law or professional school. Graduates of this program will be well-suited to pursue a variety of positions across numerous aspects of the communications field.

Students receive cross-curricular expertise through foundation and core courses. Academic rigor and student choice are at the very core of the program. Choices allow a student flexibility, and curricular oversight ensures a solid, academically robust education. Courses are designed to allow student progress to be monitored at yearly intervals. Experiential learning is promoted, particularly during the junior and senior years. Cross cultural exchanges and experiences are integral aspects of the program's design. Advanced scholars have a distinct and individualized track.

Production Track

The **Production track** is available only at Temple University, Japan Campus. It provides an overview of divergent technologies used in the production of media, including traditional and multi-media platforms. Students wishing to expand their knowledge of communications to include skill-based knowledge vital in a variety of professional fields, including filmmaking, television and radio are welcome.

Students are expected to gain an understanding of both fiction and non-fiction narratives, and how technological components such as photography, editing and audio contribute to the realization of the project. As writing is a crucial component of project work, students will complete scripts, essays and articles, including extensive revision. Attainment of professional production broadcast standards is expected.

Campus Location: Japan

Program Code: CO-CMST-BA

Contact Information

Ron Carr, MFA, Major Coordinator
carr@tuj.temple.edu

Learn more about the Bachelor of Arts in Communication Studies.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The degree of Bachelor of Arts may be conferred upon a student majoring in Communication Studies by the recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours (s.h.) of credit with a cumulative grade point average of 2.0 overall and in the major.

Students must meet:

- University requirements
 - All students are required to complete the General Education (GenEd (p. 83)) curriculum.
 - All students must take a minimum of two writing-intensive courses in the major at Temple University.
- Lew Klein College of Media and Communication requirements (p. 1184).
- Minimum of 42 s.h. in Communication Studies.
- Each course that fulfills a requirement for the major must be passed with a C- or better.
- Maximum of 30 s.h. in any one Klein department may be counted toward the major.
- A maximum of 4 s.h. of Internship credit may be counted toward the degree.
- A maximum of 8 s.h. combined of Independent Study and/or Special Projects may be counted toward the degree.
- No more than 8 s.h. in Kinesiology and Dance activities courses.
- Students may participate in study away programs.
- Transfer students are required to complete a minimum of 24 s.h. of major courses at Temple.
- Communication Studies majors may minor in established Klein minors. The Communication Studies student who declares a minor must complete the entire program requirements for both the major and the minor. Courses listed for both the Communication Studies major and Klein minor will only apply towards one of the curriculums. If the class is part of an array of courses, students will be required to take a different course to satisfy the major requirement.

Communication Studies: Production Track Requirements

- All Communication Studies majors must take the following two foundation courses:

Code	Title	Credit Hours
CMST 1111	Communication and Public Life	3
MSP 1021	Introduction to Media Analysis	3
Total Credit Hours		6

- All majors will take five additional core courses. Students will select one course each from the categories below (15 credits). Students should plan to meet the prerequisites for courses in their selected track by taking appropriate core courses.

Code	Title	Credit Hours
Core Courses		
CMST 2111	Communications Seminar ¹	3
Communication Theory		
Select one of the following:		3
JRN 1111	Journalism and Society	
ADV 1101	Introduction to Media and Society	
Research Methods		
JRN 2101	Journalism Research	3
Analysis		
Select one of the following:		3

MSP 2421	Media Popular Culture ¹	
CSI 1111	Introduction to Public Speaking	
Cross-Cultural Perspectives (specific to TUJ)		
JRN 3706	Journalism and Globalization	3
Total Credit Hours		15

1

Course has prerequisites.

3. In consultation with a faculty advisor, a student must take seven courses (minimum 21 credits) from the list below.

- Students must have met the prerequisites for courses in their track by taking the appropriate core courses (see above).
- All students must take a minimum of two writing-intensive courses in the major. The writing-intensive course options for this track are MSP 4496, MSP 4796 and JRN 2396.

Code	Title	Credit Hours
MSP 1701	Introduction to Media Production	3
Choose either the TV Production or Audio/Radio focus:		12
TV Production Focus		
MSP 2701	Intermediate Video Production	
MSP 3701	Genres of Media Production	
Select one of the following:		
MSP 2751	Audio for Media	
MSP 3709	Advanced Editing	
MSP 3721	Media Performance	
MSP 4701	Producing and Directing	
Audio/Radio Focus		
MSP 2751	Audio for Media	
MSP 3751	Studio Music Recording Techniques	
Select one of the following:		
MSP 2701	Intermediate Video Production	
MSP 3721	Media Performance	
Writing-Intensive Courses		
Select two of the following:		6
MSP 4496	Global Media	
MSP 4796	Creative Scriptwriting	
JRN 2396	Magazine Article Writing	
Total Credit Hours		21

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Communication Studies with a Track in Production

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
CMST 1111	Communication and Public Life	3
Select one of the following (Communication Theory):		3
JRN 1111	Journalism and Society	
ADV 1101	Introduction to Media and Society	
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	

GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		14
Spring		
MSP 1021	Introduction to Media Analysis	3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Elective		4
Credit Hours		16
Year 2		
Fall		
CMST 2111	Communications Seminar	3
Select one of the following (Analysis):		3
MSP 2421	Media Popular Culture	
CSI 1111	Introduction to Public Speaking	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3-4
GenEd Breadth Course		3
Credit Hours		15
Spring		
JRN 2101	Journalism Research (Research Methods)	3
JRN 3706	Journalism and Globalization (Cross-Cultural Perspectives)	3
MSP 1701	Introduction to Media Production	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
Select one of the following based on either the TV Production or Audio/Radio focus:		4
MSP 2701	Intermediate Video Production (for TV Production focus)	
MSP 2751	Audio for Media (for Audio/Radio focus)	
GenEd Breadth Course		3
Electives		9
Credit Hours		16
Spring		
Select one of the following based on the focus chosen in previous semester:		4
MSP 3701	Genres of Media Production (for TV Production focus)	
MSP 3751	Studio Music Recording Techniques (for Audio/Radio focus)	
Select one of the following based on the focus chosen in previous semester:		4
For TV Production focus, select one of the following courses:		
MSP 2751	Audio for Media	
MSP 3709	Advanced Editing	
MSP 3721	Media Performance	
MSP 4701	Producing and Directing	
For Audio/Radio focus, select one of the following courses:		
MSP 2701	Intermediate Video Production	
MSP 3721	Media Performance	
Electives		9
Credit Hours		17

Year 4**Fall**

Select one of the following:

3

MSP 4496 Global Media

MSP 4796 Creative Scriptwriting

JRN 2396 Magazine Article Writing

Electives

13

Credit Hours**16****Spring**

Select one of the following not previously taken:

3

MSP 4496 Global Media

MSP 4796 Creative Scriptwriting

JRN 2396 Magazine Article Writing

Electives

12

Credit Hours**15****Total Credit Hours****124**

Optional Concentration

The **optional International Communication Concentration (ICC)** provides a theoretical and practical education in international and intercultural communication and media. This program allows students to develop sought-after competencies in cultural sensitivity and intercultural communication skills by encouraging students to reflect on their own cultural lenses. Students participating in the ICC program will be exposed to multiple international perspectives through internationally- and interculturally-oriented courses offered on Temple's domestic campuses and may be supplemented with study abroad coursework.

This concentration is restricted to Klein students only.

Requirements

To earn the International Communication Concentration transcript notation, a student must successfully complete a total of 18-20 credits of International / Intercultural studies courses, a maximum 9 credits of which may come from courses transferred into Temple, across 3 areas. Each course that fulfills a requirement for the concentration must be passed with a C- or better.

Code	Title	Credit Hours
Common Course		
Select one of the following:		3
CSI 3701	Intercultural Communication	
CSI 3703	Intercultural Communication in the Workplace	
Klein International/Intercultural courses		
Select three of the following:		9
Any ADV, CMST, CSI, JRN, MSP, or PR courses taken as part of a Klein Global Opportunities Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)		
Any ADV, CMST, CSI, JRN, MSP, or PR Internship completed as part of a Klein Global Opportunities International Program		
CSI 2401	Intercultural and Cross Cultural Conflict	
CSI 3702	Communication, Culture and Identity	
CSI 3703	Intercultural Communication in the Workplace (if not used to fulfill common course requirement above)	
JRN 3254	International Reporting	
JRN 3706	Journalism and Globalization	
MSP 3471	Media and Cultural Differences	
MSP 3572	Communication and Development	
MSP 4453	Information Society	
MSP 4496	Global Media	
PR 2672	Global Communication and Leadership	

International/Intercultural Electives outside of Klein

Note: Satisfying the GenEd World Society requirement by completing a Study Abroad does not also satisfy this requirement.

Choose any two (2) courses of the following:

6-8

Up to any two foreign language courses

Any non-Klein courses at the 2000-level or higher taken in a Klein Global Opportunities Int'l Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)

Any non-Klein internship taken in a Klein Global Opportunities International Program

Anthropology

ANTH 2238 Visual Anthropology of Modern Japan
or ASST 2238 Visual Anthropology of Modern Japan

ANTH 2374 The Anthropology of Modern China
or ASST 2374 The Anthropology of Modern China

ANTH 2361 Peoples of Latin America
or LAS 2361 Peoples of Latin America

ANTH 2362 Peoples and Cultures of the Caribbean
or LAS 2362 Peoples and Cultures of the Caribbean

Art History

ARTH 2102

ARTH 2105 Roman Art and Archaeology

ARTH 2129 Greek and Roman Sculpture

ARTH 2431 Early Modern Italy and Spain in the 17th Century

ARTH 2432 Northern and Global Baroque Art: Art in the Age of Rubens, Rembrandt, Vermeer

ARTH 2543 Transnational Impressionisms

ARTH 2642 Modern Art, 1900-1945

ARTH 2868 Arts of Asia

ARTH 1003 History of Art in Rome (Study Abroad - Rome)

ARTH 2135 Art and Culture in Ancient Rome (Study Abroad - Rome)

ARTH 2428 Wonders of Rome: Art and Culture of the Baroque Era (Study Abroad - Rome)

ARTH 2622 Galleries and Studios of Rome (Study Abroad - Rome)

ARTH 1801 Arts of Asia (Study Abroad - Japan)

ARTH 2815 Pre-Modern Japanese Art up to the Edo Period (Study Abroad - Japan)

Asian Studies

ASST 2001 Practical Asian Society and Culture

ASST 2011 Survey of Japanese Literature Before 1868

ASST 2015 Tokyo in Literature and Film

or JPNS 2015 Tokyo in Literature and Film

ASST 2021 Japanese Literature in Film

or JPNS 2021 Japanese Literature in Film

ASST 2351 Japan in a Changing World

ASST 2367 South Asia: Peoples, Culture, Experiences

ASST 2373 Japanese Culture

or ANTH 2373 Japanese Culture

ASST 2503 Introduction to Southeast Asia: Insular

ASST 2504 Introduction to Southeast Asia: Mainland

ASST 2511 Introduction to Asian Business

ASST 3247 Ideology and Social Change in Japan

or SOC 3247 Ideology and Social Change in Japan

ASST 3251 China: State and Society

or POLS 3251 China: State and Society

ASST 3522 Contemporary China

or HIST 3522 Contemporary China

ASST 3541 Japan Today

or HIST 3541 Japan Today

ASST 3542 Women and Society in Japan

or HIST 3542	Women and Society in Japan
Film & Media Arts	
FMA 4673	International Cinema
Geography & Urban Studies	
GUS 2032	Urban Systems in a Global Economy
GUS 2073	African Development
GUS 2074	East and South Asia
or ASST 2074	Geography of East and South Asia
GUS 3021	International Urbanization
GUS 3052	Environmental Problems in Asia
or ASST 3052	Environmental Problems in Asia
or ENST 3052	Environmental Problems in Asia
GUS 3073	Geography of Travel and Tourism
GUS 3307	Transportation & Culture
History	
HIST 2303	History of Central Europe, 1618-1871
HIST 2317	Central Europe Through Wars and Revolution, 1848-1989
HIST 2501	Introduction to East Asia: China
or ASST 2501	Introduction to East Asia: China
HIST 2502	Introduction to East Asia: Japan
or ASST 2502	Introduction to East Asia: Japan
HIST 2503	Introduction to Southeast Asia: Insular
or ASST 2503	Introduction to Southeast Asia: Insular
HIST 2504	Introduction to Southeast Asia: Mainland
or ASST 2504	Introduction to Southeast Asia: Mainland
HIST 2511	Introduction to African History
HIST 2514	Introduction to Latin America
HIST 2515	Civilization and Modernity in the Caribbean
or LAS 2515	Civilization and Modernity in the Caribbean
HIST 2516	Modern Islamic History
HIST 2611	Third World Issues through Film
HIST 3321	Irish History
HIST 3331	History of England
HIST 3362	Russia: Nationality and Empire
HIST 3363	Russia: Revolution, State, and Empire
HIST 3511	Southern Africa: A History
HIST 3521	The Chinese Revolution
HIST 3531	Modern India
HIST 3551	History of Vietnam
HIST 3561	History of Brazil
or LAS 3561	History of Brazil
HIST 3562	Contemporary Mexico
or LAS 3562	Contemporary Mexico
HIST 3571	Israel: History, Politics and Society
HIST 3572	Modern Middle East
HIST 3675	Third World Women's Lives
Jewish Studies	
JST 2706	Jewish Diaspora/Survey of Jewish History
Latin American Studies	
LAS 2101	Latin America through Film and Fiction
LAS 2231	Comparative Political Systems in Latin America
LAS 2502	Fundamentals of Latin American Business

or IB 2502	Fundamentals of Latin American Business
LAS 2514	Historical Continuity and Social Change in Latin America
LAS 3267	Sociology of Music: Nation, Race, Class and Gender in Argentina and Brazil
LAS 3601	"Other Voices" in Latin American Literature
LAS 3602	Caribbean Literature and Culture
LAS 3801	African Culture in Brazil
Political Science	
POLS 2211	Contemporary Politics of Europe
POLS 2212	Eastern Europe, Russia and the West
POLS 2231	Comparative Political Systems in Latin America
POLS 2255	Comparative Public Policy
POLS 2314	Politics of International Law
POLS 2321	Politics of the Global Economy
POLS 2331	International Organization
POLS 3212	British Government and Politics
POLS 3241	Mideast Politics
POLS 3252	East Asia and the United States
or ASST 3252	East Asia and the United States
POLS 3265	International Environmental Policy
or ENST 3265	International Environmental Policy
Religion	
REL 2002	Religion and Human Sexuality
REL 2007	Religion in Film
REL 2101	Indian Philosophies and Religions
or ASST 2101	Religions of India
REL 2102	Introduction to Buddhism
or ASST 2102	Introduction to Buddhism
REL 2201	Chinese Religions - Confucius to Mao
REL 2301	Zen Buddhism
or ASST 2301	Zen Buddhism
REL 2403	Introduction to Judaism
or JST 2403	Introduction to Judaism
REL 2447	Kabbalah and Mysticism
or JST 2447	Kabbalah and Mysticism
REL 2502	Jesus in the Media
REL 2606	Introduction to Islam
REL 2702	Religion in Contemporary Africa
REL 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
or ASST 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
REL 3201	I-Ching, Tao, and Ch'an/Zen
or ASST 3201	I-Ching, Tao, and Ch'an/Zen
REL 3301	Japanese Religions
or ASST 3301	Japanese Religions
REL 3411	The Philosophies of Judaism
or JST 3411	The Philosophies of Judaism
REL 3601	The Islamic State
REL 3602	Women in Islam
REL 3603	Islamic Mysticism
REL 3702	African Religions and New World Culture

Total Credit Hours
18-20

Contact Information

Jack Klotz, MSP Faculty Advisor
 Annenberg Hall, Room 115
 215-204-5823
 jklotz@temple.edu

Communication Studies Minor

Overview

The focus of the Communication Studies program is on the academic (aesthetic, analytical, critical, historical, theoretical) and interdisciplinary study of communication and media.

The **Minor in Communication Studies** requires students to take two foundational courses (6 credits) introducing students to the broad concepts of communication in public life and of media history and convergence. Students then take one course from each of the following categories (12 credits): Communication Theory, Research Methods, Analysis, and Cross-Cultural Perspectives.

Unlike Communication Studies majors, students are not required to take advanced coursework.

The minor is available to undergraduate students in any major except Communication Studies. Other Klein students may declare the minor, but all minor requirements must be separate from major requirements, with the exception of MSP 1021.

Campus Location: Main

Contact Information

Scott Gratson, PhD, Program Director
 Annenberg Hall, Room 9C
 215-204-6434
 sgratson@temple.edu

Learn more about the Communication Studies minor.

Requirements

The Communication Studies minor requires a total of 18 credits. Students must earn at least a C- in all required courses.

Code	Title	Credit Hours
Foundation Courses		
CMST 1111	Communication and Public Life	3
MSP 1021	Introduction to Media Analysis	3
Communication Theory		
Select one of the following:		3
ADV 1101	Introduction to Media and Society	
ADV 1102	Introduction to Advertising	
JRN 1111	Journalism and Society	
MSP 1011	Introduction to Media Theory	
Research Methods		
Select one of the following:		3
ADV 2141	Introduction to Brand Strategy and Research	
JRN 2101	Journalism Research	
MSP 2141	Media Research	
Analysis		
Select one of the following:		3
ADV 2151	Introduction to Art Direction: Visual Communication	
MSP 2421	Media Popular Culture	
CSI 1111	Introduction to Public Speaking	
or CSI 1911	Honors Introduction to Public Speaking	
Cross-Cultural Perspectives		

Select one of the following:

3

CSI 3701	Intercultural Communication
CSI 3702	Communication, Culture and Identity

Total Credit Hours

18

Content Creation Minor

Overview

The **Minor in Content Creation**, offered by the Department of Advertising and Public Relations, consists of seven courses (21 s.h.) and is designed for students who are interested in building their creative development skills and learning the principles behind strategic social media and content marketing materials.

Campus Location: Main

Contact Information

Kathy Mueller, Department Chair
215-204-4262
kmueller@temple.edu

Michelle Rambo, Senior Administrative Specialist
215-204-4268
michelle.rambo@temple.edu

Advertising and Public Relations Department Office
Annenberg Hall, Room 300

<https://klein.temple.edu/academics>

Learn more about the Content Creation minor.

Requirements

Code	Title	Credit Hours
ADV 1102	Introduction to Advertising	3
ADV 1103	Digital Media and Advertising	3
ADV 1196	Persuasive Writing	3
ADV 2005	Social Media Marketing	3
ADV 2121	Introduction to Copywriting	3
ADV 2151	Introduction to Art Direction: Visual Communication	3
ADV 3022	Copywriting for Print and Web	3

Total Credit Hours

21

Digital Media Engagement Minor

Overview

The **Minor in Digital Media Engagement**, offered by the Department of Advertising and Public Relations, consists of seven courses (21 s.h.) and is designed for students in any major looking to build digital expertise to help build a marketable skill set. Students prepare to take the Google AdWords Certification Exam and the Google Analytics Individual Qualification Exam upon completion of these courses.

Campus Location: Main

Contact Information

Kathy Mueller, Department Chair
215-204-4262
kmueller@temple.edu

Michelle Rambo, Senior Administrative Specialist
215-204-4268

michelle.rambo@temple.edu

Advertising and Public Relations Department Office
Annenberg Hall, Room 300

<https://klein.temple.edu/academics>

Learn more about the Digital Media Engagement minor.

Requirements

Code	Title	Credit Hours
ADV 1102	Introduction to Advertising	3
ADV 1103	Digital Media and Advertising	3
ADV 2002	Search Engine Optimization	3
ADV 2005	Social Media Marketing	3
ADV 2131	Introduction to Media Planning	3
ADV 3004	Klein Online Marketing Challenge	3
ADV 3031	Digital Analytics and Reporting	3
Total Credit Hours		21

Digital Media Technologies Minor (KCMC)

Overview

The **Minor in Digital Media Technologies** is an interdisciplinary minor offered through the Department of Media Studies and Production (MSP) within the Lew Klein College of Media and Communication and the Department of Computer and Information Sciences (CIS) within the College of Science and Technology. This minor is designed to expand students' knowledge of the information age and enable them to share communications over the internet using fast evolving, emerging technologies.

The minor is available to undergraduate students in Media Studies and Production, Computer and Information Science, as well as other departments and colleges. Upon completion of the minor, students should be able to demonstrate the following competencies:

- Use technology to integrate internet content with computers and mobile devices.
- Design and implement content for various digital media, utilizing database technologies.
- Critically analyze decisions made regarding the use of technology, specifically in the social and ethical domains.
- Understand the impact of current and emerging technologies on communications, both locally and globally.
- Create effective written communications make professional presentations.
- Analyze and solve problems efficiently.

Campus Location: Main

Note: Transfer credits are not accepted for credit for the minor.

Contact Information

Sally Kyvernitis, CIS Faculty Advisor
Science Education and Research Center, Room 330
215-204-2030
sallyk@temple.edu

Hector Postigo, MSP Faculty Advisor
Annenberg Hall, Room 115
215-204-7398
hector.postigo@temple.edu

Learn more about the Digital Media Technologies minor.

Minor Requirements

- Students with a GPA of 2.00 or more may declare this minor by contacting either CST advising (215-204-2890) or Klein advising (215-204-5273). See additional Grade Requirements below.

- Three (3) of the Digital Media Technologies minor courses must be distinct from the student's major. Students should see their CST or Klein advisor for course substitutions.
- Students without a CIS background should begin their CIS courses in their Junior year or earlier.

Code	Title	Credit Hours
Two Required MSP Courses:		
Select one of the following:		3-4
MSP 1701	Introduction to Media Production	
MSP 2701	Intermediate Video Production ¹	
MSP 2751	Audio for Media ¹	
MSP 2741	Introduction to Internet Studies and Web Authoring ¹	3
Two Required CIS Courses:		
Select two courses from the following:		8
CIS 1052	Introduction to Web Technology and Programming	
CIS 1056	Advanced Web Technology and Programming	
CIS 2305	Mobile Computing Technologies ¹	
CIS 3308	Web Application Programming ¹	
CIS 3342	Server-Side Web Application Development ¹	
CIS 3344	Client-Side Scripting for the Web ¹	
CIS 3515	Introduction to Mobile Application Development ¹	
Two Electives:		
One CIS elective and one MSP elective are required. However, MSP students may choose two CIS electives instead and CIS students may choose two MSP electives instead.		
Select two courses from the following:		7-9
MSP Elective Options		
MSP 4741	Emergent Media Production	
MSP 4221	Information Technology Policy ¹	
MSP 4252	Law and Ethics of Digital Media	
MSP 4541	Mobile Media	
MSP 4614	Creating a Media Business	
CIS Elective Options		
CIS 2305	Mobile Computing Technologies ^{1,2}	
	any other CIS 2000+ level course ¹	
Total Credit Hours		21-24

¹
This course requires additional prerequisites outside of the Digital Media Technology Minor coursework.

²
May satisfy a CIS Elective only if CIS 2305 was not taken as a Required CIS Course.

Elective Requirements

- All prerequisites must be completed to enroll in minor courses or permission from both the faculty advisor and instructor must be obtained prior to registration.

Grade Requirements

- Minor credit is not given for grades below C-.
- Students must maintain at least a 2.00 grade point average in the program to successfully complete this minor.

Residency Requirements

At least 4 courses required for the minor must be completed at Temple. At least 2 CIS courses and at least 2 MSP courses must be completed at Temple.

Global Communication and Media Arts Minor

Overview

The Lew Klein College of Media and Communication has partnered with Temple University Rome (TU Rome) and Temple University Japan (TU Japan) to offer an 18–20-credit (at least 6 courses) **Minor in Global Communication and Media Arts (GCMA)**. This program is designed to provide undergraduate students from a wide range of academic backgrounds and interests, and especially students already studying at TU Rome or TU Japan, or who may be planning to study on one of Temple's international campuses, with an international education in communication arts and media production.

To earn the GCMA minor, students, who can be from any major, must successfully complete at least nine of the minor's 18–20 credits on one of Temple's international campuses: TU Rome or TU Japan. If desired, students can complete all 18–20 credits for the minor on one or both of Temple's international campuses. However, a maximum of 10 credits completed on Temple's Main campus can count toward the GCMA minor. In other words, a student could complete the entire GCMA minor without taking any courses on Temple's Main campus.

Students majoring in Advertising, Communication and Social Influence, Film and Media Arts, Journalism, or Media Studies and Production may count up to 3 credits (1 course) from the array of courses in the minor toward both their major and the minor. Should students decide to pursue a major in one of these programs, any courses from the minor's array that were completed from that major can be applied to the major; however, only 3 credits can count toward completing both the major and the minor.

Campus Locations: Japan, Rome

Requirements

To earn the Global Communication and Media Arts Minor transcript notation, a student must successfully complete a total of 18–20 credits of courses from the Klein College of Media and Communication and from the Department of Film and Media Arts. The minor requires that a minimum of 9 credits—and up to all—of the 18–20 credit hours must be taken on the campuses of either TU Rome or TU Japan, or both, and a maximum of 10 credit hours can be completed on Temple's Main campus. Each course that fulfills a requirement for the minor must be passed with a C- or better.

Code	Title	Credit Hours
Required Course		
Select one of the following: ¹		3
ADV 1101	Introduction to Media and Society	
JRN 1111	Journalism and Society	
MSP 1021	Introduction to Media Analysis	
Electives		
Select from the following list of courses, for a total of 15-17 credits: ²		15-17
ADV 1103	Digital Media and Advertising	
ADV 2104	Personal Branding	
ADV 2151	Introduction to Art Direction: Visual Communication	
CSI 2296	Resistance, Protests, and Social Movements	
CSI 2401	Intercultural and Cross Cultural Conflict	
CSI 3401	Social Activism and Community Organizing	
CSI 3701	Intercultural Communication	
CSI 3702	Communication, Culture and Identity	
JRN 3255	Sports Writing	
JRN 3263	Travel Writing	
JRN 3297	Writing Arts Criticism	
JRN 3403	Documentary Photography	
JRN 3711	Ethnic and Alternative News Media	
MSP 1655	Introduction to Media Business	
MSP 1701	Introduction to Media Production	
MSP 3296	Travel Writing	
MSP 3471	Media and Cultural Differences	
MSP 3473	Media and the Environment	
MSP 4496	Global Media	
MSP 4541	Mobile Media	

MSP 4614	Creating a Media Business
PR 2672	Global Communication and Leadership
FMA 1144	Media Arts for Non-Production Majors
FMA 1171	Media & Culture
FMA 1172	Introduction to Film and Video Analysis
FMA 2245	Video Production for Non-Production Majors ³
FMA 2678	History of Experimental Film and Video Art
FMA 3247	Cross-Cultural Image Making ⁴

Total Credit Hours**18-20**

1

At TU Rome and TU Japan, these courses may be cross-listed.

2

Not all of these courses will be offered at TU Rome or TU Japan every semester, but a select group will be offered regularly on both campuses.

3

Must be taken with FMA 3247.

4

Students without filmmaking experience must also take FMA 2245.

International Communication Minor

Overview

The **Minor in International Communication** provides a theoretical and practical education in international and intercultural communication and media. This program allows students to develop sought-after competencies in cultural sensitivity and intercultural communication skills by encouraging students to reflect on their own cultural lenses. Students participating in the minor will be exposed to multiple international perspectives through internationally- and interculturally-oriented courses offered on Temple's domestic campuses and may be supplemented with study abroad coursework.

This program is restricted to students outside the Lew Klein College of Media and Communication only.

Campus Locations: Main and Study Abroad

Contact Information

Jack Klotz, MSP Faculty Advisor
 Annenberg Hall, Room 115
 215-204-5823
 jklotz@temple.edu

Learn more about the International Communication minor.

Requirements

To earn the International Communication Minor transcript notation, a student must successfully complete a total of 18-20 credits of International / Intercultural studies courses. Each course that fulfills a requirement for the minor must be passed with a C- or better.

Code	Title	Credit Hours
Key Course		
Select one of the following:		3
CSI 3701	Intercultural Communication	
CSI 3703	Intercultural Communication in the Workplace	
Klein International / Intercultural courses		
Select three of the following:		9
Any ADV, CMST, CSI, JRN, MSP, or PR courses taken as part of a Klein Global Opportunities Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)		
Any ADV, CMST, CSI, JRN, MSP, or PR Internship completed as part of a Klein Global Opportunities International Program		
CSI 2401	Intercultural and Cross Cultural Conflict	
CSI 3702	Communication, Culture and Identity	

CSI 3703	Intercultural Communication in the Workplace (if not used to fulfill key course requirement above)
JRN 3254	International Reporting
JRN 3706	Journalism and Globalization
MSP 3471	Media and Cultural Differences
MSP 3572	Communication and Development
MSP 4453	Information Society
MSP 4496	Global Media
PR 2672	Global Communication and Leadership

International/Intercultural Electives outside of Klein

Note: Satisfying the GenEd World Society requirement by completing a Study Abroad does not also satisfy this requirement.

Choose any two (2) courses of the following

6-8

Up to any two foreign language courses

Any non-Klein courses at the 2000-level or higher taken in a Klein Global Opportunities Int'l Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)

Any non-Klein internship taken in a Klein Global Opportunities International Program

Anthropology

ANTH 2238	Visual Anthropology of Modern Japan
or ASST 2238	Visual Anthropology of Modern Japan
ANTH 2374	The Anthropology of Modern China
or ASST 2374	The Anthropology of Modern China
ANTH 2361	Peoples of Latin America
or LAS 2361	Peoples of Latin America
ANTH 2362	Peoples and Cultures of the Caribbean
or LAS 2362	Peoples and Cultures of the Caribbean

Art History

ARTH 2102	
ARTH 2105	Roman Art and Archaeology
ARTH 2129	Greek and Roman Sculpture
ARTH 2431	Early Modern Italy and Spain in the 17th Century
ARTH 2432	Northern and Global Baroque Art: Art in the Age of Rubens, Rembrandt, Vermeer
ARTH 2543	Transnational Impressionisms
ARTH 2642	Modern Art, 1900-1945
ARTH 2868	Arts of Asia
ARTH 1003	History of Art in Rome (Study Abroad - Rome)
ARTH 2135	Art and Culture in Ancient Rome (Study Abroad - Rome)
ARTH 2428	Wonders of Rome: Art and Culture of the Baroque Era (Study Abroad - Rome)
ARTH 2622	Galleries and Studios of Rome (Study Abroad - Rome)
ARTH 1801	Arts of Asia (Study Abroad - Japan)
ARTH 2815	Pre-Modern Japanese Art up to the Edo Period (Study Abroad - Japan)

Asian Studies

ASST 2001	Practical Asian Society and Culture
ASST 2011	Survey of Japanese Literature Before 1868
ASST 2015	Tokyo in Literature and Film
or JPNS 2015	Tokyo in Literature and Film
ASST 2021	Japanese Literature in Film
or JPNS 2021	Japanese Literature in Film
ASST 2351	Japan in a Changing World
ASST 2367	South Asia: Peoples, Culture, Experiences
ASST 2373	Japanese Culture
or ANTH 2373	Japanese Culture
ASST 2503	Introduction to Southeast Asia: Insular
ASST 2504	Introduction to Southeast Asia: Mainland

ASST 2511	Introduction to Asian Business
ASST 3247 or SOC 3247	Ideology and Social Change in Japan Ideology and Social Change in Japan
ASST 3251 or POLS 3251	China: State and Society China: State and Society
ASST 3522 or HIST 3522	Contemporary China Contemporary China
ASST 3541 or HIST 3541	Japan Today Japan Today
ASST 3542 or HIST 3542	Women and Society in Japan Women and Society in Japan
Film & Media Arts	
FMA 4673	International Cinema
Geography & Urban Studies	
GUS 2032	Urban Systems in a Global Economy
GUS 2073	African Development
GUS 2074 or ASST 2074	East and South Asia Geography of East and South Asia
GUS 3021	International Urbanization
GUS 3052 or ASST 3052 or ENST 3052	Environmental Problems in Asia Environmental Problems in Asia Environmental Problems in Asia
GUS 3073	Geography of Travel and Tourism
GUS 3307	Transportation & Culture
History	
HIST 2303	History of Central Europe, 1618-1871
HIST 2317	Central Europe Through Wars and Revolution, 1848-1989
HIST 2501 or ASST 2501	Introduction to East Asia: China Introduction to East Asia: China
HIST 2502 or ASST 2502	Introduction to East Asia: Japan Introduction to East Asia: Japan
HIST 2503 or ASST 2503	Introduction to Southeast Asia: Insular Introduction to Southeast Asia: Insular
HIST 2504 or ASST 2504	Introduction to Southeast Asia: Mainland Introduction to Southeast Asia: Mainland
HIST 2511	Introduction to African History
HIST 2514	Introduction to Latin America
HIST 2515 or LAS 2515	Civilization and Modernity in the Caribbean Civilization and Modernity in the Caribbean
HIST 2516	Modern Islamic History
HIST 2611	Third World Issues through Film
HIST 3321	Irish History
HIST 3331	History of England
HIST 3362	Russia: Nationality and Empire
HIST 3363	Russia: Revolution, State, and Empire
HIST 3511	Southern Africa: A History
HIST 3521	The Chinese Revolution
HIST 3531	Modern India
HIST 3551	History of Vietnam
HIST 3561 or LAS 3561	History of Brazil History of Brazil
HIST 3562	Contemporary Mexico

or LAS 3562	Contemporary Mexico
HIST 3571	Israel: History, Politics and Society
HIST 3572	Modern Middle East
HIST 3675	Third World Women's Lives
Jewish Studies	
JST 2706	Jewish Diaspora/Survey of Jewish History
Latin American Studies	
LAS 2101	Latin America through Film and Fiction
LAS 2231	Comparative Political Systems in Latin America
LAS 2502	Fundamentals of Latin American Business
or IB 2502	Fundamentals of Latin American Business
LAS 2514	Historical Continuity and Social Change in Latin America
LAS 3267	Sociology of Music: Nation, Race, Class and Gender in Argentina and Brazil
LAS 3601	"Other Voices" in Latin American Literature
LAS 3602	Caribbean Literature and Culture
LAS 3801	African Culture in Brazil
Political Science	
POLS 2211	Contemporary Politics of Europe
POLS 2212	Eastern Europe, Russia and the West
POLS 2231	Comparative Political Systems in Latin America
POLS 2255	Comparative Public Policy
POLS 2314	Politics of International Law
POLS 2321	Politics of the Global Economy
POLS 2331	International Organization
POLS 3212	British Government and Politics
POLS 3241	Mideast Politics
POLS 3252	East Asia and the United States
or ASST 3252	East Asia and the United States
POLS 3265	International Environmental Policy
or ENST 3265	International Environmental Policy
Religion	
REL 2002	Religion and Human Sexuality
REL 2007	Religion in Film
REL 2101	Indian Philosophies and Religions
or ASST 2101	Religions of India
REL 2102	Introduction to Buddhism
or ASST 2102	Introduction to Buddhism
REL 2201	Chinese Religions - Confucius to Mao
REL 2301	Zen Buddhism
or ASST 2301	Zen Buddhism
REL 2403	Introduction to Judaism
or JST 2403	Introduction to Judaism
REL 2447	Kabbalah and Mysticism
or JST 2447	Kabbalah and Mysticism
REL 2502	Jesus in the Media
REL 2606	Introduction to Islam
REL 2702	Religion in Contemporary Africa
REL 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
or ASST 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
REL 3201	I-Ching, Tao, and Ch'an/Zen
or ASST 3201	I-Ching, Tao, and Ch'an/Zen
REL 3301	Japanese Religions

or ASST 3301	Japanese Religions
REL 3411	The Philosophies of Judaism
or JST 3411	The Philosophies of Judaism
REL 3601	The Islamic State
REL 3602	Women in Islam
REL 3603	Islamic Mysticism
REL 3702	African Religions and New World Culture

Total Credit Hours

18-20

Journalism BA

Overview

The curriculum for the **Bachelor of Arts in Journalism**, offered by the Department of Journalism, is based on developing critical thinking in students for a multimedia, urban, journalistic environment. This requires a broad educational background coupled with rigorous professional training. The curriculum emphasizes subject matter from other disciplines, particularly those in the liberal arts. The Journalism department also believes that effective writing is central to communication and is, therefore, integral to the department curriculum.

Graduates of the program will develop:

1. Strong skills in reporting, writing, photography, audio/video newsgathering, print and web editing and design.
2. The ability to analyze critically past and present trends of journalism and to help craft alternative forms of journalism for the future.
3. A strong sense of ethical responsibility and the knowledge necessary for ethical decision-making.
4. An understanding of digital and interactive media technologies.
5. The ability to provide information in multimedia formats.
6. A culture of collaboration through team reporting....
7. ...in order to tell stories emanating from a diverse urban environment.
8. A keen understanding of the increasingly global nature of today's journalistic environment.
9. An appreciation of free expression and awareness of legal constraints guiding responsible journalism.

Journalism students need to meet the department's nine required courses as well as 18 credits of journalism electives, which often form an area of emphasis. The capstone experience combines urban community journalism with multimedia storytelling. This capstone produces the online news site, *PhiladelphiaNeighborhoods.com*.

An optional concentration in International Communication is available for this major.

Students who major in Journalism enter a variety of careers, including those as web reporters and producers, newspaper reporters and editors, still and video photographers, radio and television reporters and producers, magazine writers and editors, and any other areas that value storytelling, multimedia, and the accurate gathering, assessment, and reporting of information and ideas.

Although students must ultimately be responsible for their own academic programs, freshmen and first-semester transfer students will first meet with a Lew Klein College of Media and Communication academic advisor. During the sophomore and junior years, a student must meet at least once each year with a faculty advisor who is knowledgeable about the area of study the student is following.

Campus Location: Main

Program Code: CO-JRN-BA

Accreditation

Temple's Journalism department is one of only three programs in Pennsylvania accredited by the Accrediting Council on Education in Journalism and Mass Communication (ACEJMC).

Student Associations and Awards

The department has a chapter of the national journalism and mass communication honor society, Kappa Tau Alpha. Additionally, every spring the department awards thousands of dollars in scholarships to deserving majors.

Contact Information

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Learn more about the Bachelor of Arts in Journalism.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The degree of Bachelor of Arts may be conferred upon a student majoring in Journalism by recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours of credit with a cumulative average of 2.0 overall and in the major.

Students must meet:

1. University requirements:
 - a. All students are required to complete the General Education (GenEd (p. 83)) curriculum.
 - b. All students must take a minimum of two writing-intensive courses in the major at Temple University. The specific writing-intensive courses required for this major are JRN 1196 and JRN 3696.
2. Lew Klein College of Media and Communication requirements (p. 1184), including KLN 1001 and KLN 1002.
3. Minimum 46 credits in Journalism required. Maximum 62 credits in the Lew Klein College of Media and Communication permitted (excluding certain Communication and Social Influence courses). Students must complete 62 credits outside the Lew Klein College of Media and Communication.
 - a. Students are cautioned to plan their program so they do not exceed the 62-credit hour limit (excluding certain Communication and Social Influence courses) that is set by our accrediting body.
 - b. Below is the list of Communication and Social Influence courses that could be exempted from the ACEJMC accreditation cap:

Code	Title	Credit Hours
CSI 1111	Introduction to Public Speaking	3
or CSI 1911	Honors Introduction to Public Speaking	
CSI 1112	Introduction to Communication and Social Influence	3
CSI 1113	Persuasion	3
CSI 1201	Communication and Civic Engagement	3
CSI 1401	Conflict and Communication Behavior	3
CSI 1601	Communication and Behavior Change	3
CSI 2111	Argumentation and Advocacy	3
CSI 2112	Social Influence Inquiry	3
CSI 2201	The Meaningful Enjoyment of Civic Life	3
CSI 2296	Resistance, Protests, and Social Movements (WI)	3
CSI 2401	Intercultural and Cross Cultural Conflict	3
CSI 2403	Civil Disobedience	3
CSI 2602	Rhetoric of Hate and Violence	3
CSI 2696	Risk Communication (WI)	3
CSI 3201	Rhetoric and Civic Culture	3
CSI 3401	Social Activism and Community Organizing	3
CSI 3402	Conflict and Influence: Identity, Emotion and Power	3
CSI 3601	Misperceptions and Misinformation	3
CSI 3602	Communicating Science in Today's World	3
CSI 3701	Intercultural Communication	3
CSI 3702	Communication, Culture and Identity	3
CSI 3896	Rhetorical Criticism (WI)	3
CSI 4402	Multiparty Conflict Processes: Dialogue, Facilitation and Multiparty Mediation	3
CSI 4601	Narrative Persuasion	3

4. For Journalism department courses to fulfill the 46-credit requirement in the Journalism major, students must earn a grade of C- or higher.

5. A maximum of 6 credits may be earned for internships and a maximum of 3 credits for independent studies. If students plan to take multiple internships, please keep in mind the six-credit maximum. Internships may be taken for 1-3 credits.
6. Only 8 credits will be accepted from Kinesiology and Dance activity courses.
7. No more than 30 credits may be taken in any single CLA department without special written permission from the Department of Journalism. These requirements are to ensure a broad-based liberal arts education for each major.
8. Journalism-related coursework must be evaluated for transfer (including courses taken through study abroad programs after enrolling at Temple University) by the Department Chair. No more than 12 credits in total will be accepted for transfer from an accredited journalism/mass communication program; maximum 9 credits from a non-accredited program. Under no circumstances will credit be allowed for duplicate courses.
9. The department does not award credit for academic or life experience. Students with extensive experience may present evidence and petition for a waiver of department course requirements.
10. Coursework taken in Business Education, lower-level credits in Military Science, and the Extern Program are not applicable towards graduation.

Departmental Requirements for the Major

It is the student's responsibility to meet all course prerequisite requirements.

Code	Title	Credit Hours
Core Courses		
JRN 1111	Journalism and Society ¹	3
JRN 1196	Writing and Reporting ^{1,2}	3
JRN 1113	Audio/Visual Newsgathering	3
JRN 2114	Journalism Innovation and Design	3
JRN 3101	Journalism Law and Ethics	3
JRN 3696	Philadelphia Neighborhoods	3
Capstone Course		
Select one of the following:		4
JRN 4173	Philadelphia Neighborhoods II: Audio Visual Storytelling	
JRN 4174	Philadelphia Neighborhoods II: The Magazine	
JRN 4175	Philadelphia Neighborhoods II: Data, Development and Design	
JRN 4196	Philadelphia Neighborhoods Capstone: News Beat	
The Future of Journalism		
Select at least one of the following:		3
JRN 2111	The Practice and Process of News	
JRN 3258	Solutions Journalism	
JRN 3709	The Entrepreneurial Journalist	
JRN 3701	Contemporary Issues in Journalism	
JRN 3712	The Business of Journalism	
Related Special Topics courses in Journalism		
Democracy, Inclusion, and Representation		
Select at least one of the following:		3
JRN 3702	Race and Racism in the News	
JRN 3703	History of Journalism	
JRN 3705	Gender and American Mass Media	
JRN 3706	Journalism and Globalization	
JRN 3711	Ethnic and Alternative News Media	
Related Special Topics courses in Journalism		
Area of Specialization Electives		
Select a minimum of 6 Journalism courses. Students are open to take any elective in the department. The following lists offer guidance on which courses relate to each other by medium and topic area:		18-34
Broadcast Journalism		
JRN 2501	Broadcast Newswriting	
JRN 2551	Broadcast Performance	
JRN 3501	Radio News Reporting	
JRN 3502	TV News Reporting	

JRN 3504	Broadcast News Documentary
JRN 3506	Broadcast News Producing
JRN 3551	Advanced Video Newsgathering
JRN 3552	Crossroads: TUTV News Magazine
JRN 3554	A Broader View
JRN 4596	Broadcast Journalism Practicum
Magazine	
JRN 2301	Introduction to Magazines
JRN 2396	Magazine Article Writing
JRN 3301	Magazine Editing
JRN 3302	Longform Magazine Writing
JRN 3303	Magazine Design
JRN 3351	Magazine Fiction Workshop
Visual Journalism	
JRN 3401	Photography
JRN 3402	Photojournalism
JRN 3403	Documentary Photography
JRN 3404	Photography Seminar I
JRN 3405	Photography Seminar II
JRN 3451	Photographic Portfolio
JRN 3482	Photography Special Projects
JRN 3707	Visual Communication
Media Entrepreneurship and Innovation	
JRN 3251	Business Writing
JRN 3505	Experimental Journalism
JRN 3605	Data Journalism
JRN 3708	Newsroom Management
JRN 3709	The Entrepreneurial Journalist
JRN 3712	The Business of Journalism
News and Public Affairs	
JRN 2201	Public Affairs Reporting
JRN 2202	Editing the News
JRN 2702	News Literacy
JRN 3201	Investigative Reporting
JRN 3252	Opinion Writing
JRN 3253	Health and Environmental Writing
JRN 3605	Data Journalism
JRN 3702	Race and Racism in the News
JRN 3704	Ethical Issues in Journalism
JRN 3887	High School Journalism Workshop
Arts and Culture	
JRN 2396	Magazine Article Writing
JRN 3256	Writing Humor
JRN 3263	Travel Writing
JRN 3297	Writing Arts Criticism
JRN 3302	Longform Magazine Writing
JRN 3403	Documentary Photography
JRN 3351	Magazine Fiction Workshop
JRN 3901	Honors: Comics Journalism
International Journalism	
JRN 3254	International Reporting
JRN 3263	Travel Writing

JRN 3706	Journalism and Globalization
JRN 3711	Ethnic and Alternative News Media
JRN 3751	Foreign Studies in Journalism
JRN 3810	Special Topics in Journalism
JRN 3885	Internship
JRN 4571	International Studies in Media and Communication
Sports	
JRN 3255	Sports Writing
JRN 3257	Advanced Sports Reporting
JRN 4597	Sports Production Practicum
JRN 2800	Special Topics in Journalism (Sports focus)
JRN 3800	Special Topics in Journalism (Sports focus)
JRN 3887	High School Journalism Workshop
Longform and Narrative Storytelling	
JRN 2396	Magazine Article Writing
JRN 3302	Longform Magazine Writing
JRN 3352	Ripped from the Headlines
JRN 3403	Documentary Photography
JRN 3504	Broadcast News Documentary
JRN 3901	Honors: Comics Journalism
Critical Analysis of Journalism / Journalism Studies	
JRN 2701	Approaches to Research in Journalism Studies
JRN 2702	News Literacy
JRN 3700	Journalism Studies Special Topics
JRN 3701	Contemporary Issues in Journalism
JRN 3702	Race and Racism in the News
JRN 3703	History of Journalism
JRN 3704	Ethical Issues in Journalism
JRN 3705	Gender and American Mass Media
JRN 3706	Journalism and Globalization
JRN 3707	Visual Communication
JRN 3711	Ethnic and Alternative News Media
JRN 3719	Research Colloquium in Journalism Studies
Writing and Editing	
JRN 2202	Editing the News
JRN 2396	Magazine Article Writing
JRN 3251	Business Writing
JRN 3253	Health and Environmental Writing
JRN 3255	Sports Writing
JRN 3256	Writing Humor
JRN 3263	Travel Writing
JRN 3297	Writing Arts Criticism
JRN 3302	Longform Magazine Writing

Total Credit Hours**46-62**

1

Completion of JRN 1111 and JRN 1196 with grades of C- or better is required before students enroll in any Journalism classes numbered higher than 1111.

2

Students required to take ENG 0701 Introduction to Academic Discourse must complete that requirement before enrolling in JRN 1196 Writing and Reporting.

Required Liberal Arts Courses for the Journalism Major

Code	Title	Credit Hours
HIST 1101	U.S. History to 1877	3
HIST 1102	U.S. History since 1877	3
POLS 1101	The American Political System	3
POLS 2102	American State and Local Politics	3
Select one of the following:		3
GUS 0861	Urban Dynamics: Global, Regional, and Local Connections	
GUS 1021	Urban Society: Race, Class, and Community	
GUS 1025	World Urban Patterns	
SOC 1176	Introduction to Sociology	
Select one of the following:		3
ECON 0858	The American Economy	
ECON 1001	Introduction to the Economy	
ECON 1101	Macroeconomic Principles	
ECON 1102	Microeconomic Principles	
ECON 1103	Global Economics	
Select one of the following:		3-4
MATH 1013	Elements of Statistics	
SOC 1167	Social Statistics	
STAT 0826	Statistics in the News	

Total Credit Hours

21-22

Suggested Academic Plan

Please note that these are **suggested** academic plans. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Journalism

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
JRN 1111	Journalism and Society	3
JRN 1196	Writing and Reporting	3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4
KLN 1001	Klein First-Year Seminar	1
Credit Hours		15
Spring		
JRN 1113	Audio/Visual Newsgathering	3
HIST 1101	U.S. History to 1877	3
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
POLS 1101	The American Political System	3
KLN 1002	Klein College Introduction to Professional Development	1
GenEd Breadth Course		3-4
Credit Hours		16
Year 2		
Fall		
Journalism Topic Area: The Future of Journalism Course		3
JRN 2114	Journalism Innovation and Design	3

POLS 2102	American State and Local Politics	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Credit Hours		15
Spring		
Journalism Topic Area: Democracy, Inclusion and Representation Course		3
Journalism Area of Specialization Elective		3
HIST 1102	U.S. History since 1877	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
JRN 3101	Journalism Law and Ethics	3
JRN 3696	Philadelphia Neighborhoods	3
Select one of the following:		3
GUS 0861	Urban Dynamics: Global, Regional, and Local Connections	
GUS 1021	Urban Society: Race, Class, and Community	
GUS 1025	World Urban Patterns	
SOC 1176	Introduction to Sociology	
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
Journalism Area of Specialization Elective		3
Journalism Area of Specialization Elective		3
Select one of the following:		3
ECON 0858	The American Economy	
ECON 1001	Introduction to the Economy	
ECON 1101	Macroeconomic Principles	
ECON 1102	Microeconomic Principles	
ECON 1103	Global Economics	
Select one of the following:		3-4
MATH 1013	Elements of Statistics	
SOC 1167	Social Statistics	
STAT 0826	Statistics in the News ¹	
GenEd Breadth Course		3
Credit Hours		15
Year 4		
Fall		
Philadelphia Neighborhoods Capstone - Select one of the following:		4
JRN 4173	Philadelphia Neighborhoods II: Audio Visual Storytelling	
JRN 4174	Philadelphia Neighborhoods II: The Magazine	
JRN 4175	Philadelphia Neighborhoods II: Data, Development and Design	
JRN 4196	Philadelphia Neighborhoods Capstone: News Beat	
Journalism Area of Specialization Elective		3
Journalism Area of Specialization Elective		3
Non-Journalism Electives		6
Credit Hours		16
Spring		
Journalism Area of Specialization Elective		3

Non-Journalism Electives	14
Credit Hours	17
Total Credit Hours	124

1

If STAT 0826 not taken as GenEd Quantitative Literacy (GQ) Requirement.

Optional Concentration

The **optional International Communication Concentration (ICC)** provides a theoretical and practical education in international and intercultural communication and media. This program allows students to develop sought-after competencies in cultural sensitivity and intercultural communication skills by encouraging students to reflect on their own cultural lenses. Students participating in the ICC program will be exposed to multiple international perspectives through internationally- and interculturally-oriented courses offered on Temple's domestic campuses and may be supplemented with study abroad coursework.

This concentration is restricted to Klein students only.

Requirements

To earn the International Communication Concentration transcript notation, a student must successfully complete a total of 18-20 credits of International / Intercultural studies courses, a maximum 9 credits of which may come from courses transferred into Temple, across 3 areas. Each course that fulfills a requirement for the concentration must be passed with a C- or better.

Code	Title	Credit Hours
Common Course		
Select one of the following:		3
CSI 3701	Intercultural Communication	
CSI 3703	Intercultural Communication in the Workplace	
Klein International/Intercultural courses		
Select three of the following:		9
Any ADV, CMST, CSI, JRN, MSP, or PR courses taken as part of a Klein Global Opportunities Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)		
Any ADV, CMST, CSI, JRN, MSP, or PR Internship completed as part of a Klein Global Opportunities International Program		
CSI 2401	Intercultural and Cross Cultural Conflict	
CSI 3702	Communication, Culture and Identity	
CSI 3703	Intercultural Communication in the Workplace (if not used to fulfill common course requirement above)	
JRN 3254	International Reporting	
JRN 3706	Journalism and Globalization	
MSP 3471	Media and Cultural Differences	
MSP 3572	Communication and Development	
MSP 4453	Information Society	
MSP 4496	Global Media	
PR 2672	Global Communication and Leadership	
International/Intercultural Electives outside of Klein		
Note: Satisfying the GenEd World Society requirement by completing a Study Abroad does not also satisfy this requirement.		
Choose any two (2) courses of the following:		6-8
Up to any two foreign language courses		
Any non-Klein courses at the 2000-level or higher taken in a Klein Global Opportunities Int'l Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)		
Any non-Klein internship taken in a Klein Global Opportunities International Program		
Anthropology		
ANTH 2238	Visual Anthropology of Modern Japan	
or ASST 2238	Visual Anthropology of Modern Japan	
ANTH 2374	The Anthropology of Modern China	
or ASST 2374	The Anthropology of Modern China	
ANTH 2361	Peoples of Latin America	

or LAS 2361	Peoples of Latin America
ANTH 2362	Peoples and Cultures of the Caribbean
or LAS 2362	Peoples and Cultures of the Caribbean
Art History	
ARTH 2102	
ARTH 2105	Roman Art and Archaeology
ARTH 2129	Greek and Roman Sculpture
ARTH 2431	Early Modern Italy and Spain in the 17th Century
ARTH 2432	Northern and Global Baroque Art: Art in the Age of Rubens, Rembrandt, Vermeer
ARTH 2543	Transnational Impressionisms
ARTH 2642	Modern Art, 1900-1945
ARTH 2868	Arts of Asia
ARTH 1003	History of Art in Rome (Study Abroad - Rome)
ARTH 2135	Art and Culture in Ancient Rome (Study Abroad - Rome)
ARTH 2428	Wonders of Rome: Art and Culture of the Baroque Era (Study Abroad - Rome)
ARTH 2622	Galleries and Studios of Rome (Study Abroad - Rome)
ARTH 1801	Arts of Asia (Study Abroad - Japan)
ARTH 2815	Pre-Modern Japanese Art up to the Edo Period (Study Abroad - Japan)
Asian Studies	
ASST 2001	Practical Asian Society and Culture
ASST 2011	Survey of Japanese Literature Before 1868
ASST 2015	Tokyo in Literature and Film
or JPNS 2015	Tokyo in Literature and Film
ASST 2021	Japanese Literature in Film
or JPNS 2021	Japanese Literature in Film
ASST 2351	Japan in a Changing World
ASST 2367	South Asia: Peoples, Culture, Experiences
ASST 2373	Japanese Culture
or ANTH 2373	Japanese Culture
ASST 2503	Introduction to Southeast Asia: Insular
ASST 2504	Introduction to Southeast Asia: Mainland
ASST 2511	Introduction to Asian Business
ASST 3247	Ideology and Social Change in Japan
or SOC 3247	Ideology and Social Change in Japan
ASST 3251	China: State and Society
or POLS 3251	China: State and Society
ASST 3522	Contemporary China
or HIST 3522	Contemporary China
ASST 3541	Japan Today
or HIST 3541	Japan Today
ASST 3542	Women and Society in Japan
or HIST 3542	Women and Society in Japan
Film & Media Arts	
FMA 4673	International Cinema
Geography & Urban Studies	
GUS 2032	Urban Systems in a Global Economy
GUS 2073	African Development
GUS 2074	East and South Asia
or ASST 2074	Geography of East and South Asia
GUS 3021	International Urbanization
GUS 3052	Environmental Problems in Asia
or ASST 3052	Environmental Problems in Asia

or ENST 3052	Environmental Problems in Asia
GUS 3073	Geography of Travel and Tourism
GUS 3307	Transportation & Culture
History	
HIST 2303	History of Central Europe, 1618-1871
HIST 2317	Central Europe Through Wars and Revolution, 1848-1989
HIST 2501	Introduction to East Asia: China
or ASST 2501	Introduction to East Asia: China
HIST 2502	Introduction to East Asia: Japan
or ASST 2502	Introduction to East Asia: Japan
HIST 2503	Introduction to Southeast Asia: Insular
or ASST 2503	Introduction to Southeast Asia: Insular
HIST 2504	Introduction to Southeast Asia: Mainland
or ASST 2504	Introduction to Southeast Asia: Mainland
HIST 2511	Introduction to African History
HIST 2514	Introduction to Latin America
HIST 2515	Civilization and Modernity in the Caribbean
or LAS 2515	Civilization and Modernity in the Caribbean
HIST 2516	Modern Islamic History
HIST 2611	Third World Issues through Film
HIST 3321	Irish History
HIST 3331	History of England
HIST 3362	Russia: Nationality and Empire
HIST 3363	Russia: Revolution, State, and Empire
HIST 3511	Southern Africa: A History
HIST 3521	The Chinese Revolution
HIST 3531	Modern India
HIST 3551	History of Vietnam
HIST 3561	History of Brazil
or LAS 3561	History of Brazil
HIST 3562	Contemporary Mexico
or LAS 3562	Contemporary Mexico
HIST 3571	Israel: History, Politics and Society
HIST 3572	Modern Middle East
HIST 3675	Third World Women's Lives
Jewish Studies	
JST 2706	Jewish Diaspora/Survey of Jewish History
Latin American Studies	
LAS 2101	Latin America through Film and Fiction
LAS 2231	Comparative Political Systems in Latin America
LAS 2502	Fundamentals of Latin American Business
or IB 2502	Fundamentals of Latin American Business
LAS 2514	Historical Continuity and Social Change in Latin America
LAS 3267	Sociology of Music: Nation, Race, Class and Gender in Argentina and Brazil
LAS 3601	"Other Voices" in Latin American Literature
LAS 3602	Caribbean Literature and Culture
LAS 3801	African Culture in Brazil
Political Science	
POLS 2211	Contemporary Politics of Europe
POLS 2212	Eastern Europe, Russia and the West
POLS 2231	Comparative Political Systems in Latin America
POLS 2255	Comparative Public Policy

POLS 2314	Politics of International Law
POLS 2321	Politics of the Global Economy
POLS 2331	International Organization
POLS 3212	British Government and Politics
POLS 3241	Mideast Politics
POLS 3252	East Asia and the United States
or ASST 3252	East Asia and the United States
POLS 3265	International Environmental Policy
or ENST 3265	International Environmental Policy
Religion	
REL 2002	Religion and Human Sexuality
REL 2007	Religion in Film
REL 2101	Indian Philosophies and Religions
or ASST 2101	Religions of India
REL 2102	Introduction to Buddhism
or ASST 2102	Introduction to Buddhism
REL 2201	Chinese Religions - Confucius to Mao
REL 2301	Zen Buddhism
or ASST 2301	Zen Buddhism
REL 2403	Introduction to Judaism
or JST 2403	Introduction to Judaism
REL 2447	Kabbalah and Mysticism
or JST 2447	Kabbalah and Mysticism
REL 2502	Jesus in the Media
REL 2606	Introduction to Islam
REL 2702	Religion in Contemporary Africa
REL 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
or ASST 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
REL 3201	I-Ching, Tao, and Ch'an/Zen
or ASST 3201	I-Ching, Tao, and Ch'an/Zen
REL 3301	Japanese Religions
or ASST 3301	Japanese Religions
REL 3411	The Philosophies of Judaism
or JST 3411	The Philosophies of Judaism
REL 3601	The Islamic State
REL 3602	Women in Islam
REL 3603	Islamic Mysticism
REL 3702	African Religions and New World Culture

Total Credit Hours
18-20

Contact Information

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 215-204-5823
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Journalism, Society and Culture Minor

Overview

The **Minor in Journalism, Society and Culture**, offered by the Department of Journalism, serves students in other majors who would benefit from a deeper understanding of journalism's role in society. Coursework explores the social, political and economic issues that underlie journalism's role in public life. This minor has a natural affinity with the liberal arts and education. It offers students headed toward a range of careers—for instance,

community advocacy work, teaching, media research, law, policymaking, public history, global development, and many other fields—a valuable perspective on how contemporary issues in journalism will impact their roles as citizens and professionals.

Campus Location: Main

Contact Information

Carolyn Kitch, PhD, Director and Laura H. Carnell Professor of Journalism
Annenberg Hall, Room 316
215-204-8346
ckitch@temple.edu

Learn more about the Journalism, Society and Culture minor.

Requirements

To earn this minor, students must complete a minimum of 18 credits.

Code	Title	Credit Hours
Foundational Course		
Select one of the following:		3
JRN 1111	Journalism and Society	
CMST 1111	Communication and Public Life ¹	
Intermediate Level Courses		
Select one (or both) of the following:		3-6
JRN 1196	Writing and Reporting	
JRN 2702	News Literacy	
Upper Level Studies Electives		
Select four of the following (or three, if you have taken both Intermediate Level courses):		12-9
JRN 3701	Contemporary Issues in Journalism	
JRN 3702	Race and Racism in the News	
JRN 3703	History of Journalism	
JRN 3704	Ethical Issues in Journalism	
JRN 3705	Gender and American Mass Media	
JRN 3706	Journalism and Globalization	
JRN 3707	Visual Communication	
JRN 3711	Ethnic and Alternative News Media	
JRN 3712	The Business of Journalism	
JRN 3719	Research Colloquium in Journalism Studies	
Any 37xx level special topics course		
Total Credit Hours		18

1

For Communication Studies majors only.

Leadership Minor

Overview

The **Minor in Leadership**, offered by the Department of Advertising and Public Relations, consists of six courses (18 s.h.) which provide students in other Temple University programs the opportunity to better prepare for life after graduation by acquiring the knowledge and skills required to communicate effectively and to lead at the organizational, team and individual levels.

The goal of the Leadership minor is to help students understand that leadership is a communication and relational process, not a position. Viewed that way, leadership requires responsible, thoughtful reflection and action at all societal levels. That also requires competencies in being self-aware, in managing teams, in making ethical decisions, and leading with an intent to engender positive change.

Campus Location: Main

Contact Information

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Advertising and Public Relations Department Office
Annenberg Hall, Room 300

<https://klein.temple.edu/academics>

Learn more about the Leadership minor.

Requirements

Code	Title	Credit Hours
CSI 1111	Introduction to Public Speaking	3
PR 1112	Communicating Leadership	3
PR 2661	Communicating Organizational Change	3
PR 2662	Leading Groups and Team Building	3
PR 2672	Global Communication and Leadership	3
CSI 3701	Intercultural Communication	3
Total Credit Hours		18

Media Studies and Production BA with Media Analysis Concentration

Overview

The Department of Media Studies and Production expands students' knowledge and skills to create, evaluate and manage media content and organizations. With the urban and global communities as their living laboratories, students draw on their creativity, entrepreneurship, intellectual curiosity and analytical abilities to navigate digital media in our global society.

Theory and practice are integrated into all areas of study in the **Bachelor of Arts in Media Studies and Production**. Media Studies and Production students learn how to produce, evaluate and manage media content for traditional and emerging media in a variety of genres, including information (news and documentary), music, comedy, sports, drama, and commercial and noncommercial persuasion campaigns. They study institutions that create, distribute, and investigate media products (e.g., production studios, television and radio networks, and audience measurement companies) and learn how to create and operate successful media businesses. Media Studies and Production students learn to think purposefully and critically about media, and examine the media's role in history, culture and society from many perspectives. They also learn how to act ethically as they interact with the world both in careers in media institutions and as media consuming and producing citizens.

Students must select one of the following concentrations:

- Media Analysis,
- Media Business, or
- Media Production.

An optional concentration in International Communication is also available for this major.

Media Analysis Concentration

The **Media Analysis** professional option concentration introduces students to the critical understanding of the roles of media in contemporary life, including media technology as a cultural force; the nature of media institutions, audiences, and texts; and the media as a source of shared social identities. Students who select this concentration are prepared for careers as media consultants, editorial or technical writers, community activists, corporate communication producers, media scholars and market research analysts.

Campus Location: Main

Program Code: CO-MSP-BA

Accelerated Program

BA in Media Studies and Production / MA in Media Studies and Production

Contact Information

Matthew Lombard, PhD, Chair
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Jack Klotz, Vice Chair
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Rebecca Gollihur, Department Director
gollihur@temple.edu

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Annenberg Hall, Room 205
215-204-5401
msp@temple.edu

Learn more about the Bachelor of Arts in Media Studies and Production.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The degree of Bachelor of Arts may be conferred upon a student majoring in Media Studies and Production (MSP) by the recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours of credit with a cumulative grade point average of 2.0 overall and in the major.

Students must meet:

- University requirements
 - All students are required to complete the General Education (GenEd (p. 83)) curriculum.
 - All students must take a minimum of two writing-intensive (WI) courses in the major at Temple University. Whenever possible, it is recommended that students select WI courses that also directly satisfy a specific MSP requirement to ease the path to program completion.
- Low Klein College of Media and Communication requirements (p. 1184), including KLN 1001 and KLN 1002.
- Minimum of 45 credits in Media Studies & Production / maximum of 64 credits in Media Studies & Production.
- Each course that fulfills a requirement for the major must be passed with a C- or better.
- All prerequisites must be met unless exempted in writing.
- No more than 20 transfer credits may be applied to the Media Studies & Production major.
- No more than 12 credits total for internship, practicum, and independent study courses.

Media Studies and Production: Media Analysis Concentration Requirements

Code	Title	Credit Hours
Foundation Courses		
MSP 1021	Introduction to Media Analysis ¹	3
MSP 1655	Introduction to Media Business ¹	3
MSP 1701	Introduction to Media Production ¹	3
Content Area Requirements		
Media Policy & Ethics		
Select a minimum of one of the following:		3
MSP 3297	History of Electronic Media (WI)	
MSP 4221	Information Technology Policy	
MSP 4226	Public Media	
MSP 4252	Law and Ethics of Digital Media	
MSP 4454	Public Information Media Campaigns	

Media Critical Topics

Select a minimum of one of the following: 3

MSP 1011	Introduction to Media Theory
MSP 2141	Media Research
MSP 2421	Media Popular Culture
MSP 3153	Media Criticism
MSP 3445	Media Images and Analysis
MSP 4446	Psychological Processing of Media
MSP 4497	Media and Children (WI)
MSP 4533	Media, Ecology and Technology

Emergent Media

Select a minimum of one of the following: 3

MSP 2741	Introduction to Internet Studies and Web Authoring
MSP 3324	The Video Game Industry and Game Culture
MSP 3421	Technology and Culture
MSP 4453	Information Society
MSP 4455	New Media Literacies
MSP 4541	Mobile Media
MSP 4741	Emergent Media Production

International/Intercultural Media Issues

Select a minimum of one of the following: 3

MSP 3471	Media and Cultural Differences
MSP 3473	Media and the Environment
MSP 3572	Communication and Development
MSP 4275	#ourmedia: Community, Activist, Citizens' and Radical Media
MSP 4496	Global Media (WI)
MSP 4571	International Studies in Media and Communication
MSP 4572	British Media and Telecommunication

Professional Development and Experiential Learning Requirements

MSP 4039 Senior Seminar² 3

Select one of the following Experiential Learning Options based upon your interests and eligibility:³ 3-4

MSP 4785	Internship
MSP 4487	TUTV Practicum
MSP 4596	TV News Production Practicum - Temple Update (WI)
MSP 4597	Sports Production Practicum (WI)
MSP 4687	Recording Industry Practicum
MSP 4787	Television Production Workshop Practicum
MSP 4887	Radio Production Practicum
MSP Special Topics practicum course (when available - check the course schedule for the term in question)	

Media Analysis Concentration Options

Select a minimum of 18 credit hours from the following courses, including at least two (2) courses at EITHER the 2000 or 3000 level. (Two is the minimum; however, there is no limit to the number of courses taken at these levels.)³ 18

MSP 1011	Introduction to Media Theory
MSP 2141	Media Research
MSP 2421	Media Popular Culture
MSP 2741	Introduction to Internet Studies and Web Authoring
MSP 2889	Field Experience in Youth Media and Media Literacy
MSP 3153	Media Criticism
MSP 3196	Writing Workshop (WI)
MSP 3297	History of Electronic Media (WI)
MSP 3324	The Video Game Industry and Game Culture
MSP 3421	Technology and Culture

MSP 3445	Media Images and Analysis
MSP 3471	Media and Cultural Differences
MSP 3473	Media and the Environment
MSP 3572	Communication and Development
MSP 4221	Information Technology Policy
MSP 4226	Public Media
MSP 4446	Psychological Processing of Media
MSP 4252	Law and Ethics of Digital Media
MSP 4453	Information Society
MSP 4275	#ourmedia: Community, Activist, Citizens' and Radical Media
MSP 4454	Public Information Media Campaigns
MSP 4455	New Media Literacies
MSP 4496	Global Media (WI)
MSP 4497	Media and Children (WI)
MSP 4541	Mobile Media
MSP 4696	Communication in Media Organizations (WI)

Total Credit Hours**45-46**

1

Foundation courses must be completed within the first 45 credits at Temple University. Students transferring into Temple must complete at least one Media Studies & Production foundation course at Temple, unless exempted in writing by the chair of the department.

2

Taken during final 30 credits.

3

It is recommended that these are chosen in consultation with a Media Studies & Production Faculty Advisor.

Note: Courses offered in various categories can only be counted once.

About the Professional Development Requirements

The academic experience for all Media Studies and Production majors culminates with the Professional Development requirements, which include MSP 4039 Senior Seminar (3 credits) and one of the Experiential Learning Options (3-4 credits). Together, these courses provide students with hands-on and practical training in the field while allowing them the opportunity to explore their potential professional futures.

Experiential Learning Option: Internship

MSP 4785 Internship (3 or 4 credits): Internship opportunities exist locally (at virtually every media-oriented organization in the greater Philadelphia region), nationally (in New York City, Los Angeles, Chicago, and other U.S. media markets), and internationally (in London, Dublin, Paris, Barcelona, Hong Kong, and Tokyo through the Lew Klein College of Media and Communication's Global Opportunities Program and Temple's Education Abroad Office). Students who wish to enroll in a second internship as an elective can take MSP 4786 for 1 to 3 credit hours. NOTE: To be eligible for an internship, students must obtain an appropriate internship placement for the term of registration (assistance is available), have Junior or Senior standing, a minimum GPA of 3.00, have completed all three MSP foundation courses with a minimum grade of C-, and official approval by the MSP Internship Coordinator via submission of the Internship Verification Form, and once determined eligible, the Site Verification Form.

Experiential Learning Option: Standard and Special Topics Practica

As noted in the major requirements list, there are six (6) standard practica courses, (MSP 4487, MSP 4596, MSP 4597, MSP 4687, MSP 4787, and MSP 4887). Four to five (4-5) of those options are offered each term and most of them have specific course prerequisites that must be completed prior to practica registration, so students are advised to plan accordingly.

When possible, at least one Special Topics practicum is also offered each year, and these focus on media-related topics different from the standard six. Consult the MSP Department for any upcoming Special Topics availability as well as the process for counting them toward the Professional Development Option within the official degree audit.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Media Studies and Production with a Concentration in Media Analysis

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MSP 1021	Introduction to Media Analysis (Foundation Requirement)	3
MSP 1701	Introduction to Media Production (Foundation Requirement)	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ}		4
KLN 1001	Klein First-Year Seminar	1
Credit Hours		15
Spring		
MSP 1655	Introduction to Media Business (Foundation Requirement)	3
Select one of the following courses from the Media Analysis Concentration Requirement (Other options may be possible depending upon completed prerequisites.) ¹		3
MSP 1011	Introduction to Media Theory	
MSP 2741	Introduction to Internet Studies and Web Authoring	
MSP 3196	Writing Workshop	
KLN 1002	Klein College Introduction to Professional Development	1
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
Media Analysis 2000-3000 Concentration Course (minimum of two courses required at 2000-3000 level) ¹		3
Media Analysis 2000-3000 level Concentration Course (select a 2000-3000 level course if not yet completed; if completed, select any Media Analysis Concentration Course) ¹		3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
Media Analysis Concentration Course ¹		3
Media Critical Topics Requirement Course ¹		3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Non-MSP Elective		3
Credit Hours		15
Year 3		
Fall		
Media Analysis Concentration Course ¹		3
Emergent Media Requirement Course		3
GenEd Breadth Course		3
Non-MSP Electives		7
Credit Hours		16
Spring		
Media Analysis Concentration Course ¹		3
International/Intercultural Media Issues Requirement Course ¹		3

MSP or Non-MSP Electives		9
	Credit Hours	15
Year 4		
Fall		
MSP 4039	Senior Seminar (Professional Development Requirement)	3
	Media Policy & Ethics Requirement Course ¹	3
MSP or Non-MSP Electives		10
	Credit Hours	16
Spring		
	Select one of the following Experiential Learning Options based upon your interests and eligibility: ¹	3-4
MSP 4785	Internship ²	
MSP 4487	TUTV Practicum ³	
MSP 4596	TV News Production Practicum - Temple Update ³	
MSP 4597	Sports Production Practicum ³	
MSP 4687	Recording Industry Practicum ³	
MSP 4787	Television Production Workshop Practicum ³	
MSP 4887	Radio Production Practicum (not offered every year) ³	
	MSP Special Topics practicum course (when available - check the course schedule for the term in question)	
Non-MSP Electives		13-12
	Credit Hours	16
	Total Credit Hours	124

1

All students are required to take at least two writing-intensive (WI) courses in their major. Therefore, this academic plan includes a [WI] notation next to any course that has a writing-intensive attribute. All three MSP concentrations and three of the four focus areas include WI options. Whenever possible, it is recommended that students select their two WI courses from those that also directly satisfy one of their specific MSP requirements, since that will provide a more efficient use of credits and ease the path to program completion.

2

Internship Requirements: a.) Junior or Senior standing (minimum 60 credits completed), b.) a minimum 3.0 GPA, c.) completion of ALL MSP Foundations courses (MSP 1021, MSP 1655, and MSP 1701), and d.) no outstanding grades of Incomplete for any course. For details of the application process and information about the Internship course, review the MSP Internship Overview document, available from the "Forms and Links" section of the Klein tab on the TUPortal.

3

Practicum requirements vary from course to course. Check specific course prerequisites so you may plan accordingly.

Optional Concentration

The **optional International Communication Concentration (ICC)** provides a theoretical and practical education in international and intercultural communication and media. This program allows students to develop sought-after competencies in cultural sensitivity and intercultural communication skills by encouraging students to reflect on their own cultural lenses. Students participating in the ICC program will be exposed to multiple international perspectives through internationally- and interculturality-oriented courses offered on Temple's domestic campuses and may be supplemented with study abroad coursework.

This concentration is restricted to Klein students only.

Requirements

To earn the International Communication Concentration transcript notation, a student must successfully complete a total of 18-20 credits of International / Intercultural studies courses, a maximum 9 credits of which may come from courses transferred into Temple, across 3 areas. Each course that fulfills a requirement for the concentration must be passed with a C- or better.

Code	Title	Credit Hours
Common Course		
	Select one of the following:	3
CSI 3701	Intercultural Communication	
CSI 3703	Intercultural Communication in the Workplace	

Klein International/Intercultural courses

Select three of the following:

9

Any ADV, CMST, CSI, JRN, MSP, or PR courses taken as part of a Klein Global Opportunities Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)

Any ADV, CMST, CSI, JRN, MSP, or PR Internship completed as part of a Klein Global Opportunities International Program

CSI 2401 Intercultural and Cross Cultural Conflict

CSI 3702 Communication, Culture and Identity

CSI 3703 Intercultural Communication in the Workplace (if not used to fulfill common course requirement above)

JRN 3254 International Reporting

JRN 3706 Journalism and Globalization

MSP 3471 Media and Cultural Differences

MSP 3572 Communication and Development

MSP 4453 Information Society

MSP 4496 Global Media

PR 2672 Global Communication and Leadership

International/Intercultural Electives outside of Klein

Note: Satisfying the GenEd World Society requirement by completing a Study Abroad does not also satisfy this requirement.

Choose any two (2) courses of the following:

6-8

Up to any two foreign language courses

Any non-Klein courses at the 2000-level or higher taken in a Klein Global Opportunities Int'l Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)

Any non-Klein internship taken in a Klein Global Opportunities International Program

Anthropology

ANTH 2238 Visual Anthropology of Modern Japan

or ASST 2238 Visual Anthropology of Modern Japan

ANTH 2374 The Anthropology of Modern China

or ASST 2374 The Anthropology of Modern China

ANTH 2361 Peoples of Latin America

or LAS 2361 Peoples of Latin America

ANTH 2362 Peoples and Cultures of the Caribbean

or LAS 2362 Peoples and Cultures of the Caribbean

Art History

ARTH 2102

ARTH 2105 Roman Art and Archaeology

ARTH 2129 Greek and Roman Sculpture

ARTH 2431 Early Modern Italy and Spain in the 17th Century

ARTH 2432 Northern and Global Baroque Art: Art in the Age of Rubens, Rembrandt, Vermeer

ARTH 2543 Transnational Impressionisms

ARTH 2642 Modern Art, 1900-1945

ARTH 2868 Arts of Asia

ARTH 1003 History of Art in Rome (Study Abroad - Rome)

ARTH 2135 Art and Culture in Ancient Rome (Study Abroad - Rome)

ARTH 2428 Wonders of Rome: Art and Culture of the Baroque Era (Study Abroad - Rome)

ARTH 2622 Galleries and Studios of Rome (Study Abroad - Rome)

ARTH 1801 Arts of Asia (Study Abroad - Japan)

ARTH 2815 Pre-Modern Japanese Art up to the Edo Period (Study Abroad - Japan)

Asian Studies

ASST 2001 Practical Asian Society and Culture

ASST 2011 Survey of Japanese Literature Before 1868

ASST 2015 Tokyo in Literature and Film

or JPNS 2015 Tokyo in Literature and Film

ASST 2021 Japanese Literature in Film

or JPNS 2021	Japanese Literature in Film
ASST 2351	Japan in a Changing World
ASST 2367	South Asia: Peoples, Culture, Experiences
ASST 2373	Japanese Culture
or ANTH 2373	Japanese Culture
ASST 2503	Introduction to Southeast Asia: Insular
ASST 2504	Introduction to Southeast Asia: Mainland
ASST 2511	Introduction to Asian Business
ASST 3247	Ideology and Social Change in Japan
or SOC 3247	Ideology and Social Change in Japan
ASST 3251	China: State and Society
or POLS 3251	China: State and Society
ASST 3522	Contemporary China
or HIST 3522	Contemporary China
ASST 3541	Japan Today
or HIST 3541	Japan Today
ASST 3542	Women and Society in Japan
or HIST 3542	Women and Society in Japan
Film & Media Arts	
FMA 4673	International Cinema
Geography & Urban Studies	
GUS 2032	Urban Systems in a Global Economy
GUS 2073	African Development
GUS 2074	East and South Asia
or ASST 2074	Geography of East and South Asia
GUS 3021	International Urbanization
GUS 3052	Environmental Problems in Asia
or ASST 3052	Environmental Problems in Asia
or ENST 3052	Environmental Problems in Asia
GUS 3073	Geography of Travel and Tourism
GUS 3307	Transportation & Culture
History	
HIST 2303	History of Central Europe, 1618-1871
HIST 2317	Central Europe Through Wars and Revolution, 1848-1989
HIST 2501	Introduction to East Asia: China
or ASST 2501	Introduction to East Asia: China
HIST 2502	Introduction to East Asia: Japan
or ASST 2502	Introduction to East Asia: Japan
HIST 2503	Introduction to Southeast Asia: Insular
or ASST 2503	Introduction to Southeast Asia: Insular
HIST 2504	Introduction to Southeast Asia: Mainland
or ASST 2504	Introduction to Southeast Asia: Mainland
HIST 2511	Introduction to African History
HIST 2514	Introduction to Latin America
HIST 2515	Civilization and Modernity in the Caribbean
or LAS 2515	Civilization and Modernity in the Caribbean
HIST 2516	Modern Islamic History
HIST 2611	Third World Issues through Film
HIST 3321	Irish History
HIST 3331	History of England
HIST 3362	Russia: Nationality and Empire
HIST 3363	Russia: Revolution, State, and Empire

HIST 3511	Southern Africa: A History
HIST 3521	The Chinese Revolution
HIST 3531	Modern India
HIST 3551	History of Vietnam
HIST 3561	History of Brazil
or LAS 3561	History of Brazil
HIST 3562	Contemporary Mexico
or LAS 3562	Contemporary Mexico
HIST 3571	Israel: History, Politics and Society
HIST 3572	Modern Middle East
HIST 3675	Third World Women's Lives
Jewish Studies	
JST 2706	Jewish Diaspora/Survey of Jewish History
Latin American Studies	
LAS 2101	Latin America through Film and Fiction
LAS 2231	Comparative Political Systems in Latin America
LAS 2502	Fundamentals of Latin American Business
or IB 2502	Fundamentals of Latin American Business
LAS 2514	Historical Continuity and Social Change in Latin America
LAS 3267	Sociology of Music: Nation, Race, Class and Gender in Argentina and Brazil
LAS 3601	"Other Voices" in Latin American Literature
LAS 3602	Caribbean Literature and Culture
LAS 3801	African Culture in Brazil
Political Science	
POLS 2211	Contemporary Politics of Europe
POLS 2212	Eastern Europe, Russia and the West
POLS 2231	Comparative Political Systems in Latin America
POLS 2255	Comparative Public Policy
POLS 2314	Politics of International Law
POLS 2321	Politics of the Global Economy
POLS 2331	International Organization
POLS 3212	British Government and Politics
POLS 3241	Mideast Politics
POLS 3252	East Asia and the United States
or ASST 3252	East Asia and the United States
POLS 3265	International Environmental Policy
or ENST 3265	International Environmental Policy
Religion	
REL 2002	Religion and Human Sexuality
REL 2007	Religion in Film
REL 2101	Indian Philosophies and Religions
or ASST 2101	Religions of India
REL 2102	Introduction to Buddhism
or ASST 2102	Introduction to Buddhism
REL 2201	Chinese Religions - Confucius to Mao
REL 2301	Zen Buddhism
or ASST 2301	Zen Buddhism
REL 2403	Introduction to Judaism
or JST 2403	Introduction to Judaism
REL 2447	Kabbalah and Mysticism
or JST 2447	Kabbalah and Mysticism
REL 2502	Jesus in the Media

REL 2606	Introduction to Islam
REL 2702	Religion in Contemporary Africa
REL 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
or ASST 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
REL 3201	I-Ching, Tao, and Ch'an/Zen
or ASST 3201	I-Ching, Tao, and Ch'an/Zen
REL 3301	Japanese Religions
or ASST 3301	Japanese Religions
REL 3411	The Philosophies of Judaism
or JST 3411	The Philosophies of Judaism
REL 3601	The Islamic State
REL 3602	Women in Islam
REL 3603	Islamic Mysticism
REL 3702	African Religions and New World Culture

Total Credit Hours**18-20**

Contact Information

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 215-204-5823
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Media Studies and Production BA with Media Business Concentration

Overview

The Department of Media Studies and Production expands students' knowledge and skills to create, evaluate and manage media content and organizations. With the urban and global communities as their living laboratories, students draw on their creativity, entrepreneurship, intellectual curiosity and analytical abilities to navigate digital media in our global society.

Theory and practice are integrated into all areas of study in the **Bachelor of Arts in Media Studies and Production**. Media Studies and Production students learn how to produce, evaluate and manage media content for traditional and emerging media in a variety of genres, including information (news and documentary), music, comedy, sports, drama, and commercial and noncommercial persuasion campaigns. They study institutions that create, distribute, and investigate media products (e.g., production studios, television and radio networks, and audience measurement companies) and learn how to create and operate successful media businesses. Media Studies and Production students learn to think purposefully and critically about media, and examine the media's role in history, culture and society from many perspectives. They also learn how to act ethically as they interact with the world both in careers in media institutions and as media consuming and producing citizens.

Students must select one of the following concentrations:

- Media Analysis,
- Media Business, or
- Media Production.

An optional concentration in International Communication is also available for this major.

Media Business Concentration

The **Media Business** professional option concentration introduces students to the business decisions, challenges, creative approaches and ethical responsibilities of media managers and media entrepreneurs in the digital age. Students who follow this concentration seek career opportunities as network executives, talent agents, program developers, executive producers or founders/owners of a digital channel, production company, recording studio or web site development company.

Campus Location: Main

Program Code: CO-MSP-BA

Accelerated Program

BA in Media Studies and Production / MA in Media Studies and Production

Contact Information

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Learn more about the Bachelor of Arts in Media Studies and Production.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The degree of Bachelor of Arts may be conferred upon a student majoring in Media Studies and Production (MSP) by the recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours of credit with a cumulative grade point average of 2.0 overall and in the major.

Students must meet:

- University requirements
 - All students are required to complete the General Education (GenEd (p. 83)) curriculum.
 - All students must take a minimum of two writing-intensive (WI) courses in the major at Temple University. Whenever possible, it is recommended that students select WI courses that also directly satisfy a specific MSP requirement to ease the path to program completion.
- Low Klein College of Media and Communication requirements (p. 1184), including KLN 1001 and KLN 1002.
- Minimum of 45 credits in Media Studies & Production / maximum of 64 credits in Media Studies & Production.
- Each course that fulfills a requirement for the major must be passed with a C- or better.
- All prerequisites must be met unless exempted in writing.
- No more than 20 transfer credits may be applied to the Media Studies & Production major.
- No more than 12 credits total for internship, practicum, and independent study courses.

Media Studies and Production: Media Business Concentration Requirements

Code	Title	Credit Hours
Foundation Courses		
MSP 1021	Introduction to Media Analysis ¹	3
MSP 1655	Introduction to Media Business ¹	3
MSP 1701	Introduction to Media Production ¹	3
Content Area Requirements		
Media Policy & Ethics		
Select a minimum of one of the following:		3
MSP 3297	History of Electronic Media (WI)	
MSP 4221	Information Technology Policy	
MSP 4226	Public Media	
MSP 4252	Law and Ethics of Digital Media	
MSP 4454	Public Information Media Campaigns	
Media Critical Topics		
Select a minimum of one of the following:		3
MSP 1011	Introduction to Media Theory	
MSP 2141	Media Research	
MSP 2421	Media Popular Culture	

MSP 3153	Media Criticism	
MSP 3445	Media Images and Analysis	
MSP 4446	Psychological Processing of Media	
MSP 4497	Media and Children (WI)	
MSP 4533	Media, Ecology and Technology	

Emergent Media

Select a minimum of one of the following: 3

MSP 2741	Introduction to Internet Studies and Web Authoring	
MSP 3324	The Video Game Industry and Game Culture	
MSP 3421	Technology and Culture	
MSP 4453	Information Society	
MSP 4455	New Media Literacies	
MSP 4541	Mobile Media	
MSP 4741	Emergent Media Production	

International/Intercultural Media Issues

Select a minimum of one of the following: 3

MSP 3471	Media and Cultural Differences	
MSP 3473	Media and the Environment	
MSP 3572	Communication and Development	
MSP 4275	#ourmedia: Community, Activist, Citizens' and Radical Media	
MSP 4496	Global Media (WI)	
MSP 4571	International Studies in Media and Communication	
MSP 4572	British Media and Telecommunication	

Professional Development and Experiential Learning Requirements

MSP 4039 Senior Seminar ² 3

Select one of the following Experiential Learning Options based upon your interests and eligibility: ³ 3-4

MSP 4785	Internship	
MSP 4487	TUTV Practicum	
MSP 4596	TV News Production Practicum - Temple Update (WI)	
MSP 4597	Sports Production Practicum (WI)	
MSP 4687	Recording Industry Practicum	
MSP 4787	Television Production Workshop Practicum	
MSP 4887	Radio Production Practicum	
MSP Special Topics practicum course (when available - check the course schedule for the term in question)		

Media Business Concentration Options

Select a minimum of 18 credit hours from the following courses, including at least two (2) courses at EITHER the 2000 or 3000 level. (Two is the minimum; however, there is no limit to the number of courses taken at these levels.) ³ 18

MSP 2421	Media Popular Culture	
MSP 2663	The Recording Industry and Music Business	
MSP 3196	Writing Workshop (WI)	
MSP 3225	Educational Multimedia Production	
MSP 3297	History of Electronic Media (WI)	
MSP 3324	The Video Game Industry and Game Culture	
MSP 3421	Technology and Culture	
MSP 3473	Media and the Environment	
MSP 3611	Media Advertising	
MSP 3631	Media Sales	
MSP 3663	Marketing Music and Media	
MSP 3701	Genres of Media Production	
MSP 4221	Information Technology Policy	
MSP 4226	Public Media	
MSP 4252	Law and Ethics of Digital Media	

MSP 4275	#ourmedia: Community, Activist, Citizens' and Radical Media
MSP 4453	Information Society
MSP 4496	Global Media (WI)
MSP 4541	Mobile Media
MSP 4614	Creating a Media Business
MSP 4641	Programming for Multiplatform Media
MSP 4657	Current Issues in Media Management
MSP 4663	Art and Business of Recording
MSP 4687	Recording Industry Practicum
MSP 4696	Communication in Media Organizations (WI)
MSP 4703	Multimedia Production for Corporations and Non-Profits

Total Credit Hours**45-46**

1

Foundation courses must be completed within the first 45 credits at Temple University. Students transferring into Temple must complete at least one Media Studies & Production foundation course at Temple, unless exempted in writing by the chair of the department.

2

Taken during final 30 credits.

3

It is recommended that these are chosen in consultation with a Media Studies & Production Faculty Advisor.

Note: Courses offered in various categories can only be counted once.

About the Professional Development Requirements

The academic experience for all Media Studies and Production majors culminates with the Professional Development requirements, which include MSP 4039 Senior Seminar (3 credits) and one of the Experiential Learning Options (3-4 credits). Together, these courses provide students with hands-on and practical training in the field while allowing them the opportunity to explore their potential professional futures.

Experiential Learning Option: Internship

MSP 4785 Internship (3 or 4 credits): Internship opportunities exist locally (at virtually every media-oriented organization in the greater Philadelphia region), nationally (in New York City, Los Angeles, Chicago, and other U.S. media markets), and internationally (in London, Dublin, Paris, Barcelona, Hong Kong, and Tokyo through the Lew Klein College of Media and Communication's Global Opportunities Program and Temple's Education Abroad Office). Students who wish to enroll in a second internship as an elective can take MSP 4786 for 1 to 3 credit hours. NOTE: To be eligible for an internship, students must obtain an appropriate internship placement for the term of registration (assistance is available), have Junior or Senior standing, a minimum GPA of 3.00, have completed all three MSP foundation courses with a minimum grade of C-, and official approval by the MSP Internship Coordinator via submission of the Internship Verification Form, and once determined eligible, the Site Verification Form.

Experiential Learning Option: Standard and Special Topics Practica

As noted in the major requirements list, there are six (6) standard practica courses, (MSP 4487, MSP 4596, MSP 4597, MSP 4687, MSP 4787, and MSP 4887). Four to five (4-5) of those options are offered each term and most of them have specific course prerequisites that must be completed prior to practica registration, so students are advised to plan accordingly.

When possible, at least one Special Topics practicum is also offered each year, and these focus on media-related topics different from the standard six. Consult the MSP Department for any upcoming Special Topics availability as well as the process for counting them toward the Professional Development Option within the official degree audit.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Media Studies and Production with a Concentration in Media Business

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MSP 1655	Introduction to Media Business (Foundation Requirement)	3
MSP 1701	Introduction to Media Production (Foundation Requirement)	3

ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ}		4
KLN 1001	Klein First-Year Seminar	1
Credit Hours		15
Spring		
MSP 1021	Introduction to Media Analysis (Foundation Requirement)	3
Select one of the following courses from the Media Business Concentration Requirement (Other options may be possible depending upon completed prerequisites.) ¹		3
MSP 2663	The Recording Industry and Music Business	
MSP 3196	Writing Workshop	
KLN 1002	Klein College Introduction to Professional Development	1
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
Media Business 2000-3000 level Concentration Course (minimum of two courses required at 2000-3000 level) ¹		3-4
Media Business 2000-3000 level Concentration Course (select a 2000-3000 level course if not yet completed; if completed, select any Media Business Track Course) ¹		3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15-16
Spring		
Media Business Concentration Course ¹		3
Media Critical Topics Requirement Course ¹		3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Non-MSP Elective		3
Credit Hours		15
Year 3		
Fall		
Media Business Concentration Course ¹		3
Emergent Media Requirement Course		3
GenEd Breadth Course		3
Non-MSP Electives		7-6
Credit Hours		16-15
Spring		
Media Business Concentration Course ¹		3-4
International/Intercultural Media Issues Requirement Course ¹		3
MSP or Non-MSP Electives		9-8
Credit Hours		15
Year 4		
Fall		
MSP 4039	Senior Seminar (Professional Development Requirement)	3
Media Policy & Ethics Requirement Course ¹		3
MSP or Non-MSP Electives		10
Credit Hours		16

Spring

Select one of the following courses from the Professional Development Experiential Learning Options based upon your interests and eligibility: ¹ 3-4

MSP 4785	Internship ²	
MSP 4487	TUTV Practicum ³	
MSP 4596	TV News Production Practicum - Temple Update ³	
MSP 4597	Sports Production Practicum ³	
MSP 4687	Recording Industry Practicum ³	
MSP 4787	Television Production Workshop Practicum ³	
MSP 4887	Radio Production Practicum ³	
MSP Special Topics practicum course (when available - check the course schedule for the term in question)		
Non-MSP Electives		13-12
Credit Hours		16
Total Credit Hours		124

1

All students are required to take at least two writing-intensive (WI) courses in their major. Therefore, this academic plan includes a [WI] notation next to any course that has a writing-intensive attribute. All three MSP concentrations and three of the four focus areas include WI options. Whenever possible, it is recommended that students select their two WI courses from those that also directly satisfy one of their specific MSP requirements, since that will provide a more efficient use of credits and ease the path to program completion.

2

Internship Requirements: a.) Junior or Senior standing (minimum 60 credits completed), b.) a minimum 3.0 GPA, c.) completion of ALL MSP Foundations courses (MSP 1021, MSP 1655, and MSP 1701), and d.) no outstanding grades of Incomplete for any course. For details of the application process and information about the Internship course, review the MSP Internship Overview document, available from the "Forms and Links" section of the Klein tab on the TUPortal.

3

Practicum requirements vary from course to course. Check specific course prerequisites so you may plan accordingly.

Optional Concentration

The **optional International Communication Concentration** (ICC) provides a theoretical and practical education in international and intercultural communication and media. This program allows students to develop sought-after competencies in cultural sensitivity and intercultural communication skills by encouraging students to reflect on their own cultural lenses. Students participating in the ICC program will be exposed to multiple international perspectives through internationally- and interculturally-oriented courses offered on Temple's domestic campuses and may be supplemented with study abroad coursework.

This concentration is restricted to Klein students only.

Requirements

To earn the International Communication Concentration transcript notation, a student must successfully complete a total of 18-20 credits of International / Intercultural studies courses, a maximum 9 credits of which may come from courses transferred into Temple, across 3 areas. Each course that fulfills a requirement for the concentration must be passed with a C- or better.

Code	Title	Credit Hours
Common Course		
Select one of the following:		3
CSI 3701	Intercultural Communication	
CSI 3703	Intercultural Communication in the Workplace	
Klein International/Intercultural courses		
Select three of the following:		9
Any ADV, CMST, CSI, JRN, MSP, or PR courses taken as part of a Klein Global Opportunities Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)		
Any ADV, CMST, CSI, JRN, MSP, or PR Internship completed as part of a Klein Global Opportunities International Program		
CSI 2401	Intercultural and Cross Cultural Conflict	
CSI 3702	Communication, Culture and Identity	
CSI 3703	Intercultural Communication in the Workplace (if not used to fulfill common course requirement above)	

JRN 3254	International Reporting
JRN 3706	Journalism and Globalization
MSP 3471	Media and Cultural Differences
MSP 3572	Communication and Development
MSP 4453	Information Society
MSP 4496	Global Media
PR 2672	Global Communication and Leadership

International/Intercultural Electives outside of Klein

Note: Satisfying the GenEd World Society requirement by completing a Study Abroad does not also satisfy this requirement.

Choose any two (2) courses of the following:

6-8

Up to any two foreign language courses

Any non-Klein courses at the 2000-level or higher taken in a Klein Global Opportunities Int'l Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)

Any non-Klein internship taken in a Klein Global Opportunities International Program

Anthropology

ANTH 2238	Visual Anthropology of Modern Japan
or ASST 2238	Visual Anthropology of Modern Japan
ANTH 2374	The Anthropology of Modern China
or ASST 2374	The Anthropology of Modern China
ANTH 2361	Peoples of Latin America
or LAS 2361	Peoples of Latin America
ANTH 2362	Peoples and Cultures of the Caribbean
or LAS 2362	Peoples and Cultures of the Caribbean

Art History

ARTH 2102	
ARTH 2105	Roman Art and Archaeology
ARTH 2129	Greek and Roman Sculpture
ARTH 2431	Early Modern Italy and Spain in the 17th Century
ARTH 2432	Northern and Global Baroque Art: Art in the Age of Rubens, Rembrandt, Vermeer
ARTH 2543	Transnational Impressionisms
ARTH 2642	Modern Art, 1900-1945
ARTH 2868	Arts of Asia
ARTH 1003	History of Art in Rome (Study Abroad - Rome)
ARTH 2135	Art and Culture in Ancient Rome (Study Abroad - Rome)
ARTH 2428	Wonders of Rome: Art and Culture of the Baroque Era (Study Abroad - Rome)
ARTH 2622	Galleries and Studios of Rome (Study Abroad - Rome)
ARTH 1801	Arts of Asia (Study Abroad - Japan)
ARTH 2815	Pre-Modern Japanese Art up to the Edo Period (Study Abroad - Japan)

Asian Studies

ASST 2001	Practical Asian Society and Culture
ASST 2011	Survey of Japanese Literature Before 1868
ASST 2015	Tokyo in Literature and Film
or JPNS 2015	Tokyo in Literature and Film
ASST 2021	Japanese Literature in Film
or JPNS 2021	Japanese Literature in Film
ASST 2351	Japan in a Changing World
ASST 2367	South Asia: Peoples, Culture, Experiences
ASST 2373	Japanese Culture
or ANTH 2373	Japanese Culture
ASST 2503	Introduction to Southeast Asia: Insular
ASST 2504	Introduction to Southeast Asia: Mainland
ASST 2511	Introduction to Asian Business

ASST 3247 or SOC 3247	Ideology and Social Change in Japan Ideology and Social Change in Japan
ASST 3251 or POLS 3251	China: State and Society China: State and Society
ASST 3522 or HIST 3522	Contemporary China Contemporary China
ASST 3541 or HIST 3541	Japan Today Japan Today
ASST 3542 or HIST 3542	Women and Society in Japan Women and Society in Japan
Film & Media Arts	
FMA 4673	International Cinema
Geography & Urban Studies	
GUS 2032	Urban Systems in a Global Economy
GUS 2073	African Development
GUS 2074 or ASST 2074	East and South Asia Geography of East and South Asia
GUS 3021	International Urbanization
GUS 3052 or ASST 3052 or ENST 3052	Environmental Problems in Asia Environmental Problems in Asia Environmental Problems in Asia
GUS 3073	Geography of Travel and Tourism
GUS 3307	Transportation & Culture
History	
HIST 2303	History of Central Europe, 1618-1871
HIST 2317	Central Europe Through Wars and Revolution, 1848-1989
HIST 2501 or ASST 2501	Introduction to East Asia: China Introduction to East Asia: China
HIST 2502 or ASST 2502	Introduction to East Asia: Japan Introduction to East Asia: Japan
HIST 2503 or ASST 2503	Introduction to Southeast Asia: Insular Introduction to Southeast Asia: Insular
HIST 2504 or ASST 2504	Introduction to Southeast Asia: Mainland Introduction to Southeast Asia: Mainland
HIST 2511	Introduction to African History
HIST 2514	Introduction to Latin America
HIST 2515 or LAS 2515	Civilization and Modernity in the Caribbean Civilization and Modernity in the Caribbean
HIST 2516	Modern Islamic History
HIST 2611	Third World Issues through Film
HIST 3321	Irish History
HIST 3331	History of England
HIST 3362	Russia: Nationality and Empire
HIST 3363	Russia: Revolution, State, and Empire
HIST 3511	Southern Africa: A History
HIST 3521	The Chinese Revolution
HIST 3531	Modern India
HIST 3551	History of Vietnam
HIST 3561 or LAS 3561	History of Brazil History of Brazil
HIST 3562 or LAS 3562	Contemporary Mexico Contemporary Mexico

HIST 3571	Israel: History, Politics and Society
HIST 3572	Modern Middle East
HIST 3675	Third World Women's Lives
Jewish Studies	
JST 2706	Jewish Diaspora/Survey of Jewish History
Latin American Studies	
LAS 2101	Latin America through Film and Fiction
LAS 2231	Comparative Political Systems in Latin America
LAS 2502	Fundamentals of Latin American Business
or IB 2502	Fundamentals of Latin American Business
LAS 2514	Historical Continuity and Social Change in Latin America
LAS 3267	Sociology of Music: Nation, Race, Class and Gender in Argentina and Brazil
LAS 3601	"Other Voices" in Latin American Literature
LAS 3602	Caribbean Literature and Culture
LAS 3801	African Culture in Brazil
Political Science	
POLS 2211	Contemporary Politics of Europe
POLS 2212	Eastern Europe, Russia and the West
POLS 2231	Comparative Political Systems in Latin America
POLS 2255	Comparative Public Policy
POLS 2314	Politics of International Law
POLS 2321	Politics of the Global Economy
POLS 2331	International Organization
POLS 3212	British Government and Politics
POLS 3241	Mideast Politics
POLS 3252	East Asia and the United States
or ASST 3252	East Asia and the United States
POLS 3265	International Environmental Policy
or ENST 3265	International Environmental Policy
Religion	
REL 2002	Religion and Human Sexuality
REL 2007	Religion in Film
REL 2101	Indian Philosophies and Religions
or ASST 2101	Religions of India
REL 2102	Introduction to Buddhism
or ASST 2102	Introduction to Buddhism
REL 2201	Chinese Religions - Confucius to Mao
REL 2301	Zen Buddhism
or ASST 2301	Zen Buddhism
REL 2403	Introduction to Judaism
or JST 2403	Introduction to Judaism
REL 2447	Kabbalah and Mysticism
or JST 2447	Kabbalah and Mysticism
REL 2502	Jesus in the Media
REL 2606	Introduction to Islam
REL 2702	Religion in Contemporary Africa
REL 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
or ASST 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
REL 3201	I-Ching, Tao, and Ch'an/Zen
or ASST 3201	I-Ching, Tao, and Ch'an/Zen
REL 3301	Japanese Religions
or ASST 3301	Japanese Religions

REL 3411	The Philosophies of Judaism
or JST 3411	The Philosophies of Judaism
REL 3601	The Islamic State
REL 3602	Women in Islam
REL 3603	Islamic Mysticism
REL 3702	African Religions and New World Culture

Total Credit Hours

18-20

Contact Information

Jack Klotz, MSP Faculty Advisor
 Annenberg Hall, Room 115
 215-204-5823
 jklotz@temple.edu

Media Studies and Production BA with Media Production Concentration

Overview

The Department of Media Studies and Production expands students' knowledge and skills to create, evaluate and manage media content and organizations. With the urban and global communities as their living laboratories, students draw on their creativity, entrepreneurship, intellectual curiosity and analytical abilities to navigate digital media in our global society.

Theory and practice are integrated into all areas of study in the **Bachelor of Arts in Media Studies and Production**. Media Studies and Production students learn how to produce, evaluate and manage media content for traditional and emerging media in a variety of genres, including information (news and documentary), music, comedy, sports, drama, and commercial and noncommercial persuasion campaigns. They study institutions that create, distribute, and investigate media products (e.g., production studios, television and radio networks, and audience measurement companies) and learn how to create and operate successful media businesses. Media Studies and Production students learn to think purposefully and critically about media, and examine the media's role in history, culture and society from many perspectives. They also learn how to act ethically as they interact with the world both in careers in media institutions and as media consuming and producing citizens.

Students must select one of the following concentrations:

- Media Analysis,
- Media Business, or
- Media Production.

An optional concentration in International Communication is also available for this major.

Media Production Concentration

The **Media Production** professional option concentration introduces students to conceptual and technical tools employed to create media content for the digital world. Students who study in this concentration develop strong professional skills as well as critical and analytical abilities that enable them to produce and evaluate content for various media. They seek career opportunities as producers, writers, videographers, editors, recording engineers, web site designers, and talent in traditional and emerging media.

Campus Location: Main

Program Code: CO-MSP-BA

Accelerated Program

BA in Media Studies and Production / MA in Media Studies and Production

Contact Information

Matthew Lombard, PhD, Chair
 lombard@temple.edu

Jack Klotz, Vice Chair
 jklotz@temple.edu

Rebecca Gollihur, Department Director

gollihur@temple.edu

Department Office
 Annenberg Hall, Room 205
 215-204-5401
 msp@temple.edu

Learn more about the Bachelor of Arts in Media Studies and Production.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The degree of Bachelor of Arts may be conferred upon a student majoring in Media Studies and Production (MSP) by the recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours of credit with a cumulative grade point average of 2.0 overall and in the major.

Students must meet:

1. University requirements
 - All students are required to complete the General Education (GenEd (p. 83)) curriculum.
 - All students must take a minimum of two writing-intensive (WI) courses in the major at Temple University. Whenever possible, it is recommended that students select WI courses that also directly satisfy a specific MSP requirement to ease the path to program completion.
2. Lew Klein College of Media and Communication requirements (p. 1184), including KLN 1001 and KLN 1002.
3. Minimum of 45 credits in Media Studies & Production / maximum of 64 credits in Media Studies & Production.
4. Each course that fulfills a requirement for the major must be passed with a C- or better.
5. All prerequisites must be met unless exempted in writing.
6. No more than 20 transfer credits may be applied to the Media Studies & Production major.
7. No more than 12 credits total for internship, practicum, and independent study courses.

Media Studies and Production: Media Production Concentration Requirements

Code	Title	Credit Hours
Foundation Courses		
MSP 1021	Introduction to Media Analysis ¹	3
MSP 1655	Introduction to Media Business ¹	3
MSP 1701	Introduction to Media Production ¹	3
Content Area Requirements		
Media Policy & Ethics		
Select a minimum of one of the following:		3
MSP 3297	History of Electronic Media (WI)	
MSP 4221	Information Technology Policy	
MSP 4226	Public Media	
MSP 4252	Law and Ethics of Digital Media	
MSP 4454	Public Information Media Campaigns	
Media Critical Topics		
Select a minimum of one of the following:		3
MSP 1011	Introduction to Media Theory	
MSP 2141	Media Research	
MSP 2421	Media Popular Culture	
MSP 3153	Media Criticism	
MSP 3445	Media Images and Analysis	
MSP 4446	Psychological Processing of Media	
MSP 4497	Media and Children (WI)	
MSP 4533	Media, Ecology and Technology	
Emergent Media		
Select a minimum of one of the following:		3

MSP 2741	Introduction to Internet Studies and Web Authoring	
MSP 3324	The Video Game Industry and Game Culture	
MSP 3421	Technology and Culture	
MSP 4453	Information Society	
MSP 4455	New Media Literacies	
MSP 4541	Mobile Media	
MSP 4741	Emergent Media Production	
International/Intercultural Media Issues		
Select a minimum of one of the following:		3
MSP 3471	Media and Cultural Differences	
MSP 3473	Media and the Environment	
MSP 3572	Communication and Development	
MSP 4275	#ourmedia: Community, Activist, Citizens' and Radical Media	
MSP 4496	Global Media (WI)	
MSP 4571	International Studies in Media and Communication	
MSP 4572	British Media and Telecommunication	
Professional Development and Experiential Learning Requirements		
MSP 4039	Senior Seminar ²	3
Select one of the following Experiential Learning Options based upon your interests and eligibility: ³		3-4
MSP 4785	Internship	
MSP 4487	TUTV Practicum	
MSP 4596	TV News Production Practicum - Temple Update (WI)	
MSP 4597	Sports Production Practicum (WI)	
MSP 4687	Recording Industry Practicum	
MSP 4787	Television Production Workshop Practicum	
MSP 4887	Radio Production Practicum	
MSP Special Topics practicum course (when available - check the course schedule for the term in question)		
Media Production Concentration Options		
Select a minimum of 18 credit hours from the following courses, including at least one (1) 2000-level course; no more than two (2) 2000-level courses may be taken. ³		18
MSP 2701	Intermediate Video Production	
MSP 2721	Voice-Over Techniques for Media	
MSP 2741	Introduction to Internet Studies and Web Authoring	
MSP 2751	Audio for Media	
MSP 3196	Writing Workshop (WI)	
MSP 3225	Educational Multimedia Production	
MSP 3296	Travel Writing (WI)	
MSP 3701	Genres of Media Production	
MSP 3705	Sound for Visual Media	
MSP 3709	Advanced Editing	
MSP 3711	Lighting For Media	
MSP 3721	Media Performance	
MSP 3751	Studio Music Recording Techniques	
MSP 3755	Live Sound Production	
MSP 3771	Podcast and Radio Production	
MSP 4487	TUTV Practicum	
MSP 4541	Mobile Media	
MSP 4596	TV News Production Practicum - Temple Update (WI)	
MSP 4597	Sports Production Practicum (WI)	
MSP 4614	Creating a Media Business	
MSP 4641	Programming for Multiplatform Media	
MSP 4663	Art and Business of Recording	

MSP 4687	Recording Industry Practicum
MSP 4701	Producing and Directing
MSP 4703	Multimedia Production for Corporations and Non-Profits
MSP 4741	Emergent Media Production
MSP 4751	Audio Mixing
MSP 4753	Audio Mastering
MSP 4787	Television Production Workshop Practicum
MSP 4796	Creative Scriptwriting (WI)
MSP 4887	Radio Production Practicum

Total Credit Hours**45-46**

1

Foundation courses must be completed within the first 45 credits at Temple University. Students transferring into Temple must complete at least one Media Studies & Production foundation course at Temple, unless exempted in writing by the chair of the department.

2

Taken during final 30 credits.

3

It is recommended that these are chosen in consultation with a Media Studies & Production Faculty Advisor.

Note: Courses offered in various categories can only be counted once.

About the Professional Development Requirements

The academic experience for all Media Studies and Production majors culminates with the Professional Development requirements, which include MSP 4039 Senior Seminar (3 credits) and one of the Experiential Learning Options (3-4 credits). Together, these courses provide students with hands-on and practical training in the field while allowing them the opportunity to explore their potential professional futures.

Experiential Learning Option: Internship

MSP 4785 Internship (3 or 4 credits): Internship opportunities exist locally (at virtually every media-oriented organization in the greater Philadelphia region), nationally (in New York City, Los Angeles, Chicago, and other U.S. media markets), and internationally (in London, Dublin, Paris, Barcelona, Hong Kong, and Tokyo through the Lew Klein College of Media and Communication's Global Opportunities Program and Temple's Education Abroad Office). Students who wish to enroll in a second internship as an elective can take MSP 4786 for 1 to 3 credit hours. NOTE: To be eligible for an internship, students must obtain an appropriate internship placement for the term of registration (assistance is available), have Junior or Senior standing, a minimum GPA of 3.00, have completed all three MSP foundation courses with a minimum grade of C-, and official approval by the MSP Internship Coordinator via submission of the Internship Verification Form, and once determined eligible, the Site Verification Form.

Experiential Learning Option: Standard and Special Topics Practica

As noted in the major requirements list, there are six (6) standard practica courses, (MSP 4487, MSP 4596, MSP 4597, MSP 4687, MSP 4787, and MSP 4887). Four to five (4-5) of those options are offered each term and most of them have specific course prerequisites that must be completed prior to practica registration, so students are advised to plan accordingly.

When possible, at least one Special Topics practicum is also offered each year, and these focus on media-related topics different from the standard six. Consult the MSP Department for any upcoming Special Topics availability as well as the process for counting them toward the Professional Development Option within the official degree audit.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Media Studies & Production: Media Production Concentration

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MSP 1021	Introduction to Media Analysis (Foundation Requirement)	3
MSP 1701	Introduction to Media Production (Foundation Requirement)	3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4

KLN 1001	Klein First-Year Seminar	1
Credit Hours		15
Spring		
MSP 1655	Introduction to Media Business (Foundation Requirement)	3
Select one of the following courses from the Media Production Concentration 2000-level Course Requirement. ¹		3
MSP 2701	Intermediate Video Production	
MSP 2721	Voice-Over Techniques for Media	
MSP 2741	Introduction to Internet Studies and Web Authoring	
MSP 2751	Audio for Media	
KLN 1002	Klein College Introduction to Professional Development	1
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
Media Production Concentration Course ¹		3
Media Production Concentration Course ¹		3
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
Media Production Concentration Course ¹		3
Emergent Media Requirement Course		3
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
Media Production Concentration Course ¹		3
Media Critical Topics Requirement Course ¹		3
Non-MSP Electives		10
Credit Hours		16
Spring		
Media Production Concentration Course ¹		3-4
Media Policy & Ethics Requirement Course ¹		3-4
MSP or Non-MSP Electives		9-7
Credit Hours		15
Year 4		
Fall		
MSP 4039	Senior Seminar (Professional Development Requirement)	3
International/Intercultural Media Issues Requirement Course ¹		3
MSP or Non-MSP Electives		10
Credit Hours		16
Spring		
Select one of the following courses from the Professional Development Experiential Learning Options based upon your interests and eligibility: ¹		3-4
MSP 4785	Internship ²	

MSP 4487	TUTV Practicum ³	
MSP 4596	TV News Production Practicum - Temple Update ³	
MSP 4597	Sports Production Practicum ³	
MSP 4687	Recording Industry Practicum ³	
MSP 4787	Television Production Workshop Practicum ³	
MSP 4887	Radio Production Practicum ³	
MSP Special Topics practicum course (when available - check the course schedule for the term in question)		
Non-MSP Electives		13-12
Credit Hours		16
Total Credit Hours		124

1

All students are required to take at least two writing-intensive (WI) courses in their major. Therefore, this academic plan includes a [WI] notation next to any course that has a writing-intensive attribute. All three MSP concentrations and three of the four focus areas include WI options. Whenever possible, it is recommended that students select their two WI courses from those that also directly satisfy one of their specific MSP requirements, since that will provide a more efficient use of credits and ease the path to program completion.

2

Internship Requirements: a.) Junior or Senior standing (minimum 60 credits completed), b.) a minimum 3.0 GPA, c.) completion of ALL MSP Foundations courses (MSP 1021, MSP 1655, and MSP 1701), and d.) no outstanding grades of Incomplete for any course. For details of the application process and information about the Internship course, review the MSP Internship Overview document, available from the "Forms and Links" section of the Klein tab on the TUPortal.

3

Practicum requirements vary from course to course. Check specific course prerequisites so you may plan accordingly.

Optional Concentration

The **optional International Communication Concentration (ICC)** provides a theoretical and practical education in international and intercultural communication and media. This program allows students to develop sought-after competencies in cultural sensitivity and intercultural communication skills by encouraging students to reflect on their own cultural lenses. Students participating in the ICC program will be exposed to multiple international perspectives through internationally- and interculturally-oriented courses offered on Temple's domestic campuses and may be supplemented with study abroad coursework.

This concentration is restricted to Klein students only.

Requirements

To earn the International Communication Concentration transcript notation, a student must successfully complete a total of 18-20 credits of International / Intercultural studies courses, a maximum 9 credits of which may come from courses transferred into Temple, across 3 areas. Each course that fulfills a requirement for the concentration must be passed with a C- or better.

Code	Title	Credit Hours
Common Course		
Select one of the following:		3
CSI 3701	Intercultural Communication	
CSI 3703	Intercultural Communication in the Workplace	
Klein International/Intercultural courses		
Select three of the following:		9
Any ADV, CMST, CSI, JRN, MSP, or PR courses taken as part of a Klein Global Opportunities Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)		
Any ADV, CMST, CSI, JRN, MSP, or PR Internship completed as part of a Klein Global Opportunities International Program		
CSI 2401	Intercultural and Cross Cultural Conflict	
CSI 3702	Communication, Culture and Identity	
CSI 3703	Intercultural Communication in the Workplace (if not used to fulfill common course requirement above)	
JRN 3254	International Reporting	
JRN 3706	Journalism and Globalization	
MSP 3471	Media and Cultural Differences	
MSP 3572	Communication and Development	

MSP 4453	Information Society
MSP 4496	Global Media
PR 2672	Global Communication and Leadership

International/Intercultural Electives outside of Klein

Note: Satisfying the GenEd World Society requirement by completing a Study Abroad does not also satisfy this requirement.

Choose any two (2) courses of the following:

6-8

Up to any two foreign language courses

Any non-Klein courses at the 2000-level or higher taken in a Klein Global Opportunities Int'l Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)

Any non-Klein internship taken in a Klein Global Opportunities International Program

Anthropology

ANTH 2238 or ASST 2238	Visual Anthropology of Modern Japan
ANTH 2374 or ASST 2374	The Anthropology of Modern China
ANTH 2361 or LAS 2361	Peoples of Latin America
ANTH 2362 or LAS 2362	Peoples and Cultures of the Caribbean

Art History

ARTH 2102	
ARTH 2105	Roman Art and Archaeology
ARTH 2129	Greek and Roman Sculpture
ARTH 2431	Early Modern Italy and Spain in the 17th Century
ARTH 2432	Northern and Global Baroque Art: Art in the Age of Rubens, Rembrandt, Vermeer
ARTH 2543	Transnational Impressionisms
ARTH 2642	Modern Art, 1900-1945
ARTH 2868	Arts of Asia
ARTH 1003	History of Art in Rome (Study Abroad - Rome)
ARTH 2135	Art and Culture in Ancient Rome (Study Abroad - Rome)
ARTH 2428	Wonders of Rome: Art and Culture of the Baroque Era (Study Abroad - Rome)
ARTH 2622	Galleries and Studios of Rome (Study Abroad - Rome)
ARTH 1801	Arts of Asia (Study Abroad - Japan)
ARTH 2815	Pre-Modern Japanese Art up to the Edo Period (Study Abroad - Japan)

Asian Studies

ASST 2001	Practical Asian Society and Culture
ASST 2011	Survey of Japanese Literature Before 1868
ASST 2015 or JPNS 2015	Tokyo in Literature and Film
ASST 2021 or JPNS 2021	Japanese Literature in Film
ASST 2351	Japan in a Changing World
ASST 2367	South Asia: Peoples, Culture, Experiences
ASST 2373 or ANTH 2373	Japanese Culture
ASST 2503	Introduction to Southeast Asia: Insular
ASST 2504	Introduction to Southeast Asia: Mainland
ASST 2511	Introduction to Asian Business
ASST 3247 or SOC 3247	Ideology and Social Change in Japan
ASST 3251 or POLS 3251	China: State and Society

ASST 3522 or HIST 3522	Contemporary China Contemporary China
ASST 3541 or HIST 3541	Japan Today Japan Today
ASST 3542 or HIST 3542	Women and Society in Japan Women and Society in Japan
Film & Media Arts	
FMA 4673	International Cinema
Geography & Urban Studies	
GUS 2032	Urban Systems in a Global Economy
GUS 2073	African Development
GUS 2074 or ASST 2074	East and South Asia Geography of East and South Asia
GUS 3021	International Urbanization
GUS 3052 or ASST 3052 or ENST 3052	Environmental Problems in Asia Environmental Problems in Asia Environmental Problems in Asia
GUS 3073	Geography of Travel and Tourism
GUS 3307	Transportation & Culture
History	
HIST 2303	History of Central Europe, 1618-1871
HIST 2317	Central Europe Through Wars and Revolution, 1848-1989
HIST 2501 or ASST 2501	Introduction to East Asia: China Introduction to East Asia: China
HIST 2502 or ASST 2502	Introduction to East Asia: Japan Introduction to East Asia: Japan
HIST 2503 or ASST 2503	Introduction to Southeast Asia: Insular Introduction to Southeast Asia: Insular
HIST 2504 or ASST 2504	Introduction to Southeast Asia: Mainland Introduction to Southeast Asia: Mainland
HIST 2511	Introduction to African History
HIST 2514	Introduction to Latin America
HIST 2515 or LAS 2515	Civilization and Modernity in the Caribbean Civilization and Modernity in the Caribbean
HIST 2516	Modern Islamic History
HIST 2611	Third World Issues through Film
HIST 3321	Irish History
HIST 3331	History of England
HIST 3362	Russia: Nationality and Empire
HIST 3363	Russia: Revolution, State, and Empire
HIST 3511	Southern Africa: A History
HIST 3521	The Chinese Revolution
HIST 3531	Modern India
HIST 3551	History of Vietnam
HIST 3561 or LAS 3561	History of Brazil History of Brazil
HIST 3562 or LAS 3562	Contemporary Mexico Contemporary Mexico
HIST 3571	Israel: History, Politics and Society
HIST 3572	Modern Middle East
HIST 3675	Third World Women's Lives
Jewish Studies	

JST 2706	Jewish Diaspora/Survey of Jewish History
Latin American Studies	
LAS 2101	Latin America through Film and Fiction
LAS 2231	Comparative Political Systems in Latin America
LAS 2502	Fundamentals of Latin American Business
or IB 2502	Fundamentals of Latin American Business
LAS 2514	Historical Continuity and Social Change in Latin America
LAS 3267	Sociology of Music: Nation, Race, Class and Gender in Argentina and Brazil
LAS 3601	"Other Voices" in Latin American Literature
LAS 3602	Caribbean Literature and Culture
LAS 3801	African Culture in Brazil
Political Science	
POLS 2211	Contemporary Politics of Europe
POLS 2212	Eastern Europe, Russia and the West
POLS 2231	Comparative Political Systems in Latin America
POLS 2255	Comparative Public Policy
POLS 2314	Politics of International Law
POLS 2321	Politics of the Global Economy
POLS 2331	International Organization
POLS 3212	British Government and Politics
POLS 3241	Mideast Politics
POLS 3252	East Asia and the United States
or ASST 3252	East Asia and the United States
POLS 3265	International Environmental Policy
or ENST 3265	International Environmental Policy
Religion	
REL 2002	Religion and Human Sexuality
REL 2007	Religion in Film
REL 2101	Indian Philosophies and Religions
or ASST 2101	Religions of India
REL 2102	Introduction to Buddhism
or ASST 2102	Introduction to Buddhism
REL 2201	Chinese Religions - Confucius to Mao
REL 2301	Zen Buddhism
or ASST 2301	Zen Buddhism
REL 2403	Introduction to Judaism
or JST 2403	Introduction to Judaism
REL 2447	Kabbalah and Mysticism
or JST 2447	Kabbalah and Mysticism
REL 2502	Jesus in the Media
REL 2606	Introduction to Islam
REL 2702	Religion in Contemporary Africa
REL 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
or ASST 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
REL 3201	I-Ching, Tao, and Ch'an/Zen
or ASST 3201	I-Ching, Tao, and Ch'an/Zen
REL 3301	Japanese Religions
or ASST 3301	Japanese Religions
REL 3411	The Philosophies of Judaism
or JST 3411	The Philosophies of Judaism
REL 3601	The Islamic State
REL 3602	Women in Islam

REL 3603

Islamic Mysticism

REL 3702

African Religions and New World Culture

Total Credit Hours**18-20**

Contact Information

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Public Relations BA

Overview

The **Bachelor of Arts in Public Relations**, offered by the Department of Advertising and Public Relations, consists of 17 Public Relations courses (minimum of 48 credit hours). In this major, students learn the theories of communication influencing how public relations (PR) is practiced while developing the knowledge base and skills they need for strategic and critical thinking, speaking and writing—the basic foundations for becoming a PR professional.

The goal of the Public Relations major is to help students understand public relations is an ongoing communication and relational process, not a position. Viewed this way, public relations requires responsible, thoughtful reflection and action from all levels of organizations, not just those in leadership positions. This approach requires competencies of self-awareness, oral and written communication skills, ethical decision-making and action, the ability to understand audiences' needs, wants and desires, and generate mutual win-win scenarios using a variety of communication tools to create a vision and lead with, through and for others to bring about positive change.

This program will build both knowledge and skills for students to understand true public relations, e.g., "relating" to publics through building a meaningful two-way continuous dialogue built on mutual trust and respect, and be able to effectively formulate a position, influence and empower others. Students will be able to use the knowledge gained from this program to bridge the divide between the theoretical and practical application in the organizations they work in (for-profit, non-profit, government and non-governmental organizations) and the communities they serve.

An optional concentration in International Communication is available for this major.

Campus Location: Main

Program Code: CO-PR-BA

Contact Information

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Advertising and Public Relations Department Office
 Annenberg Hall, Room 300

Learn more about the Bachelor of Arts in Public Relations.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

1. University requirements:
 - a. New students are required to complete the General Education (GenEd (p. 83)) curriculum.
 - b. All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are PR 1496 and PR 3096.

2. Lew Klein College of Media and Communication requirements (p. 1184), including KLN 1001 and KLN 1002.
3. Minimum of 48 credits in Public Relations courses and CSI 1111 or CSI 1911.
4. A grade of C or higher must be attained in all required Public Relations courses and CSI 1111 or CSI 1911.
5. An overall GPA of 2.0 must be attained in the major.
6. No more than 12 semester hours of transfer credits may be applied to Public Relations major requirements.
7. No more than 8 credits may be taken in Kinesiology and Dance activities courses.

Public Relations Requirements

Code	Title	Credit Hours
1000-Level Core Requirements		
CSI 1111 or CSI 1911	Introduction to Public Speaking Honors Introduction to Public Speaking	3
PR 1101	PRactical Grammar for Public Communications	3
PR 1112	Communicating Leadership	3
PR 1496	News Writing and Media Relations	3
PR 1552	Introduction to Public Relations	3
2000-Level Core Requirements		
PR 2551	Research Methods	3
PR 2662	Leading Groups and Team Building	3
PR 2701	Public Relations Theory	3
3000-Level Core Requirements		
PR 3096	Public Relations Writing	3
PR 3101	Digital Media, Social Media, Audience Analytics for Public Relations	3
PR 3201	Law and Ethics in Public Relations	3
PR 3202	Diversity and Public Relations	3
PR 3301	Industry Essentials for Public Relations	2
PR 3302	Crisis Communication	3
PR 3587	Public Relations Field Experience	1 to 3
4000-Level Core Requirements		
PR 4102	Public Relations Portfolio	3
PR 4501	Public Relations Capstone	3
Total Credit Hours		48-50

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Public Relations

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
PR 1101	PRactical Grammar for Public Communications	3
PR 1112	Communicating Leadership	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ}		4
KLN 1001	Klein First-Year Seminar	1
Credit Hours		15
Spring		
CSI 1111 or CSI 1911	Introduction to Public Speaking or Honors Introduction to Public Speaking	3

PR 1496	News Writing and Media Relations	3
PR 1552	Introduction to Public Relations	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
KLN 1002	Klein College Introduction to Professional Development	1
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
PR 2551	Research Methods	3
PR 2701	Public Relations Theory	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Elective		3
Credit Hours		15
Spring		
PR 2662	Leading Groups and Team Building	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Electives		6
Credit Hours		15
Year 3		
Fall		
PR 3096	Public Relations Writing	3
PR 3101	Digital Media, Social Media, Audience Analytics for Public Relations	3
PR 3201	Law and Ethics in Public Relations	3
PR 3202	Diversity and Public Relations	3
GenEd Breadth Course		3
Credit Hours		15
Spring		
PR 3301	Industry Essentials for Public Relations	2
PR 3302	Crisis Communication	3
PR 3587	Public Relations Field Experience ¹	2
Electives		10
Credit Hours		17
Year 4		
Fall		
PR 4102	Public Relations Portfolio	3
GenEd Breadth Course		3
Electives		9
Credit Hours		15
Spring		
PR 4501	Public Relations Capstone	3
GenEd Breadth Course		3
Electives		10
Credit Hours		16
Total Credit Hours		124

1

This program requires a minimum of 124 credits. If students choose to take PR 3587 Public Relations Field Experience for less than 2 credits, they may need to take one additional elective credit to reach a total of 124 credits.

Optional Concentration

The **optional International Communication Concentration (ICC)** provides a theoretical and practical education in international and intercultural communication and media. This program allows students to develop sought-after competencies in cultural sensitivity and intercultural communication skills by encouraging students to reflect on their own cultural lenses. Students participating in the ICC program will be exposed to multiple international perspectives through internationally- and interculturally-oriented courses offered on Temple's domestic campuses and may be supplemented with study abroad coursework.

This concentration is restricted to Klein students only.

Requirements

To earn the International Communication Concentration transcript notation, a student must successfully complete a total of 18-20 credits of International / Intercultural studies courses, a maximum 9 credits of which may come from courses transferred into Temple, across 3 areas. Each course that fulfills a requirement for the concentration must be passed with a C- or better.

Code	Title	Credit Hours
Common Course		
Select one of the following:		3
CSI 3701	Intercultural Communication	
CSI 3703	Intercultural Communication in the Workplace	
Klein International/Intercultural courses		
Select three of the following:		9
Any ADV, CMST, CSI, JRN, MSP, or PR courses taken as part of a Klein Global Opportunities Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)		
Any ADV, CMST, CSI, JRN, MSP, or PR Internship completed as part of a Klein Global Opportunities International Program		
CSI 2401	Intercultural and Cross Cultural Conflict	
CSI 3702	Communication, Culture and Identity	
CSI 3703	Intercultural Communication in the Workplace (if not used to fulfill common course requirement above)	
JRN 3254	International Reporting	
JRN 3706	Journalism and Globalization	
MSP 3471	Media and Cultural Differences	
MSP 3572	Communication and Development	
MSP 4453	Information Society	
MSP 4496	Global Media	
PR 2672	Global Communication and Leadership	
International/Intercultural Electives outside of Klein		
Note: Satisfying the GenEd World Society requirement by completing a Study Abroad does not also satisfy this requirement.		
Choose any two (2) courses of the following:		6-8
Up to any two foreign language courses		
Any non-Klein courses at the 2000-level or higher taken in a Klein Global Opportunities Int'l Program, or at a Temple University Overseas Campus (e.g., Temple Rome or Temple Japan)		
Any non-Klein internship taken in a Klein Global Opportunities International Program		
Anthropology		
ANTH 2238 or ASST 2238	Visual Anthropology of Modern Japan	
ANTH 2374 or ASST 2374	The Anthropology of Modern China	
ANTH 2361 or LAS 2361	Peoples of Latin America	
ANTH 2362 or LAS 2362	Peoples and Cultures of the Caribbean	
Art History		
ARTH 2102		
ARTH 2105	Roman Art and Archaeology	

ARTH 2129	Greek and Roman Sculpture
ARTH 2431	Early Modern Italy and Spain in the 17th Century
ARTH 2432	Northern and Global Baroque Art: Art in the Age of Rubens, Rembrandt, Vermeer
ARTH 2543	Transnational Impressionisms
ARTH 2642	Modern Art, 1900-1945
ARTH 2868	Arts of Asia
ARTH 1003	History of Art in Rome (Study Abroad - Rome)
ARTH 2135	Art and Culture in Ancient Rome (Study Abroad - Rome)
ARTH 2428	Wonders of Rome: Art and Culture of the Baroque Era (Study Abroad - Rome)
ARTH 2622	Galleries and Studios of Rome (Study Abroad - Rome)
ARTH 1801	Arts of Asia (Study Abroad - Japan)
ARTH 2815	Pre-Modern Japanese Art up to the Edo Period (Study Abroad - Japan)
Asian Studies	
ASST 2001	Practical Asian Society and Culture
ASST 2011	Survey of Japanese Literature Before 1868
ASST 2015	Tokyo in Literature and Film
or JPNS 2015	Tokyo in Literature and Film
ASST 2021	Japanese Literature in Film
or JPNS 2021	Japanese Literature in Film
ASST 2351	Japan in a Changing World
ASST 2367	South Asia: Peoples, Culture, Experiences
ASST 2373	Japanese Culture
or ANTH 2373	Japanese Culture
ASST 2503	Introduction to Southeast Asia: Insular
ASST 2504	Introduction to Southeast Asia: Mainland
ASST 2511	Introduction to Asian Business
ASST 3247	Ideology and Social Change in Japan
or SOC 3247	Ideology and Social Change in Japan
ASST 3251	China: State and Society
or POLS 3251	China: State and Society
ASST 3522	Contemporary China
or HIST 3522	Contemporary China
ASST 3541	Japan Today
or HIST 3541	Japan Today
ASST 3542	Women and Society in Japan
or HIST 3542	Women and Society in Japan
Film & Media Arts	
FMA 4673	International Cinema
Geography & Urban Studies	
GUS 2032	Urban Systems in a Global Economy
GUS 2073	African Development
GUS 2074	East and South Asia
or ASST 2074	Geography of East and South Asia
GUS 3021	International Urbanization
GUS 3052	Environmental Problems in Asia
or ASST 3052	Environmental Problems in Asia
or ENST 3052	Environmental Problems in Asia
GUS 3073	Geography of Travel and Tourism
GUS 3307	Transportation & Culture
History	
HIST 2303	History of Central Europe, 1618-1871
HIST 2317	Central Europe Through Wars and Revolution, 1848-1989

HIST 2501 or ASST 2501	Introduction to East Asia: China Introduction to East Asia: China
HIST 2502 or ASST 2502	Introduction to East Asia: Japan Introduction to East Asia: Japan
HIST 2503 or ASST 2503	Introduction to Southeast Asia: Insular Introduction to Southeast Asia: Insular
HIST 2504 or ASST 2504	Introduction to Southeast Asia: Mainland Introduction to Southeast Asia: Mainland
HIST 2511	Introduction to African History
HIST 2514	Introduction to Latin America
HIST 2515 or LAS 2515	Civilization and Modernity in the Caribbean Civilization and Modernity in the Caribbean
HIST 2516	Modern Islamic History
HIST 2611	Third World Issues through Film
HIST 3321	Irish History
HIST 3331	History of England
HIST 3362	Russia: Nationality and Empire
HIST 3363	Russia: Revolution, State, and Empire
HIST 3511	Southern Africa: A History
HIST 3521	The Chinese Revolution
HIST 3531	Modern India
HIST 3551	History of Vietnam
HIST 3561 or LAS 3561	History of Brazil History of Brazil
HIST 3562 or LAS 3562	Contemporary Mexico Contemporary Mexico
HIST 3571	Israel: History, Politics and Society
HIST 3572	Modern Middle East
HIST 3675	Third World Women's Lives
Jewish Studies	
JST 2706	Jewish Diaspora/Survey of Jewish History
Latin American Studies	
LAS 2101	Latin America through Film and Fiction
LAS 2231	Comparative Political Systems in Latin America
LAS 2502 or IB 2502	Fundamentals of Latin American Business Fundamentals of Latin American Business
LAS 2514	Historical Continuity and Social Change in Latin America
LAS 3267	Sociology of Music: Nation, Race, Class and Gender in Argentina and Brazil
LAS 3601	"Other Voices" in Latin American Literature
LAS 3602	Caribbean Literature and Culture
LAS 3801	African Culture in Brazil
Political Science	
POLS 2211	Contemporary Politics of Europe
POLS 2212	Eastern Europe, Russia and the West
POLS 2231	Comparative Political Systems in Latin America
POLS 2255	Comparative Public Policy
POLS 2314	Politics of International Law
POLS 2321	Politics of the Global Economy
POLS 2331	International Organization
POLS 3212	British Government and Politics
POLS 3241	Mideast Politics
POLS 3252	East Asia and the United States

or ASST 3252	East Asia and the United States
POLS 3265	International Environmental Policy
or ENST 3265	International Environmental Policy
Religion	
REL 2002	Religion and Human Sexuality
REL 2007	Religion in Film
REL 2101	Indian Philosophies and Religions
or ASST 2101	Religions of India
REL 2102	Introduction to Buddhism
or ASST 2102	Introduction to Buddhism
REL 2201	Chinese Religions - Confucius to Mao
REL 2301	Zen Buddhism
or ASST 2301	Zen Buddhism
REL 2403	Introduction to Judaism
or JST 2403	Introduction to Judaism
REL 2447	Kabbalah and Mysticism
or JST 2447	Kabbalah and Mysticism
REL 2502	Jesus in the Media
REL 2606	Introduction to Islam
REL 2702	Religion in Contemporary Africa
REL 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
or ASST 3011	Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
REL 3201	I-Ching, Tao, and Ch'an/Zen
or ASST 3201	I-Ching, Tao, and Ch'an/Zen
REL 3301	Japanese Religions
or ASST 3301	Japanese Religions
REL 3411	The Philosophies of Judaism
or JST 3411	The Philosophies of Judaism
REL 3601	The Islamic State
REL 3602	Women in Islam
REL 3603	Islamic Mysticism
REL 3702	African Religions and New World Culture

Total Credit Hours**18-20**

Contact Information

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Public Relations Minor

Overview

The **Minor in Public Relations**, offered by the Department of Advertising and Public Relations, consists of seven courses (21 s.h.) which provide students in other programs at Temple University the opportunity to better prepare them for life after graduation by gaining the knowledge and skill sets required to communicate effectively and lead at the organizational, team and individual levels.

The goal of the Public Relations minor is to help students understand public relations is a communication and relational process, not a position. Viewed this way, public relations requires responsible, thoughtful reflection and action from all levels of organizations, not just those in leadership positions. This approach requires competencies of self-awareness, oral and written communication skills, ethical decision-making and action, and the ability to understand audiences and generate mutual win-win scenarios using a variety of communication tools to generate a vision and lead with, through, and for others to bring about positive change.

This program will build both knowledge and skills for students to understand true public relations, e.g., "relating" to publics in a meaningful and continuous two-way dialogue built on mutual trust and respect, and be able to effectively formulate a position, influence and empower others. They will

be able to use the knowledge gained from this program to bridge the divide between the theoretical and practical application in the businesses (for-profit, non-profit, government and non-government organizations) and industries they work in and the communities they serve.

Campus Location: Main

Contact Information

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Advertising and Public Relations Department Office
Annenberg Hall, Room 300

<https://klein.temple.edu/academics>

Learn more about the Public Relations minor.

Requirements

Code	Title	Credit Hours
CSI 1111	Introduction to Public Speaking	3
PR 1496	News Writing and Media Relations (WI)	3
PR 1552	Introduction to Public Relations	3
PR 2551	Research Methods	3
PR 2661	Communicating Organizational Change	3
PR 2701	Public Relations Theory	3
PR 3101	Digital Media, Social Media, Audience Analytics for Public Relations	3
Total Credit Hours		21

Sports Media Certificate

Overview

The **Certificate in Sports Media** gives Klein College students the opportunity to gain experience and expertise in the fields of journalism, advertising, public relations, media and communication by completing a minimum of 18 credit hours in designated sports media courses offered across the college. The Sports Media certificate enables Klein College to compete with a variety of peer and aspirant universities for students embarking on careers dealing with some phase of sports media. Because the certificate will be noted on students' transcripts, the program is expected to enhance the possibility of employment in a variety of sports media fields as well as create a foundation for research on the topic of sports media.

Campus Location: Main

Program Code: CO-SPTM-CERT

Contact Information

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Learn more about the undergraduate certificate in Sports Media.

Requirements

Code	Title	Credit Hours
Required Course		
JRN 3763	The Influence of Sports Media on Modern Society	3
Electives		
Select five courses from the following:		15
JRN 3255	Sports Writing	
JRN 3257	Advanced Sports Reporting	
JRN 3261	Beyond the Lines: Producing Sports Journalism	
JRN 3764	Race, Ethnicity and Gender Influence on Sports Coverage	
JRN 4203	Communicating Sports Statistics and Data	
JRN 4597	Sports Production Practicum ¹	
MSP 3701	Genres of Media Production	
MSP 4597	Sports Production Practicum ¹	
MSP 4787	Television Production Workshop Practicum	
PR 3401	Sports Media Relations	
CSI 1401	Conflict and Communication Behavior	
CSI 2101	Communicating Civic Engagement through Sports	
CSI 4402	Multiparty Conflict Processes: Dialogue, Facilitation and Multiparty Mediation	
Total Credit Hours		18

1

Only 4 credits of JRN 4597 and MSP 4597 can count toward the Sports Media Certificate. These two courses are cross-listed.

Virtual Media Management BA

Overview

The **Bachelor of Arts in Virtual Media Management** (VMM) is an interdisciplinary program designed to prepare tomorrow's communication experts to work and lead in professional environments that require abilities to build relationships while working on virtual teams, make decisions across international boundaries, and adapt to new technologies within ever-changing virtual environments. This program can be completed either fully online or in hybrid mode. It delivers a unique combination of courses in interpersonal communication, organizational communication, mediated communication, team and group communication, all of which focus on communicating within virtual organizations and mediated environments.

Students begin this major with two 7-week courses that focus on how to work and learn effectively in virtual environments. These courses set the foundation for students to learn and be successful throughout the rest of the VMM major. The ability to communicate efficiently and effectively in virtual settings, and the ability to adapt to continual changes in mediated environments—from virtual platforms to the growth in virtual reality and avatars that represent spaces and identities—requires a novel type of preparation of students who seek to excel in the remote workplace that has become the new normal. Media corporations increasingly depend on a workforce that is capable of crossing state, national and international boundaries, working across time zones, and engaging daily with people who live and work in cultures and nations far from their own homes.

This undergraduate major addresses the cultural, organizational and mediated challenges of this type of workplace, while preparing students with the theoretical and practical knowledge for leading teams and managing media platforms in these types of mediated spaces. This major offers the value of a degree in media and communication, with a specific focus on how to manage and work within virtual environments, which can be applied to both remote and in-person work environments.

Campus Location: Main and Online

Program Code: CO-VMM-BA

Contact Information

Deborah Cai, Senior Associate Dean and Program Director
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Learn more about the Bachelor of Arts in Virtual Media Management.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

The degree of Bachelor of Arts may be conferred upon a student majoring in Virtual Media Management by the recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours of credit with a cumulative grade point average of 2.0 overall and in the major.

Students must meet:

1. University requirements:
 - All students are required to complete the General Education (GenEd (p. 83)) curriculum.
 - All students must take a minimum of two writing-intensive courses in their major at Temple University. VMM 4196 is required for all students completing this major. The second writing-intensive course can be selected from the following: ADV 1196, JRN 1196, CSI 2296, CSI 2696.
2. Low Klein College of Media and Communication requirements (p. 1184), including KLN 1001 and KLN 1002.
3. Minimum 45 credit hours in Virtual Media Management major.
4. Grades of C- or higher must be attained in all courses within the Virtual Media Management major.
5. No more than 12 semester hours of transfer credits may be applied to Virtual Media Management major requirements.

Virtual Media Management Major Requirements

Code	Title	Credit Hours
Core Courses (all core courses are offered online)		
VMM 1111	Introduction to Virtual Media Management ¹	3
VMM 1112	Challenges of Virtual Media Management ¹	3
VMM 3112	Experiential Learning in Virtual Media Management ²	3
VMM 4196	(WI)	3
Communicating in Virtual Environments (CVE) Focus Area		
Select three of the following:		9
CSI 1111	Introduction to Public Speaking	
CSI 1113	Persuasion	
CSI 1401	Conflict and Communication Behavior	
CSI 2401	Intercultural and Cross Cultural Conflict	
CSI 3701	Intercultural Communication	
CSI 4201	Communication, Attitudes, and Opinion	
CSI 4601	Narrative Persuasion	
MSP 4454	Public Information Media Campaigns	
PR 1112	Communicating Leadership	
PR 2661	Communicating Organizational Change	
PR 2672	Global Communication and Leadership	
VMM 4571	International Studies in Media and Communication	
Mediated Platforms and Environments (MPE) Focus Area		
Select three of the following:		9
ADV 2005	Social Media Marketing	
JRN 3709	The Entrepreneurial Journalist	
JRN 3712	The Business of Journalism	
MSP 1001	Video Production for Non-Majors	
MSP 1655	Introduction to Media Business	
MSP 3471	Media and Cultural Differences	
MSP 4221	Information Technology Policy	
MSP 4252	Law and Ethics of Digital Media	
MSP 4446	Psychological Processing of Media	
MSP 4614	Creating a Media Business	
MSP 4641	Programming for Multiplatform Media	
MSP 4657	Current Issues in Media Management	

Focus Area Electives

Select four courses in any combination from the CVE and MPE Focus Areas. At least two of these courses must be at or above the 3000-level. 12

Writing Intensive Course

Select one of the following: 3

ADV 1196	Persuasive Writing	
CSI 2296	Resistance, Protests, and Social Movements	
CSI 2696	Risk Communication	
JRN 1196	Writing and Reporting	
MSP 4696	Communication in Media Organizations	

Total Credit Hours 45

1

Students should complete VMM 1111 and VMM 1112 in their first semester of the major.

2

Students should complete VMM 3112 during the last two years in the major.

Suggested Academic Plan

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Virtual Media Management**Suggested Plan for New Students Starting in the 2023-2024 Academic Year**

Year 1		
Fall		Credit Hours
VMM 1111	Introduction to Virtual Media Management	3
VMM 1112	Challenges of Virtual Media Management	3
KLN 1001	Klein First-Year Seminar	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		15
Spring		
Communicating in Virtual Environments (CVE) Focus Area Course #1		3
Mediated Platforms and Environments (MPE) Focus Area Course #1		3
KLN 1002	Klein College Introduction to Professional Development	1
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
CVE Focus Area Course #2		3
MPE Focus Area Course #2		3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
CVE Focus Area Course #3		3
MPE Focus Area Course #3		3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3

GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
VMM 3112	Experiential Learning in Virtual Media Management	3
Select one of the following WI courses:		3
ADV 1196	Persuasive Writing	
CSI 2296	Resistance, Protests, and Social Movements	
CSI 2696	Risk Communication	
JRN 1196	Writing and Reporting	
MSP 4696	Communication in Media Organizations	
Electives		10
Credit Hours		16
Spring		
CVE or MPE Focus Area Course (3000-4999)		3
CVE or MPE Focus Area Course (3000-4999)		3
Electives		10
Credit Hours		16
Year 4		
Fall		
VMM 4196		3
CVE or MPE Focus Area Course (any level)		3
Electives		10
Credit Hours		16
Spring		
CVE or MPE Focus Area Course (any level)		3
Electives		12
Credit Hours		15
Total Credit Hours		124

College of Public Health

Overview

Since its inception in 1966, the College of Public Health has prepared well-rounded practitioners who are sensitive to patient/client needs and whose professional competence is built on a solid foundation of theory, laboratory practice, and clinical fieldwork/internships with a focus in interprofessional engagement. The college offers undergraduate programs that include Exercise and Sport Science; Health Information Management; Health Professions; Health Studies; Kinesiology; Nursing; Public Health; Social Work; Speech, Language and Hearing Science; and Recreational Therapy. Students graduating with a bachelor's degree in Health Information Management, Kinesiology, Nursing, Public Health, or Recreational Therapy meet the entry-level requirements of their professions and are qualified to take state and/or national examinations leading to certification or licensure in their fields. The college also offers an exploratory undeclared major for lower-division students as well as accelerated undergraduate-plus-graduate degree programs, including a 3+3 Doctor of Physical Therapy degree program and a Direct Entry 5-year program leading to the Master of Science degree in Athletic Training.

Vision Statement

Solving health's complexities for a better tomorrow.

Mission Statement

The mission of Temple University's College of Public Health is to prepare our students to become researchers, practitioners and educators. Collaborating across health-related disciplines, we address community needs, create evidence-based solutions, and deliver effective, compassionate care.

Academic Departments

- The Department of Communication Sciences and Disorders seeks to enhance the theoretical and applied knowledge in the fields of speech, language and hearing sciences, speech-language pathology, and theoretical linguistics.
- The Department of Epidemiology and Biostatistics strives to enhance population health and train the next generation of public health scholars and professionals.
- The Department of Health and Rehabilitation Sciences is committed to both preventing injury and disability and helping those who have illnesses, short-term injuries, or long-term physical or psychological disabilities lead full, satisfying and meaningful lives.
- The Department of Health Services Administration and Policy is focused on improving population health through research on the role and effectiveness of health services, health information and informatics, leadership/management and policy.
- The Department of Nursing prepares graduates for the practice of professional nursing through rigorous academic and clinical coursework grounded in nursing science and related biological sciences, social sciences and the arts.
- The Department of Social and Behavioral Sciences strives to promote healthy communities and train those who excel in public health practice and research.
- The School of Social Work is an integral part of Temple's College of Public Health, sharing a home with other professions that seek healing and opportunities to bolster human capacities.

Accelerated Programs

Accelerated programs provide a pathway for students to pursue both an undergraduate degree and an advanced degree in a shorter amount of time. Below is a list of available accelerated programs for students in the College of Public Health.

- **3+3 Accelerated Bachelor of Science in Health Professions / Doctor of Physical Therapy:** Exceptional freshman undergraduate students can maximize their academic investment and shorten the path to a DPT through this accelerated degree option, which allows them to earn both an undergraduate and a DPT degree in six years instead of seven. Learn more about the benefits of the College of Public Health's 3+3 Accelerated DPT Admissions Option.
- **Accelerated Bachelor of Science in Public Health / Master of Public Health:** The College of Public Health offers a rigorous five-year (4+1) program in which outstanding public health majors can earn a bachelor of science in public health and a master of public health degree in five years, rather than six. This combined degree program offers exceptional students an opportunity to work closely with faculty, while developing critical skills in public health and completing graduate work for professional careers in research, policy, administration, or real-world public health practice. The public health curriculum at Temple University is diverse, offering both undergraduate and graduate students access to faculty from a broad range of public health areas. The MPH requirements will be satisfied by the end of the fifth year of study. The undergraduate program consists of 110 undergraduate credits and the graduate program consists of 39 graduate credits, for a total of 149 credits. The +1 Accelerated BS in Public Health/ MPH program is currently available with the MPH in Epidemiology, MPH in Health Policy and Management and MPH in Social and Behavioral Sciences programs.
- **Accelerated Bachelor of Science in Recreational Therapy / Master of Science in Recreational Therapy:** The College of Public Health offers a rigorous five-year (4+1) program in which high-performing undergraduate recreational therapy students can earn a BS in Recreational Therapy and MS in Recreational Therapy in five years, rather than six. This combined degree program offers exceptional students an opportunity to develop critical skills in recreational therapy and complete graduate work for professional careers in diverse settings, including hospitals, rehabilitation

centers, nursing homes, assisted living facilities, schools and community recreation agencies. Students can apply for admission to this accelerated program at the beginning of their junior year. They begin taking graduate-level courses the semester after they are admitted. Students will complete the requirements for the undergraduate degree within two years after entering the +1 program, and the MS requirements will be satisfied by the end of the fifth year of study.

- **Direct Entry Master of Science in Athletic Training:** For undergraduate students interested in a career in athletic training, the College of Public Health offers a direct entry program combining our BS in Health Professions and our MS in Athletic Training. More than 70 percent of athletic trainers hold at least a master's degree—and within the next few years, a master's degree will be required in order to become eligible for national certification. This program provides you with a direct path into our accredited Master of Science in Athletic Training program, allowing you to earn both a bachelor's and master's degree in five years and preparing you to begin practicing as an athletic trainer. Admitted students are granted direct acceptance into both programs—meaning you do not have to apply separately to the MS program. During the program, you will work with an advisor on academic planning to make sure you are on track and remain in good academic standing to satisfy academic requirements for both programs. View a sample academic plan.

For a complete list, see Accelerated Degree Programs (p. 1792) in the *Undergraduate Bulletin*.

College Accreditation

Temple University's College of Public Health is fully accredited by the Council on Education for Public Health (CEPH). The college is one of only two CEPH-accredited schools of public health in the Philadelphia region, and one of three in the state of Pennsylvania. The college's accreditation is in addition to its 24 program-specific accreditations.

Student Organizations

The College of Public Health houses many student organizations within its departments and organized by area of study.

Contact Information

Undergraduate students with general questions should contact the College's Dean's Office at 215-204-5440.

For questions about academic requirements, students should contact the departmental academic advisor. A list of advisors is available at Academic Advising.

Contact information for specific departments is available at the College of Public Health web site. Please select the program tab at the top of the college page and follow the links for additional program information.

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Undergraduate Programs

- American Sign Language Certificate (p. 1360)
- Applied Epidemiology Minor (p. 1361)
- Emergency and Sports Injury Management Certificate (p. 1361)
- Exercise and Sport Science BS (p. 1362)
- Global Health Minor (p. 1365)
- Health Information Management BSHIM (p. 1366)
- Health Information Management Minor (p. 1370)
- Health Policy and Management Minor (p. 1371)
- Health Professions BS (p. 1372)
- Health Studies BA (p. 1376)
- Kinesiology BS (p. 1379)
- Linguistics Certificate (p. 1382)
- Nursing BSN (p. 1383)
- Nutrition Minor (p. 1387)
- Public Health BS (p. 1388)
- Public Health Minor (p. 1393)

- Recreational Therapy BS (p. 1394)
- Speech, Language and Hearing Science BA (p. 1399)

Academic Policies and Regulations

Students are responsible for complying with all university-wide academic policies that apply to their individual academic status (Please see Undergraduate Academic Policies (p. 1835)). Additional and unique policies, or exceptions for the College of Public Health (CPH), appear below.

Attendance

The College of Public Health desires to promote professional responsibility among its students. It is therefore the policy of the college to place the responsibility for class attendance upon the students. Students are accountable for all work missed due to absence. Instructors are generally not required to make special arrangements or examinations for students who are absent. There are certain courses that require a minimum number of hours of student participation in laboratory or clinical experiences, as established by the professional accrediting agency and/or the academic department concerned. At the beginning of each such course, the department shall make the attendance requirement clearly known to the enrolled students. Excessive absences may, at the option of the department, jeopardize the student's grade and/or continuance in the course.

Grade Grievances

Temple University students have the right to appeal any academic matter in which they feel they have been treated unfairly, including grade grievances. Learn about the College of Public Health's grade grievance appeals procedure.

Change of Major (CPH students)

In order to add or change majors or minors within CPH, a CPH student must meet with the academic advisor for their intended major. The advisor will evaluate the student's record in accordance with the following policy:

1. CPH students in their first semester at Temple University who wish to add or change majors or minors may be approved, but a discussion with the academic advisor in your intended major may be required.
2. Continuing CPH students who wish to add or change majors or minors within CPH must have a cumulative grade point average (GPA) of 2.00 or higher. Continuing CPH students who wish to change their major may be required to have an additional meeting with the academic advisor of their intended major.

Change of Major (Non-CPH Temple Students)

To transfer into CPH from another school or college within Temple University, a non-CPH student must complete the following steps:

Step One: Review a brief College of Public Health Change of Program presentation (pdf), which covers important information about academic advising and college/university requirements.

Step Two: Complete a brief online assessment, which will test your knowledge of the information covered in the presentation. You must answer each question correctly in order to complete the process. You may take the test more than once.

Step Three: Within a week, you will receive an official College of Public Health Change of Program form **via email**. It is the student's responsibility to get that form to the advisor of their intended major. Your change of program will not be complete until you submit this form. Please note that this form is **NOT available online**. Once the change is complete, you will then be able to make an appointment with your advisor if you need to register/revise your schedule for the upcoming semester.

After submitting your form, your request to transfer to the College of Public Health will then be reviewed to ensure that you are eligible for transfer. If you have completed all the steps above and have a cumulative and previous semester GPA of 2.0 or higher, your request will be forwarded to the Office of the University Registrar for processing. You will receive e-mail notifications from the Office of the University Registrar once your Change of Program is complete.

Please note the following:

- Students also must be aware that there may be a tuition increase for transferring to CPH (with the exception of intended Social Work majors).
- Students interested in transferring into Nursing are not eligible for the Change of Program process. Information about the application process and access to the application itself can be found on the page for each program.

Laptop

All incoming students in the College of Public Health and the School of Social Work are required to have a laptop. Academic programs in the college are technology intensive. They incorporate statistical and database analyses; utilize specialized tools for athletic training, kinesiology and physical therapy; stream audio and video for communication sciences; facilitate online interactive counseling for social work; and foster clinical experiences and online assessments. The laptop requirement enables the College of Public Health and the School of Social Work to improve opportunities for active learning and provide greater access to specialized software and required tools in and out of the classroom, better preparing

students for the workforce. Learn more about device specifications and suggested vendors. Students can use excess financial aid (i.e., funds that are reimbursed after all tuition and fees are paid) to meet student needs, including the purchase of a laptop. Scholarships may also provide funding.

Standards of Scholarship

The grading system is in accordance with the system adopted by Temple University. For students enrolled in this college, a grade of C is the lowest acceptable final grade in major courses, as these are defined in the description of each major. Students not achieving a grade of C or better are required to repeat those courses in which they have failed to demonstrate acceptable performance.

Student Code of Ethics and Professional Conduct

Since students of the College of Public Health are enrolled in professional programs, they are expected to abide by standards of professional conduct and behavior at all times.

The College of Public Health prepares practitioners to fulfill their ideals of service in health or social service settings. In attaining these goals, practitioners must demonstrate exemplary professional behavior, as this is the keystone of the professional associations of the disciplines within this college. The Code of Conduct of Temple University's College of Public Health is intended to contribute to an environment in which excellence in learning and conduct may be fostered.

Terms of the Temple University Student Rights, the Student Conduct Code, and disciplinary procedures described in that code apply to students within the College of Public Health. In addition to the major violations noted by the University code, another action has been identified by the faculty of the college as constituting a major infraction of the code: "Unethical conduct or intentional neglect of duty on clinical practice."

Clinical Training and Field Education

Most College of Public Health programs prepare students for careers that involve close examination of a person's background before being employed or even engaged in clinical training and field education. *Thus, students are strongly encouraged to begin gathering required documentation and clearances immediately after admission into their program so that they have sufficient time to assemble their portfolio well before it is required for field-based learning, including internships.* Gathering required background information early also provides sufficient time to address any issues that might postpone or prevent fieldwork. Each program publishes more detailed information on health screenings and background clearances that are used for clinical training and field education.

Military Science Courses

Undergraduate students in CPH whose degree programs allow for free electives may apply up to 12 credits of military science courses at the 3000 and 4000 levels in Aerospace Studies (Air Force ROTC), Military Science (Army ROTC), and Naval Science (Navy ROTC).

College Graduation Requirements

Specific graduation requirements for undergraduate programs in the College of Public Health (CPH) are available on the individual program pages within this *Bulletin* as well as at CPH Academics.

College Core Course

A key requirement for entering undergraduates is the College Core Course, HRP 1001 Public Health: The Way We Live, Work and Play. For all students who enrolled in the college prior to fall 2015, this course is strongly recommended, but it will not be required. The course was integrated into existing programs and does not extend time to graduation or increase tuition costs. Students should consult individual program descriptions in this *Bulletin* to see how the course fits into their programs—replacing either an elective or an existing course requirement—and consult with their program advisors about whether they should or must take the course.

The course is designed to help students think about contemporary health issues from an interdisciplinary perspective. The course includes an introduction to the five core areas of public health—biostatistics, epidemiology, environmental health, health services administration, and social and behavioral sciences—and how these areas relate to various health, health care, and human service professions. Public health helps inform decisions that shape the behavior of individuals and communities. Students will analyze health issues such as health promotion, disease prevention, and health care policy from a variety of perspectives. As part of the course, students will work in small interdisciplinary teams to access and evaluate information about a particular individual or population-level health issue, and learn to argue persuasively, both orally and in writing, for interdisciplinary approaches to that health issue. An aim of the course is to engage students' curiosity about how the discipline of public health and interdisciplinary approaches apply to issues students may confront in their future professional work.

Academic Advising

The College of Public Health has an extensive system of academic advising provided by professional and faculty advisors. Professional advisors, coordinated by the Associate Director for Advisement, are available for each department, where they provide assistance with such topics as registration, course scheduling, and transfer credits, as well as referral to other resources. For a complete listing of our professional advising staff and more information on academic advising in the College of Public Health, visit CPH Academic Advising.

In most departments, when students reach junior or senior standing, they are assigned to faculty advisors who assist with mentoring as students progress in their professional training.

Academic advisors strive to avoid errors when advising students about program requirements; however, the college cannot assume liability for errors in advising. Students must, therefore, assume primary responsibility for knowing the requirements for their degree and for acquiring current information about their academic status.

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David B. Sarwer, Professor, Department of Social and Behavioral Sciences, College of Public Health; PhD, Loyola University Chicago.

Michelle C. Scarpulla, Instructor, Department of Social and Behavioral Sciences, College of Public Health; MPH, Temple University.

Krista Schroeder, Assistant Professor, Department of Nursing, College of Public Health; PhD, Columbia University.

Brittany Schuler, Assistant Professor, Department of Social Work, College of Public Health; PhD, University of Maryland Baltimore.

Leah M. Schumacher, Assistant Professor, Department of Kinesiology, College of Public Health; PhD, Drexel University.

Jack V. Sears, Assistant Professor of Instruction, Department of Kinesiology, College of Public Health; PhD, University of Texas at Austin.

Jay S. Segal, Professor, Department of Social and Behavioral Sciences, College of Public Health; PhD, The Ohio State University.

Jing Shen, Assistant Professor, Department of Communication Sciences and Disorders, College of Public Health; PhD, University of California San Diego.

Laura Siminoff, Professor, Department of Social and Behavioral Sciences, College of Public Health; PhD, Johns Hopkins University.

Laura Sinko, Assistant Professor, Department of Nursing, College of Public Health; PhD, University of Michigan.

Melody J. Slashinski, Associate Professor of Instruction, Department of Social and Behavioral Sciences, College of Public Health; PhD, University of Texas.

Alissa Smethers, Assistant Professor, Department of Kinesiology, College of Public Health; PhD, The Pennsylvania State University.

Brandon S. Snead, Instructor, Department of Health and Rehabilitation Sciences, College of Public Health; MS, Temple University.

Gretchen A. Snethen, Associate Professor, Department of Health and Rehabilitation Sciences, College of Public Health; PhD, Indiana University.

Tulay G. Soylu, Assistant Professor of Instruction, Department of Health Services Administration and Policy, College of Public Health; PhD, George Mason University.

Alesya Starayeva, Instructor, Department of Communication Sciences and Disorders, College of Public Health; BA, Gallaudet University.

Elizabeth Steele, Assistant Professor of Instruction, Department of Health and Rehabilitation Sciences, College of Public Health; DPT, Arcadia University.

Gerry A. Stefanatos, Associate Professor, Department of Communication Sciences and Disorders, College of Public Health; DPhil, Oxford University.

Ashley E. Stewart, Assistant Professor of Instruction, Department of Social Work, College of Public Health; PhD, Ohio State University.

Amy Stolarick, Instructor, Department of Nursing, College of Public Health; MSN, Wilmington University.

Mark Stoutenberg, Associate Professor, Department of Kinesiology, College of Public Health; PhD, University of Miami.

Chang Su, Assistant Professor, Department of Health Services Administration and Policy, College of Public Health; PhD, Xi'an Jiaotong University.

Gabriel Tajeu, Assistant Professor, Department of Health Services Administration and Policy, College of Public Health; DrPH, University of Alabama at Birmingham.

Monica Taylor, Associate Professor of Instruction, Department of Kinesiology, College of Public Health; PhD, University of Pittsburgh.

Brenda Teichman, Clinical Instructor, Department of Nursing, College of Public Health; MS, Western Governors University.

Elizabeth Tenison, Assistant Professor of Instruction, Department of Kinesiology, College of Public Health; PhD, Northern Illinois University.

Mary Terhaar, Professor, Department of Nursing, College of Public Health; PhD, The Catholic University of America.

Elizabeth Thomas, Assistant Professor, Department of Social and Behavioral Sciences, College of Public Health; PhD, University of Nebraska-Lincoln.

Christopher Thompson, Assistant Professor, Department of Health and Rehabilitation Sciences, College of Public Health; PhD, University of Illinois.

Ryan T. Tierney, Associate Professor of Instruction, Department of Health and Rehabilitation Sciences, College of Public Health; PhD, Temple University.

Jasmine M. Tooles, Assistant Professor of Instruction, Department of Health and Rehabilitation Sciences, College of Public Health; DPT, University of Delaware.

Gina Tripicchio, Assistant Professor, Department of Social and Behavioral Sciences, College of Public Health; PhD, University of North Carolina at Chapel Hill.

Elizabeth Van Nostrand, Associate Professor, Department of Health Services Administration and Policy, College of Public Health; JD, Tulane University.

Gena B. Vargas, Assistant Professor of Instruction, Department of Health and Rehabilitation Sciences, College of Public Health; PhD, Clemson University.

Aurora J. Verlin, Instructor, Department of Health and Rehabilitation Sciences, College of Public Health; MS, Temple University.

Carolina Villamil Grest, Assistant Professor, Department of Social Work, College of Public Health; PhD, University of Southern California.

Christopher Wheldon, Assistant Professor, Department of Social and Behavioral Sciences, College of Public Health; PhD, University of South Florida.

Kirsten Wiens, Assistant Professor, Department of Epidemiology and Biostatistics, College of Public Health; PhD, New York University.

Robin T. Wilson, Associate Professor, Department of Epidemiology and Biostatistics, College of Public Health; PhD, University of Iowa.

Caitlin N. Wolak, Instructor, Department of Social and Behavioral Sciences, College of Public Health; MPH, Temple University.

Andrea Wolf, Associate Professor of Instruction, Department of Nursing, College of Public Health; DNP, Case Western Reserve University.

W. Geoffrey Wright, Professor, Department of Health and Rehabilitation Sciences, College of Public Health; PhD, Brandeis University.

Huanmei Wu, Professor, Department of Health Services Administration and Policy, College of Public Health; PhD, Northeastern University.

Jingwei Wu, Associate Professor of Instruction, Department of Epidemiology and Biostatistics, College of Public Health; PhD, Indiana University.

Andrew Yannaccone, Associate Professor of Instruction, Department of Health and Rehabilitation Sciences, College of Public Health; PhD, Virginia Commonwealth University School of Medicine.

Recai Yucef, Professor, Department of Epidemiology and Biostatistics, College of Public Health; PhD, The Pennsylvania State University.

Dana Zeuggin, Instructor, Department of Communication Sciences and Disorders, College of Public Health; MS, Bloomsburg University.

Yaara Zisman-Ilani, Assistant Professor, Department of Social and Behavioral Sciences, College of Public Health; PhD, University of Haifa.

American Sign Language Certificate

Overview

The **Certificate in American Sign Language (ASL)**, offered by the Department of Communication Sciences and Disorders, provides students with intermediate-level skills in the widely used language of the deaf in the U.S. and Canada. Students also learn about American Deaf culture and gain valuable insight for future encounters with individuals who are deaf in professional and social contexts. This course of study is particularly useful for students majoring in any of the health professions, education, psychology, law, cognitive neuroscience or linguistics. The certificate program also provides students with foundational skills in ASL for additional education in ASL-English interpreting or education of individuals who are D/deaf or hearing impaired.

Campus Location: Main

Program Code: HP-ASL-CERT

Contact Information

Rena Krakow, PhD, Associate Professor, Program Director
Weiss Hall, Room 267
215-204-8407
rkrakow@temple.edu

Lisa Bedore, Chair
Weiss Hall, Room 110
215-204-4482
lisa.bedore@temple.edu

Kara Black, MA, Academic Advisor
Weiss Hall, Room 251
215-204-2063
kara.black@temple.edu

Learn more about the undergraduate certificate in American Sign Language.

Requirements

The Certificate in American Sign Language (ASL) will be awarded to students who complete the following 5-course sequence:

Code	Title	Credit Hours
CSCD 1001 or CSCD 1901	American Sign Language I Honors American Sign Language 1	3
CSCD 1002	American Sign Language II	3

or CSCD 1902	Honors American Sign Language 2	
CSCD 1003	American Sign Language III	3
CSCD 1004	American Sign Language IV	3
CSCD 2011	American Deaf Culture	3
Total Credit Hours		15

Applied Epidemiology Minor

Overview

The **Minor in Applied Epidemiology**, offered by the Department of Epidemiology and Biostatistics, is designed for students interested in science and health with an opportunity to enhance their skillset obtained from an undergraduate program in public health and other science-related undergraduate programs. Students in the 18-credit minor will expand their knowledge and abilities in the application of epidemiologic and statistical methods, tools and frameworks focusing on evidence-based findings, and best practices. Students will understand how to investigate, detect and address population- and community-level health issues. The minor consists of 6 undergraduate courses (2 required; 4 electives).

Campus Location: Main

Contact Information

To declare this minor, contact:

Laura Windisch, Last Names A-K
laura.windisch@temple.edu

Brianna Boyd, Last Names L-Z
brianna.boyd@temple.edu

Learn more about the minor in Applied Epidemiology.

Requirements

The requirements for the minor in Applied Epidemiology are:

Code	Title	Credit Hours
Required Courses		
EPBI 2219	Biostatistics and Public Health	3
EPBI 3101	Introduction to Epidemiology	3
Elective Courses		
Choose four from the following:		12
EPBI 2301	Public Health Beyond Borders	
EPBI 2305		
EPBI 2361	Epidemiology 360: Determinants, Disease and Health-related Outcomes	
EPBI 3203	Applied Survey Methods	
EPBI 3205	Introduction to Statistical Computing	
EPBI 3209		
GUS 3062	Fundamentals of Geographic Information Systems	
GUS 3065	Census Analysis with GIS	
GUS 3069	GIS for Health Data Analysis	
ENST 4066	Environmental GIS	
Total Credit Hours		18

Emergency and Sports Injury Management Certificate

Overview

Students learn to assess, outline and review management procedures for specific sports injuries with the **Certificate in Emergency and Sports Injury Management**. This 12-credit undergraduate certificate, offered by the Department of Health and Rehabilitation Sciences, teaches students to describe

and implement musculoskeletal assessment techniques. Students will gain valuable experience and knowledge for potential careers in healthcare and be eligible to take the National Registry EMT certification exam.

The Emergency and Sports Injury Management certificate program also provides in-depth training in assessment and extra- and pre-hospital management of sports injuries in an interprofessional manner. Students will have the opportunity to develop skills extracting and immobilizing mock patients from challenging scenarios, including gymnastics foam pits and an ice hockey rink. Additionally, students will gain further insight into the pathophysiology of many of the common illnesses likely encountered as a health professional.

The Certificate in Emergency Sports Injury Management presents an opportunity for students in pre-health majors to gain experience in emergency medicine and foundational knowledge for future graduate programs. Potential future career paths include emergency responder, physical therapist and sports injury specialist, among many others.

Campus Location: Main

Program Code: HP-ESIM-CERT

Contact Information

Wendy Cheesman, DPT, MPH, ATC
Program Director, BS in Health Professions
wendy.cheesman@temple.edu

Learn more about the undergraduate certificate in Emergency and Sports Injury Management.

Requirements

The Certificate in Emergency and Sports Injury Management will be awarded to students who complete the following requirements:

Code	Title	Credit Hours
HRPR 3001	Emergency Medical Technician	6
HRPR 2442	Basic Assessment of Musculoskeletal Injuries	3
HRPR 3443	Assessment of Head, Neck, and Spine Injuries in Sport	3
Total Credit Hours		12

Exercise and Sport Science BS

Overview

The **Bachelor of Science in Exercise and Sport Science**, offered by the Department of Health and Rehabilitation Sciences, focuses on the science and practice of health, fitness and sports performance. This program prepares students for a range of professional certifications and physical fitness careers. The Exercise and Sport Science program focuses on providing training to work with individuals and small groups in two areas of emphasis:

1. Exercise Physiology (the application of exercise principles involving populations that are either healthy or have pre-existing medical conditions), and
2. Sports Performance (the application of sport science principles involving populations whose primary goals are competitive and related to sports performance).

Our students pursue a wide range of pathways, including workforce opportunities and pursuing advanced studies, following graduation from the Exercise and Sport Science program.

1. **Workforce Opportunities:** Our students work in a variety of university, corporate, commercial, community and clinical settings. Career opportunities include working in clinical exercise physiology, cardiac rehabilitation, strength and conditioning, sport performance, and personal training.
2. **Graduate Training in Exercise and Sport Science:** Our students are prepared to attend graduate programs focused on exercise science, exercise physiology, kinesiology and human performance.
3. **Graduate Training in Other Professional Fields:** Our students develop a strong foundation that prepares them for other graduate programs, including athletic training, recreational therapy, physical therapy and other allied health professions. If pursuing graduate studies is a future goal of yours, please see your academic advisor for further details early in your program of study.

To prepare students for these career pathways, our curriculum incorporates didactic training and hands-on learning experiences required to sit for several professional examinations. We thoughtfully integrate multiple hands-on learning experiences that include laboratory experiences, service-learning opportunities, and a culminating internship that provides students with real-world experience implementing what was learned in the classroom throughout the Exercise and Sport Science program.

Campus Location: Main

Program Code: HP-EXSS-BS

Contact Information

Sara J. Kovacs, PhD, Associate Professor and Undergraduate Program Director
 Pearson Hall, Room 245
 1800 North Broad Street Philadelphia, PA 19121
 215-204-8790
 sara.kovacs@temple.edu

Learn more about the Bachelor of Science in Exercise and Sport Science.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses required for this major are KINS 3196 and KINS 4396.

College Requirement

All College of Public Health undergraduates must successfully complete the College Core Course, HRPR 1001 Public Health: The Way We Live, Work and Play.

Clearance Requirements

Please note that the Exercise and Sport Science program requires students to complete clinical/field education experiences at facilities both on and off the University campus. Many of these placements may require that you have personal health insurance. Additionally, these placements may require criminal background checks, Act 33/34 clearances, health clearances and immunizations and perhaps a drug screen. The results of these requirements may limit and potentially eliminate placement options for the student which can, in turn, result in an inability to meet graduation requirements.

Major Requirements

Code	Title	Credit Hours
Exercise and Sport Science Core		
KINS 1203	Introduction to Exercise and Sport Science	3
KINS 1223	Human Anatomy and Physiology I	4
KINS 1224	Human Anatomy and Physiology II	4
KINS 2001	Social Determinants of Health and Physical Activity	3
KINS 2203	Physiology of Physical Activity	4
SBS 2204	Diet and Weight Management	3
HRPR 2421	First Aid and CPR for Health and Exercise	3
KINS 2424	Functional Anatomy for Kinesiology	3
KINS 3196	Psychology of Physical Activity	3
KINS 3202	Biomechanics of Physical Activity	4
KINS 3203	Exercise Assessment and Programming	4
KINS 3316	Principles of Personal Fitness	4
KINS 3368	Principles of Health Fitness Program Management	3
KINS 4311	Advanced Physiology of Exercise	3
KINS 4364	Business Management for Exercise Professionals	3
KINS 4385	Exercise and Sport Science Internship I	3
KINS 4396	Research and Writing in Exercise and Sport Science (WI)	3
KINS 4485	Exercise and Sport Science Internship II	3
Kinesiology Physical Activity Program (KPAP) Courses		4
Content Electives		
Select from the following:		12

HRPR 1444	Movement Injuries: Prevention and Care
KINS 3362	Olympic and Powerlifting
KINS 3363	Basic Electrocardiography
KINS 4283	Directed Readings and Study in Kinesiology
KINS 4290	Special Topics in Kinesiology
KINS 4315	Applied Performance Nutrition
KINS 4316	Principles of Strength and Conditioning
KINS 4333	Clinical Cardiovascular Pulmonary Exercise Physiology
KINS 4335	Clinical Exercise Physiology
CHEM 1031	General Chemistry I
CHEM 1033	General Chemistry Laboratory I
CHEM 1032	General Chemistry II
CHEM 1034	General Chemistry Laboratory II
BIOL 1011	General Biology I
BIOL 1012	General Biology II
PHYS 1021	Introduction to General Physics I
MATH 1021	College Algebra
MATH 1022	Precalculus
MATH 1041	Calculus I

Total Credit Hours**76**

Suggested Academic Plan

Bachelor of Science in Exercise and Sport Science

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
HRPR 1001	Public Health: The Way We Live, Work and Play	3
KINS 1203	Introduction to Exercise and Sport Science	3
KINS 1223	Human Anatomy and Physiology I	4
Kinesiology Physical Activity Program (KPAP) Course		2
GenEd Breadth Course		3
Credit Hours		15
Spring		
KINS 1224	Human Anatomy and Physiology II	4
Kinesiology Physical Activity Program (KPAP) Course		2
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy (GQ)		4
GenEd Breadth Course		3
Credit Hours		17
Year 2		
Fall		
KINS 2001	Social Determinants of Health and Physical Activity	3
KINS 2203	Physiology of Physical Activity	4
KINS 2424	Functional Anatomy for Kinesiology	3
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
Free Elective		3
Credit Hours		16
Spring		
HRPR 2421	First Aid and CPR for Health and Exercise	3

SBS 2204	Diet and Weight Management	3
KINS 3202	Biomechanics of Physical Activity	4
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Credit Hours		16
Year 3		
Fall		
KINS 3203	Exercise Assessment and Programming	4
KINS 3196	Psychology of Physical Activity	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Free Elective		3
Credit Hours		16
Spring		
KINS 3316	Principles of Personal Fitness	4
KINS 3368	Principles of Health Fitness Program Management	3
ESS Content Elective		3
Free Elective		3
Credit Hours		13
Year 4		
Fall		
KINS 4311	Advanced Physiology of Exercise	3
KINS 4364	Business Management for Exercise Professionals	3
KINS 4385	Exercise and Sport Science Internship I	3
ESS Content Elective		3
ESS Content Elective		3
Credit Hours		15
Spring		
KINS 4396	Research and Writing in Exercise and Sport Science	3
KINS 4485	Exercise and Sport Science Internship II	3
ESS Content Elective		3
Free Elective		3
Credit Hours		12
Total Credit Hours		120

Global Health Minor

Overview

The **Minor in Global Health**, offered by the Department of Health Services Administration and Policy, provides students the opportunity to gain experience and expertise for the health of peoples of the world and the current population health problems and its associated influential factors and social determinants. This minor requires students to complete 18 credit hours. Students participating in the minor will gain knowledge to understand global health systems. They will also develop interdisciplinary skills to evaluate global health phenomena and design solutions to major public health challenges and engage actively in international initiatives to improve health as global citizens. Specifically, they will learn primary health disparities, social determinants, policy management, care outcomes, health informatics and public health communications in a connected global environment. The students in this minor will be well prepared for a professional career in the global public health field, including research, teaching or health services across many sectors, such as universities, government agencies, international agencies, non-governmental organizations or private industry.

Campus Location: Main

Contact Information

To declare this minor, contact:

Sara Byron, Academic Advisor

sara.byron@temple.edu

Requirements

Code	Title	Credit Hours
Required Courses		
ENVH 1103	International Health	3
HIM 2031	Global Development of Health Information Systems	3
HPM 3131	Global Health Systems	3
Electives		
Select three of the following:		9
HIM 1006	Electronic Documentation for Health Care Providers	
HIM 2215	Health Information Management IT Fundamentals	
HIM 3031	Health Technology Assessment	
HIM 3107	Healthcare Leadership and Strategic Management	
HIM 3203	Electronic Health Record Systems	
HIM 4101	Health Informatics: Infrastructure and Standards	
EPBI 2301	Public Health Beyond Borders	
HPM 2214	Politics and Payments in US Healthcare System	
HPM 3207	Principles of Emergency Management: A Public Health Perspective	
HPM 3231	Global Health Policy	
HPM 4089		
Total Credit Hours		18

Health Information Management BSHIM

Overview

The **Bachelor of Science in Health Information Management (HIM)**, offered by the Department of Health Services Administration and Policy, is focused on the development, implementation, management and maintenance of patient health information systems in accordance with legal, regulatory and accrediting agencies' requirements for health care data collection and dissemination. HIM professionals have a special role in making sure that patient information remains confidential and maintained in a manner that ensures the patient's privacy and that health care information is secure. A career in HIM combines interests in medicine, management, information technology, electronic health record systems and finance. HIM professionals design and manage health information systems, with special attention to quality and privacy of health information, in a wide range of settings such as hospitals, managed and ambulatory care, insurance and pharmaceutical companies, consulting firms and public health organizations.

The Bachelor of Science in Health Information Management (BSHIM) includes classes covering six main areas:

- Core HIM: Health Record Documentation, Legal Aspects of HIM, Internships, Healthcare Delivery Systems, and Professional Development.
- Data Analytics: HIM IT Fundamentals, Electronic Health Record Systems, Informatics, and Database Development and Design.
- Management: Leadership and Strategy, Human Resources, Operations, and Project Management.
- Classification and Reimbursement: ICD-10, CPT4, Intermediate Coding, and Reimbursement.
- Clinical Medicine: Pathophysiology, Medical Terminology, Clinical Procedures, and Pharmacology.
- Internship: Management Internship (four weeks at a facility where you will be participating in a management project at that organization). Examples of internship sites include the University of Pennsylvania Health System, Thomas Jefferson University Hospital, NYU Medical Center, and Johns Hopkins Hospital.

Admissions

Beginning Fall 2021, first-year students may select Health Information Management as their major on their application for admission to Temple University and may be offered direct admission to the program. Prerequisite courses must be completed with a grade of C or above in order to begin the HIM major courses.

Laptop Requirements

Laptops are integrated into the HIM curriculum and are required to complete in-class activities and projects outside of class. In order to run specialized analytical software, a laptop with the minimum hardware specifications defined at <https://cphapps.temple.edu/wiki/it/student/laptop> will allow a smooth experience.

Certification

Students enrolled in the HIM program and in the last term of study are eligible to apply for and sit for the examination of the American Health Information Management Association for the nationally recognized certification as a Registered Health Information Administrator (RHIA).

Following satisfactory completion of all course requirements, the graduate is awarded the degree of Bachelor of Science in Health Information Management.

See <https://www.ahima.org/certification-careers/certifications-overview/> for information about credentialing in Health Information Management.

Accreditation

The baccalaureate program in Health Information Management at Temple University is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM).

Contact Information

Huanmei Wu, PhD, Chair
Ritter Annex, Room 525
215-204-8163
huanmei.wu@temple.edu

Learn more about the Bachelor of Science in Health Information Management.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All students are required to complete the university's General Education (GenEd (p. 83)) curriculum (Analytical Reading & Writing, Intellectual Heritage I and II, Arts, Human Behavior, Global/World Society, U.S. Society, Race & Diversity, Science & Technology, Quantitative Literacy).

All Temple students must take a minimum of two writing-intensive courses at Temple as part of the major. The writing-intensive courses for this major are HIM 3297 and HIM 4298.

College Requirement

All CPH students must complete the College Core Course, HRPR 1001 Public Health: The Way We Live, Work and Play.

Clearance Requirements

Please note the Health Information Management program requires students to complete internships at facilities both on and off the University campus. These placements may require criminal background checks, Act 33/34 clearances and perhaps a drug screen. Placements may also require the student to maintain personal health insurance. The results of these requirements may limit and potentially eliminate placement options which can, in turn, result in an inability to meet graduation requirements.

Program Requirements

Students in the HIM program are required to satisfy the following prerequisite courses before beginning HIM upper level courses. A grade of C or better is required for all prerequisite and professional courses (a grade of C- is not acceptable).

Health Information Management Prerequisites:

Code	Title	Credit Hours
MATH 1013 or PSY 1167 or SOC 1167 or EPBI 2219	Elements of Statistics Social Statistics Biostatistics and Public Health	3
KINS 1223 or KINS 1221	Human Anatomy and Physiology I ¹ Principles of Anatomy and Physiology I	3-4
KINS 1224 or KINS 1222	Human Anatomy and Physiology II ¹ Principles of Anatomy and Physiology II	3-4
HIM 1101	Medical Terminology	3

HIM 1055	IT Applications for Health	3
HPM 2214	Politics and Payments in US Healthcare System	3
Total Credit Hours		18-20

Health Information Management Professional Courses: ²

Code	Title	Credit Hours
HIM 2215	Health Information Management IT Fundamentals	3
HIM 3101	Health Record Documentation	3
HIM 3106	Pathophysiology	3
HIM 3107	Healthcare Leadership and Strategic Management	3
HIM 3111	Statistics and Research in Health Care	3
HIM 3113	Healthcare Database Design and Development	3
HIM 3203	Electronic Health Record Systems	3
HIM 3208	International Classification of Diseases	3
HIM 3216	Clinical Procedures and Pharmacology	3
HIM 3271	Professional Development	1
HIM 3297	Health Information Management Human Resource Management (WI)	3
HIM 4101	Health Informatics: Infrastructure and Standards	3
HIM 4102	Legal Aspects of Health Information Management	3
HIM 4207	Healthcare Quality Improvement	3
HIM 4105	Current Procedural Terminology Coding	3
HIM 4113	Healthcare Reimbursement Systems	3
HIM 4121	Healthcare Data Analytics	3
HIM 4202	Health Information Management Project Management	3
HIM 4206	Intermediate Coding	3
HIM 4104	Health Information Management Operations Management	3
HIM 4286	Management Internship	4
HIM 4298	Health Information Management Senior Seminar (WI)	3
Total Credit Hours		65

1

You should consult with your advisor for information on the distinctions between Anatomy and Physiology selection sequence and its implication for your degree and career goals. Satisfactory completion of the KINS 1221 and KINS 1222 sequence or the KINS 1223 and KINS 1224 sequence will meet the two-course GenEd Science and Technology requirement. These courses are similar but not interchangeable and must be taken in the correct sequence. Students choosing the KINS 1221 and KINS 1222 sequence may need to take an additional 2-credit elective to meet credit hours degree graduation requirement. Please see a departmental academic advisor for clarification.

2

The professional courses follow a strict semester-by-semester sequence that requires careful attention to registration dates. See a departmental academic advisor for help planning your professional course registration.

Electives

6 credits. Strongly recommended electives include business writing electives.

Suggested Academic Plan

Bachelor of Science in Health Information Management

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ 1}		4

GenEd Breadth Course		3
HRPR 1001	Public Health: The Way We Live, Work and Play	3
Credit Hours		14
Spring		
KINS 1223 or KINS 1221	Human Anatomy and Physiology I (GS) ² or Principles of Anatomy and Physiology I	3-4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
GenEd Breadth Course		3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
KINS 1224 or KINS 1222	Human Anatomy and Physiology II (GS) ² or Principles of Anatomy and Physiology II	3-4
Select one of the following:		3
MATH 1013	Elements of Statistics	
PSY 1167		
SOC 1167	Social Statistics	
EPBI 2219	Biostatistics and Public Health	
Credit Hours		13
Spring		
HIM 1055	IT Applications for Health	3
HIM 1101	Medical Terminology	3
HPM 2214	Politics and Payments in US Healthcare System	3
General Elective		3
General Elective		3
Credit Hours		15
Year 3		
Fall		
HIM 2215	Health Information Management IT Fundamentals	3
HIM 3101	Health Record Documentation	3
HIM 3106	Pathophysiology	3
HIM 3107	Healthcare Leadership and Strategic Management	3
HIM 3111	Statistics and Research in Health Care	3
Credit Hours		15
Spring		
HIM 3113	Healthcare Database Design and Development	3
HIM 3203	Electronic Health Record Systems	3
HIM 3208	International Classification of Diseases	3
HIM 3216	Clinical Procedures and Pharmacology	3
HIM 3271	Professional Development	1
HIM 3297	Health Information Management Human Resource Management	3
Credit Hours		16
Year 4		
Fall		
HIM 4101	Health Informatics: Infrastructure and Standards	3
HIM 4102	Legal Aspects of Health Information Management	3
HIM 4105	Current Procedural Terminology Coding	3

HIM 4113	Healthcare Reimbursement Systems	3
HIM 4121	Healthcare Data Analytics	3
HIM 4207	Healthcare Quality Improvement	3
Credit Hours		18
Spring		
HIM 4202	Health Information Management Project Management	3
HIM 4104	Health Information Management Operations Management	3
HIM 4206	Intermediate Coding	3
HIM 4286	Management Internship	4
HIM 4298	Health Information Management Senior Seminar ³	3
Credit Hours		16
Total Credit Hours		123

A grade of C or better is required to satisfy ALL prerequisite and professional course requirements. Grades below a C will not be accepted.

Note: All professional courses are offered only once a year.

1

MATH 0823 or MATH 0824 is strongly recommended.

2

You should consult your advisor for information on the distinctions between the anatomy and physiology selection sequence and its implication for your degree and career goals. Satisfactory completion of the KINS 1221 and KINS 1222 sequence or the KINS 1223 and KINS 1224 sequence will meet the two-course GenEd Science & Technology requirement. These courses are similar but not interchangeable. Courses must be taken in the correct sequence. Students choosing KINS 1221 and KINS 1222 may need to take an additional 2-credit elective to meet credit hour degree requirements as well as annual progress requirements. Please see your advisor for clarification.

3

Indicates writing capstone for major.

Health Information Management Minor

Overview

The **Minor in Health Information Management**, open to all students and offered by the Department in Health Services Administration and Policy, is designed to complement existing programs throughout Temple University, where knowledge of Health Information Management would enhance a student's marketability and overall preparedness for working in the healthcare field. Students will benefit greatly as technology becomes increasingly utilized in every sector of healthcare. The Health Information Management minor provides students in any discipline with the fundamental background in areas of healthcare information technology, electronic health records and documentation, medical terminology and health care systems in the United States. Students participating in this minor will be better equipped to succeed in fieldwork and internships in their major as they will be more familiar with patient portals, electronic records, privacy and security of patient data.

Completing the Health Information Management minor improves students' marketability in many professional paths, including public health, kinesiology, health professions and psychology. The minor also prepares students for professional graduate programs such as physical therapy, occupational therapy, physician assistant or medical school.

Campus Location: Main

Contact Information

To declare or rescind this minor, contact:

Sara Byron, Academic Advisor
sara.byron@temple.edu

Requirements

The requirements for the minor in Health Information Management are:

Code	Title	Credit Hours
HIM 1006	Electronic Documentation for Health Care Providers	3
HIM 1055	IT Applications for Health	3

HIM 1101	Medical Terminology	3
HPM 2214	Politics and Payments in US Healthcare System	3
HIM 2215	Health Information Management IT Fundamentals	3
HIM 3113	Healthcare Database Design and Development	3
Total Credit Hours		18

Note:

- A grade point average of 2.0 in the minor is required as well as a minimum grade of C in each course.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- Two courses can be used to meet minor requirements as well as major requirements.

Health Policy and Management Minor

Overview

The **Minor in Health Policy and Management** (HPM) is open to all undergraduate students who are qualified to take a minor at Temple University. The HPM minor, offered by the Department of Health Services Administration and Policy, provides students with a background in policy issues and management challenges related to politics, ethics, quality, payments and access to health care. The minor gives students the opportunity to gain experience in communicating health policies for diverse audiences, advocating for health policies, analyzing health policies and explaining the political process underlying policy making. Students will also have options to learn sound management principles, leadership skills and the operation of health-related organizations. This minor requires students to complete 18 credit hours: 9 credit hours from required courses and 9 credit hours from interdisciplinary elective courses. The required courses and electives are offered by various departments in the College of Public Health and in other colleges. Alternative electives can be approved at the discretion of the program director. Elective courses in the minor also allow students to choose how to focus their area of study—students may concentrate on policy, management, or both.

Campus Location: Main

Contact Information

To declare this minor, contact:

William E. Aaronson, PhD, Associate Professor and Program Director
215-204-8128
william.aaronson@temple.edu

Requirements

Number of credits required to complete the minor: 18

All courses for the minor should be complete with a grade of C or higher.

Code	Title	Credit Hours
Required Courses		
HRPR 1001	Public Health: The Way We Live, Work and Play	3
HPM 2214	Politics and Payments in US Healthcare System	3
HPM 2216	Introduction to Health Policy	3
Elective Courses ¹		
Select three courses from the following:		9
Policy Options:		
HPM 3208	History of U.S. Public Health	
HPM 3216	Public Health Advocacy and Policy Change	
HPM 3231	Global Health Policy	
ENVH 1103	International Health	
POLS 2102	American State and Local Politics	
LAWU 1001	Law in Public Health and Health Care	
Management Options:		
HIM 1055	IT Applications for Health	
HIM 2215	Health Information Management IT Fundamentals	

HIM 3107	Healthcare Leadership and Strategic Management
HPM 3131	Global Health Systems
HPM 3207	Principles of Emergency Management: A Public Health Perspective
EPBI 2361	Epidemiology 360: Determinants, Disease and Health-related Outcomes
HCM 3502	Healthcare Financing and Information Technology

Total Credit Hours
18

1

Other electives as approved by the program director.

Health Professions BS

Overview

The **Bachelor of Science in Health Professions** (BSHP), offered by the Department of Health and Rehabilitation Sciences, helps students prepare for their chosen professional graduate program with the prerequisites necessary for many health professions, e.g., physical therapy, occupational therapy, physician assistant practice, certified anesthesiology assistant, etc. The BSHP provides a broad course of study, while also allowing students to tailor their electives toward their career of choice. For those students interested in medicine or dentistry, we recommend pursuing a degree from Temple University's College of Science and Technology.

The BSHP program provides an academically rigorous set of required core courses with unique interdisciplinary and inter-professional electives that will help set the student apart in the selection process. Drawing from the philosophy of "acres of diamonds," the program utilizes courses from across the College of Public Health (CPH), providing students with an expanded view of health professions. Courses drawn from the disciplines in the CPH give students a more inclusive view of the field reinforcing the team approach so widely used in healthcare today. Most of the core courses provide students with the prerequisites for the professional clinical degrees, i.e., Biology 1 and 2, Chemistry 1 and 2, Physics 1 and 2, Anatomy and Physiology 1 and 2, and statistics. In addition, some programs require additional courses like Microbiology, Biochemistry, Genetics (particularly for certified anesthesiology assistant), or Medical Terminology (e.g., Physical Therapy and Occupational Therapy).

Note: Depending on the program, students may be required to take advanced courses in psychology or sociology, which have been factored in as well. It is important to note some schools may require additional coursework over and above the courses mentioned here; and some professional healthcare programs may require very different prerequisite courses. Your academic advisor will assist you in choosing courses to meet your professional objectives.

Campus Location: Main

Program Code: HP-HPRF-BS

Accelerated Programs

- 3+3 Physical Therapy Program (BS/DPT)
- Direct Entry MS in Athletic Training

Contact Information

Wendy Cheesman, DPT, MPH, ATC, Program Director
 Pearson Hall, Room 243
 215-204-2789
 wendy.cheesman@temple.edu

Learn more about the Bachelor of Science in Health Professions.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All University GenEd courses must be completed with a minimum grade of C- in order to count toward graduation; however, students are encouraged to aim for the B grade or higher to improve their chances for successful admission to their graduate program of choice. It should be noted that the Department of Kinesiology requires KINS 1223 Human Anatomy and Physiology I and KINS 1224 Human Anatomy and Physiology II to fulfill the GenEd

Science & Technology requirement. Further note that KINS 1223 and KINS 1224 are required prerequisites for admission to the majority of health profession graduate programs, and students are encouraged to earn a B or better in those classes.

All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses for this major are HRPR 3096 and HRPR 3197.

College Requirement

All College of Public Health undergraduates must successfully complete the College Core Course, HRPR 1001 Public Health: The Way We Live, Work and Play .

Major Requirements

All program courses must be completed with a minimum grade of C. However, if a student wants to be successful when applying for a graduate program in the Health Professions, it is recommended that all program courses be completed with a minimum grade of B. This is especially important for the core courses in math and science.

It should also be noted that some electives are 3 credits and others are 4 credits. In planning the course of study, the student needs to be mindful of the 120-credit requirement for graduation when choosing electives. It is expected the student will work with his/her advisor to ensure the 120 credits are reached and timely completion of the BS in Health Professions program is on track.

Code	Title	Credit Hours
Required Courses		
KINS 1223	Human Anatomy and Physiology I	4
KINS 1224	Human Anatomy and Physiology II	4
Core Courses		
HIM 1101	Medical Terminology	3
HPM 2214	Politics and Payments in US Healthcare System	3
HRPR 1001	Public Health: The Way We Live, Work and Play	3
HRPR 3096	Cultural Competency in Health and Healthcare	3
HRPR 3197	Understanding and Applying Research in Health Professions	3
SBS 2101	Disease Prevention and Control	3
SBS 2103	Health Psychology and Human Behavior	3
PSY 1001	Introduction to Psychology	3
KINS 4242	Exercise, Nutrition and Behavior	3
or KINS 4001	Physical Activity Promotion for Health Professionals	
Math and Science Requirements		
MATH 1021	College Algebra	4
EPBI 2219	Biostatistics and Public Health	3
BIOL 1011	General Biology I	4
or BIOL 1111	Introduction to Organismal Biology	
BIOL 1012	General Biology II	4
or BIOL 2112	Introduction to Cellular and Molecular Biology	
CHEM 1031	General Chemistry I	3
CHEM 1033	General Chemistry Laboratory I	1
CHEM 1032	General Chemistry II	3
CHEM 1034	General Chemistry Laboratory II	1
PHYS 1021	Introduction to General Physics I	4
or PHYS 1061	Elementary Classical Physics I	
PHYS 1022	Introduction to General Physics II	4
or PHYS 1062	Elementary Classical Physics II	
Electives		
Choose 6-7 courses. Check with advisor for other options based on educational goals. ¹		22
KINS 2000 - 4999		
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	

CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II
CHEM 4401	Biochemistry I
CSI 1111	Introduction to Public Speaking
ENVH 1103	International Health
HRPR 1444	Movement Injuries: Prevention and Care
HRPR 2106	An Introduction to Holistic Practices and Integrative Medicine
HRPR 2421	First Aid and CPR for Health and Exercise
HRPR 2900	Honors Special Topics
HRPR 3001	Emergency Medical Technician
HRPR 3443	Assessment of Head, Neck, and Spine Injuries in Sport
HRPR 4282	Independent Study in Health Professions
HRPR 4283	Directed Readings and Study in Health Professions
HRPR 4821	LGBTQ+ Health Through the Lifespan
KINS 2204	Motor Behavior
KINS 3202	Biomechanics of Physical Activity
MATH 1022	Precalculus
MATH 1041	Calculus I
MATH 1042	Calculus II
MATH 1044	Introduction to Probability and Statistics for the Life Sciences
or PSY 1003	Statistics for Psychology
or SOC 1167	Social Statistics
SBS 1104	Nutrition and Health
SBS 3103	Counseling Techniques for Health Professionals

Total Credit Hours**88**

1

Students taking at least four 4-credit courses, or HRPR 3001 (6 credits), will only need 6 courses to meet the 22 credit Electives requirement.

Suggested Academic Plan

Bachelor of Science in Health Professions

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
MATH 1021	College Algebra	4
HRPR 1001	Public Health: The Way We Live, Work and Play	3
KINS 1223	Human Anatomy and Physiology I	4
Credit Hours		15
Spring		
GenEd Quantitative Literacy ^{GQ}		4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
PSY 1001	Introduction to Psychology	3
HIM 1101	Medical Terminology	3
KINS 1224	Human Anatomy and Physiology II	4
Credit Hours		17
Year 2		
Fall		
GenEd Breadth Course		3

Elective (based on education goals) ¹		3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
CHEM 1031	General Chemistry I	3
CHEM 1033	General Chemistry Laboratory I	1
SBS 2103	Health Psychology and Human Behavior	3

Credit Hours **16**

Spring

GenEd Breadth Course		3
Elective (based on education goals) ¹		3
CHEM 1032	General Chemistry II	3
CHEM 1034	General Chemistry Laboratory II	1
HPM 2214	Politics and Payments in US Healthcare System	3
EPBI 2219	Biostatistics and Public Health	3

Credit Hours **16**

Year 3**Fall**

GenEd Breadth Course		3
Elective (based on education goals) ¹		3
SBS 2101	Disease Prevention and Control	3
HRPR 3096	Cultural Competency in Health and Healthcare	3
Select one of the following:		4
BIOL 1011	General Biology I	
BIOL 1111	Introduction to Organismal Biology	

Credit Hours **16**

Spring

GenEd Breadth Course		3
Elective (free) ²		2
Elective (based on education goals) ¹		4
Select one of the following:		4
BIOL 1012	General Biology II	
BIOL 2112	Introduction to Cellular and Molecular Biology	

Credit Hours **13**

Year 4**Fall**

HRPR 3197	Understanding and Applying Research in Health Professions	3
Elective (based on education goals) ¹		3
Select one of the following:		3
KINS 4242	Exercise, Nutrition and Behavior	
KINS 4001	Physical Activity Promotion for Health Professionals	
Select one of the following:		4
PHYS 1021	Introduction to General Physics I	
PHYS 1061	Elementary Classical Physics I	

Credit Hours **13**

Spring

Elective (based on education goals) ¹		3
Elective (based on education goals) ¹		3
GenEd Breadth Course		4
Select one of the following:		4
PHYS 1022	Introduction to General Physics II	

PHYS 1062	Elementary Classical Physics II	
	Credit Hours	14
	Total Credit Hours	120

1

Please note that electives have various credit hours (i.e., 3, 4 or 6 credit hours). In planning the course of study, the student needs to be mindful of the 22-credit elective and 120-credit total requirements for graduation when choosing electives. It is expected the student will work with his/her advisor to ensure the 120 credits are reached and timely completion of the BS in Health Professions program is on track.

2

Please note that free elective credits will vary depending on the number of major-related elective credits that have been or will be taken. It is expected that the student will work with his/her advisor to ensure the 120 credits are reached and timely completion of the BS in Health Professions program is on track.

Health Studies BA

Overview

The **Bachelor of Arts in Health Studies**, offered by the Department of Health and Rehabilitation Sciences at Temple's College of Public Health, is a degree completion program for students interested in health fields which do not require a breadth of bench sciences. Generally, these are students who have at least 60 credits and a GPA at or below a 3.0 out of 4.0 scale. Students can utilize the flexibility of this program to explore a wide range of interests and to tailor their degree to their own interests in areas such as public health, health information management or psychology (just to name a few), while also preparing for careers in occupational therapy, athletic training and many more. Note: This program is intended for internal and external transfer students, not direct admit for incoming students. Incoming first year students interested in health professions should consider the BS in Health Professions.

Students in the BA in Health Studies will take a wide range of courses in public health, anatomy and physiology, statistics, and health care. This interdisciplinary approach will help prepare students to become professionals who seek healthcare solutions focused on interdisciplinary approaches and upstream interventions resulting in innovative solutions to patient and health care issues.

Campus Location: Main

Program Code: HP-HLST-BA

What makes this program special?

Flexible Curriculum: Students will have the opportunity to work with academic advisors and tailor their degree to their goals and interests.

Interdisciplinary Curriculum: Course work will provide background in the science of the human body, determinants of health, health communication, nutrition, health care systems, and much more.

Extraordinary Educators: Students take courses from leaders and innovators across fields in the College of Public Health. These educators use innovative classroom approaches and a wealth of practical experience to bring real world lessons and skills to the curriculum.

Special Admissions Information

Transfers only (internal and external). Generally minimum 60 credits and GPA at or below a 3.0 out of 4.0 scale.

Distinction in Major

Degree completion initiative.

Contact Information

Wendy Cheesman, DPT, MPH, ATC, Program Director
 Pearson Hall, Room 243
 215-204-2789
 wendy.cheesman@temple.edu

Learn more about the Bachelor of Arts in Health Studies.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All University GenEd courses must be completed with a minimum grade of C- in order to count toward graduation; however, students are encouraged to aim for the B grade or higher to improve their chances for successful admission to their graduate program of choice. It should be noted that the Department of Kinesiology requires KINS 1223 Human Anatomy and Physiology I and KINS 1224 Human Anatomy and Physiology II to fulfill the GenEd Science & Technology requirement. Further note that KINS 1223 and KINS 1224 are required prerequisites for admission to the majority of health related graduate programs, and students are encouraged to earn a B or better in those classes.

All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses for this major are HRPR 3096 and HRPR 3197.

College Requirement

All College of Public Health undergraduates must successfully complete the College Core Course, HRPR 1001 Public Health: The Way We Live, Work and Play.

Major Requirements

All program courses must be completed with a minimum grade of C. However, if a student wants to be successful when applying for a graduate program in the health related fields, it is recommended that all program courses be completed with a minimum grade of B. This is especially important for the core courses and required prerequisites.

It should also be noted that some electives are 3 credits and others are 4 credits. In planning the course of study, the student needs to be mindful of the 120-credit requirement for graduation when choosing electives. It is expected the student will work with his/her advisor to ensure the 120 credits are reached and timely completion of the BA in Health Studies program is on track.

Code	Title	Credit Hours
College Requirement		
HRPR 1001	Public Health: The Way We Live, Work and Play	3
Required Core		
HIM 1101	Medical Terminology	3
PSY 1001	Introduction to Psychology	3
KINS 1223	Human Anatomy and Physiology I	4
KINS 1224	Human Anatomy and Physiology II	4
SBS 2101	Disease Prevention and Control	3
SBS 2103	Health Psychology and Human Behavior	3
EPBI 2219	Biostatistics and Public Health	3
HPM 2214	Politics and Payments in US Healthcare System	3
KINS 4242	Exercise, Nutrition and Behavior	3
HRPR 3096	Cultural Competency in Health and Healthcare (WI)	3
HRPR 3197	Understanding and Applying Research in Health Professions	3
Content Electives		
Select from the following content electives:		31
HRPR 1005	Introduction to Mindfulness	
HRPR 1101	Contemporary Aspects of Disability	
HRPR 1222	Introduction to Clinical Health Professions	
HRPR 1444	Movement Injuries: Prevention and Care	
HRPR 2106	An Introduction to Holistic Practices and Integrative Medicine	
HRPR 2421	First Aid and CPR for Health and Exercise	
HRPR 2442	Basic Assessment of Musculoskeletal Injuries	
HRPR 2900	Honors Special Topics	
HRPR 3001	Emergency Medical Technician	
HRPR 3443	Assessment of Head, Neck, and Spine Injuries in Sport	
HRPR 4282	Independent Study in Health Professions	

HRPR 4283	Directed Readings and Study in Health Professions
HRPR 4821	LGBTQ+ Health Through the Lifespan
ENVH 1103	International Health
EPBI 2301	Public Health Beyond Borders
EPBI 2361	Epidemiology 360: Determinants, Disease and Health-related Outcomes
EPBI 3101	Introduction to Epidemiology
EPBI 3102	Introduction to Research Methods
HIM 2215	Health Information Management IT Fundamentals
HIM 3106	Pathophysiology
KINS 2204	Motor Behavior
KINS 3202	Biomechanics of Physical Activity
GUS 3071	Health Geography
SOC 1576	Introduction to Sociology for Health Professions
SBS 2201	Health Communication
SBS 3001	Community-Based Participatory Research I
SBS 3103	Counseling Techniques for Health Professionals
KINS 2000+ choice of Kinesiology courses	

Total Credit Hours**69**

Suggested Academic Plan

Bachelor of Arts in Health Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
KINS 1223	Human Anatomy and Physiology I	4
HRPR 1001	Public Health: The Way We Live, Work and Play	3
PSY 1001	Introduction to Psychology	3
Credit Hours		14
Spring		
HIM 1101	Medical Terminology	3
KINS 1224	Human Anatomy and Physiology II	4
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
GenEd Breadth Course		3
Elective (Based on educational goals) ¹		3
Credit Hours		16
Year 2		
Fall		
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
SBS 2103	Health Psychology and Human Behavior	3
GenEd Breadth Course		3
Elective (Based on educational goals) ¹		3
Free Elective ^{2,3}		3
Credit Hours		15
Spring		
EPBI 2219	Biostatistics and Public Health	3
HPM 2214	Politics and Payments in US Healthcare System	3
GenEd Breadth Course		3-4

Elective (Based on educational goals) ¹	3
Free Elective ^{2,3}	4-3
Credit Hours	16
Year 3	
Fall	
GenEd Breadth Course	3
Elective (Based on educational goals) ¹	3
Elective (Based on educational goals) ¹	3
Free Elective ^{2,3}	3
Free Elective ^{2,3}	3
Credit Hours	15
Spring	
SBS 2101 Disease Prevention and Control	3
GenEd Quantitative Literacy Course ^{GQ}	4
Elective (Based on educational goals) ¹	3
Free Elective ^{2,3}	3
Free Elective ^{2,3}	3
Credit Hours	16
Year 4	
Fall	
HRPR 3096 Cultural Competency in Health and Healthcare	3
KINS 4242 Exercise, Nutrition and Behavior	3
Elective (Based on educational goals) ¹	3
Elective (Based on educational goals) ¹	3
GenEd Breadth Course	3
Credit Hours	15
Spring	
HRPR 3197 Understanding and Applying Research in Health Professions	3
Elective (Based on educational goals) ¹	4
Elective (Based on educational goals) ¹	3
Free Elective ^{2,3}	3
Credit Hours	13
Total Credit Hours	120

1

Please note that some electives are 3 credits and others are 4 credits. In planning the course of study, the student needs to be mindful of the 120-credit requirement for graduation when choosing electives. It is expected the student will work with their advisor to ensure the 120 credits are reached and timely completion of the BA in Health Studies program is on track.

2

Please note that free elective credits will vary depending on the number of major-related elective credits that have been or will be taken. It is expected that the student will work with their advisor to ensure the 120 credits are reached and timely completion of the BA in Health Studies program is on track.

3

Students may work closely with their advisor to plan out a suggested minor or certificate to meet their educational goals. While the minor or certificate is not required, it is strongly recommended due to the flexibility of the BA in Health Studies.

Kinesiology BS

Overview

The **Bachelor of Science in Kinesiology**, offered by the Department of Health and Rehabilitation Sciences, prepares students to enter a variety of jobs in the fields of physical activity, health promotion and fitness/wellness. Students learn about the field of kinesiology through an interdisciplinary curriculum that provides students with the basic foundations of movement, which are then applied to helping communities and populations be healthier and more active. The Bachelor of Science in Kinesiology provides multiple career options as there is a growing demand for professionals skilled at

integrating physical activity, health and well-being into community settings. This demand is expected to continue growing in the future, particularly since physical activity is one of the most important public health strategies for preventing and managing chronic diseases.

Our students pursue a wide range of pathways, including workforce opportunities and pursuing advanced studies, following graduation from the Kinesiology program.

- 1. Workforce Opportunities:** Our students work in a variety of settings including wellness centers, healthcare systems, school district wellness programs, and rehabilitation centers. Career opportunities include working as a physical activity director, corporate wellness coordinator, fitness trainer/instructor, health club/spa manager, fitness/wellness manager, and community recreation center manager.
- 2. Graduate Training in Kinesiology:** Our students are prepared to attend graduate programs focused on kinesiology, physical activity, and public health.
- 3. Graduate Training in Other Professional Fields:** Our students develop a strong foundation that can prepare them for other graduate programs, including chiropractic school, occupational therapy, and other allied health professions. If pursuing graduate studies is a future goal of yours, please see your academic advisor for further details early in your program of study.

To prepare students for these career pathways, our curriculum incorporates didactic training and hands-on learning experiences. We thoughtfully integrate multiple applied learning experiences, laboratory courses and service-learning opportunities into the Kinesiology program of study.

Campus Location: Main

Program Code: HP-KINS-BS

Contact Information

Sara Kovacs, PhD, Associate Professor and Undergraduate Program Director
 Pearson Hall, Room 245
 1800 North Broad Street, Philadelphia, PA 19121
 215-204-8790
 sara.kovacs@temple.edu

Learn more about the Bachelor of Science in Kinesiology.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses for this major are KINS 3196 and KINS 4196.

College Requirement

All College of Public Health undergraduates must successfully complete the College Core Course, HRPR 1001 Public Health: The Way We Live, Work and Play.

Major Requirements

Code	Title	Credit Hours
Kinesiology Core Courses		
KINS 1201	Introduction to Kinesiology in Public Health	3
KINS 1223	Human Anatomy and Physiology I	4
KINS 1224	Human Anatomy and Physiology II	4
KINS 2203	Physiology of Physical Activity	4
KINS 2204	Motor Behavior	3
KINS 3101	Historical and Philosophical Dimensions of Physical Activity	3
KINS 3196	Psychology of Physical Activity	3
KINS 3202	Biomechanics of Physical Activity	4
KINS 3213	Human Movement and Development	3
KINS 3364	The Science of Health-Related Fitness	3

KINS 3501	Research Methods in Kinesiology	4
KINS 4242	Exercise, Nutrition and Behavior	3
KINS 4196	Sociology of Physical Activity	3
Kinesiology Physical Activity Program (KPAP) Courses		8

Content Electives

Select six from the following: 18

KINS 2424	Functional Anatomy for Kinesiology	
KINS 2501	Physical Activity Across the Lifespan	
KINS 2502	Physical Activity for Individuals with Disabilities	
KINS 3242		
KINS 3252	Exercise Psychology and Adherence	
KINS 3368	Principles of Health Fitness Program Management	
KINS 4239	Self-Development Through Physical Activity	
KINS 4501	Program Planning and Leading Physical Activity and Fitness	
KINS 4502		
HRPR 1444	Movement Injuries: Prevention and Care	
HRPR 2106	An Introduction to Holistic Practices and Integrative Medicine	
SBS 2103	Health Psychology and Human Behavior	
SBS 2216	Ethnicity, Culture and Health	

Total Credit Hours**70**

Note: All degree program courses noted above must be completed with a minimum grade of C.

The degree of Bachelor of Science in Kinesiology may be conferred upon a student by recommendation of the faculty upon the satisfactory completion of 120 semester hours of credit.

Suggested Academic Plan**Bachelor of Science in Kinesiology****Suggested Plan for New Students Starting in the 2023-2024 Academic Year**

Year 1		Credit Hours
Fall		
KINS 1201	Introduction to Kinesiology in Public Health	3
KINS 1223	Human Anatomy and Physiology I	4
HRPR 1001	Public Health: The Way We Live, Work and Play	3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
Credit Hours		14
Spring		
KINS 1224	Human Anatomy and Physiology II	4
GenEd Quantitative Literacy ^{GQ}		4
GenEd Breadth Course		3
Kinesiology Physical Activity Program Course		2
Content Elective		3
Credit Hours		16
Year 2		
Fall		
KINS 2203	Physiology of Physical Activity	4
Kinesiology Physical Activity Program Course		2
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
GenEd Breadth Course		3

Free Elective		3
Credit Hours		15
Spring		
KINS 2204	Motor Behavior	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Content Elective		3
Free Elective		3
Credit Hours		15
Year 3		
Fall		
KINS 3101	Historical and Philosophical Dimensions of Physical Activity	3
KINS 3196	Psychology of Physical Activity	3
KINS 3202	Biomechanics of Physical Activity	4
KINS 3213	Human Movement and Development	3
GenEd Breadth Course		3
Credit Hours		16
Spring		
KINS 3364	The Science of Health-Related Fitness	3
KINS 3501	Research Methods in Kinesiology	4
GenEd Breadth Course		3
Content Elective		3
Free Elective		3
Credit Hours		16
Year 4		
Fall		
KINS 4242	Exercise, Nutrition and Behavior	3
Kinesiology Physical Activity Program Course		2
Content Elective		3
Free Elective		3
Free Elective		3
Credit Hours		14
Spring		
KINS 4196	Sociology of Physical Activity	3
Kinesiology Physical Activity Program Course		2
Content Elective		3
Content Elective		3
Free Elective		3
Credit Hours		14
Total Credit Hours		120

Linguistics Certificate

Overview

The **Certificate in Linguistics**, offered by the Department of Communication Sciences and Disorders, provides students with a foundation in the science of language while addressing such pressing issues as the similarities and differences between human and machine languages as well as diversity and bias related to language and dialect. This program engages students in a field that enhances analytical abilities and critical thinking in the context of a complex and changing world.

Campus Location: Main

Program Code: HP-LING-CERT

Contact Information

Rena Krakow, PhD, Associate Professor, Program Director
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Learn more about the undergraduate certificate in Linguistics.

Requirements

The Certificate in Linguistics will be awarded to students who complete the two required 3-credit courses and two additional 3-credit courses from a choice of electives listed below. All courses must be completed with a grade of C or higher.

Code	Title	Credit Hours
Required Courses		
CSCD 1108	Introduction to Linguistics	3
CSCD 3225	Syntax of Natural and Machine Languages	3
Electives		
Select two of the following: ¹		6
CSCD 1222	Indigenous Languages: Introduction to Language Diversity, Discrimination, and Endangerment	
CSCD 2049	Language and the Brain	
CSCD 2202	Sociolinguistics	
CSCD 2204	The Linguistic Structure of Sign Language	
CSCD 3421	Multilingualism	
CSCD 3730	Topics in Linguistics	
Total Credit Hours		12

¹

Another course may be substituted for one of the required electives, with permission of the Undergraduate Program Director.

Nursing BSN

Overview

The **Bachelor of Science in Nursing** is offered by the Department of Nursing.

The degree of Bachelor of Science in Nursing (BSN) may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124 credit hours with a minimum cumulative GPA of 2.0 overall and in the major. The minimum passing grade in all required nursing major courses is 73% (C); this includes all courses listed under Department of Nursing requirements and Nursing Major requirements.

Campus Location: Main

Program Codes: HP-NUR4-BSNU, HP-NURS-BSNU

Admissions

Admission to the Bachelor of Science in Nursing program is competitive. A minimum high school GPA of 3.25 is required for first-year applicants. Students seeking to transfer from a different institution must have a minimum GPA of 3.5 for college-level work.

Facilities and Clinical Sites

The Nursing Resource Center at Temple's Health Sciences Center campus is a simulation-based learning environment that utilizes state-of-the-art technology to aid in student skill development, critical reasoning and teamwork. Students participate in real-life situations in a safe and controlled simulated setting with guidance from our faculty. BSN students complete a total of 798 hours of clinical experience in community-and hospital-based settings.

Clinical Sites may include Temple Hospital Main, Fox Chase Cancer Center, Jeanes Hospital, Episcopal Hospital, Children's Hospital of Philadelphia and St. Christopher's Hospital for Children.

Accreditation

The program is approved by the State Board of Nursing, Commonwealth of Pennsylvania. The baccalaureate degree program in nursing program at Temple University is accredited by the Commission on Collegiate Nursing Education.

Commission on Collegiate Nursing Education

655 K Street, NW, Suite 750

Washington, DC 20001

202-887-6791

Graduates are eligible to sit for the National Council Licensure Examination (NCLEX) leading to licensure as a Registered Nurse.

Contact Information

Amita Avadhani, PhD, DNP, NEA-BC, CNE, DCC, ACNP-BC, AGNP-C, CCRN, FAANP, FCCM, Chair and Professor

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Bettyanne Matase, DNP, MSN-Ed, RN, Undergraduate Nursing Program Director, Field Coordinator, Assistant Professor

215-707-0321

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Learn more about the Bachelor of Science in Nursing.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All students must take a minimum of two writing-intensive courses as part of the major. The writing-intensive courses required for this major are NURS 3296 and NURS 3496.

College Requirement

All College of Public Health undergraduates must successfully complete the College Core Course, HRPR 1001 Public Health: The Way We Live, Work and Play.

Community and Hospital Clinical Requirements

All nursing students must complete a pre-matriculation physical prior to the start of attending Temple University. Starting sophomore year, the nursing program requires students to complete clinical education experiences at facilities both on and off the University campus. As part of the clinical experience all students must complete and submit the following clearances annually: Pennsylvania state criminal background check, Pennsylvania state child abuse clearance, FBI fingerprinting clearance, and a 12-panel drug screening. The results of these requirements may impact the student's ability to continue on with the clinical component of the program, thus resulting in an inability to satisfy graduation requirements. Additionally, the conviction of a misdemeanor, felony, or illegal act may prevent the individual from becoming credentialed and/or licensed to practice nursing. Please see www.ncsbn.org/contact-bon.htm for more information about licensure.

Students also need proof of required immunizations, annual influenza vaccination, proof of Covid vaccination, Quantiferon testing (a blood test that detects the bacteria that causes tuberculosis), American Heart Association (AHA) cardiopulmonary resuscitation (CPR) certification, and personal health insurance. Students must complete the required health and immunization requirements to attend clinical. If these requirements are not completed, students may not progress in the nursing program. Additionally, all nursing students are required to be covered under the Temple University Accident Insurance Policy. If the student sustains an injury as a result of a required clinical activity, the student's expenses related to that injury are covered

by this policy (see the policy in detail since there may be some limitations). To examine the details of this policy and the procedure, go to <https://careers.temple.edu/hr-resources/our-functional-areas/benefits-administration/health-insurance-plans/student-health-1>.

Student Transportation

Transportation to and from clinical sites is the responsibility of the student. Shuttle service is available from Temple University-Main Campus to the Health Sciences Center Campus Monday through Friday. To review the current schedule, go to <https://campusoperations.temple.edu/shuttle-services/between-main-campus-hsc-ambler>. Students need to consider transportation costs in their educational planning when attending the nursing program.

Department of Nursing Requirements

Code	Title	Credit Hours
BIOL 1012	General Biology II	4
BIOL 2001	Clinical Microbiology	4
CHEM 1021 & CHEM 1023	Introduction to Chemistry I and Introduction to Chemistry Laboratory I	4
EPBI 2219	Biostatistics and Public Health	3
HRPR 1001	Public Health: The Way We Live, Work and Play	3
KINS 1223	Human Anatomy and Physiology I	4
KINS 1224	Human Anatomy and Physiology II	4
PSY 1001	Introduction to Psychology	3
PSY 2301	Foundations of Developmental Psychology	3
SBS 2106	Perspectives on Lifecycle Nutrition	2
Total Credit Hours		34

Nursing Major Requirements

Code	Title	Credit Hours
NURS 1003	Introduction to the Nursing Profession	1
NURS 2089	(Foundations of Nursing)	3
NURS 2144	Health Assessment	3
NURS 2262	(Pharmacology for Generalist Nursing Practice I)	2
NURS 2263	(Pharmacology for Generalist Nursing Practice II)	2
NURS 2689	(Med-Surg I Nursing Care of the Adult)	7
NURS 3296	Perspectives on Health, Thinking Globally	3
NURS 3487	(Pediatric Health Nursing)	4
NURS 3496	(Intro to Nursing Research (WI))	3
NURS 3589	(Med-Surg II - Complex Care of the Adult)	7
NURS 3687	(Mental Health Nursing)	2
NURS 3787	(Population Health)	3
NURS 3889	(Maternal Infant Nursing)	4
NURS 4189	(Leadership and Management)	4
NURS 4886	(General Nursing Practice Internship)	9
NURS 4401	(Senior Seminar I: Transition to Practice)	2
NURS 4402	(Senior Seminar II: Synthesis of Nursing)	2
Total Credit Hours		61

Suggested Academic Plan

Bachelor of Science in Nursing

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
CHEM 1021	Introduction to Chemistry I	3
CHEM 1023	Introduction to Chemistry Laboratory I	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
HRPR 1001	Public Health: The Way We Live, Work and Play	3
KINS 1223	Human Anatomy and Physiology I ¹	4
Credit Hours		15
Spring		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
BIOL 1012	General Biology II	4
KINS 1224	Human Anatomy and Physiology II ¹	4
PSY 1001	Introduction to Psychology	3
NURS 1003	Introduction to the Nursing Profession	1
Credit Hours		15
Year 2		
Fall		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
BIOL 2001	Clinical Microbiology	4
NURS 2089	Foundations of Nursing	3
NURS 2144	Health Assessment	3
NURS 2262	Pharmacology for Generalist Practice Nursing I	2
Credit Hours		15
Spring		
GenEd Quantitative Literacy Course ^{GQ}		4
PSY 2301	Foundations of Developmental Psychology	3
SBS 2106	Perspectives on Lifecycle Nutrition	2
NURS 2263	Pharmacology for Generalist Nursing Practice II	2
NURS 2689	Med-Surg I - Nursing Care of the Adult	7
Credit Hours		18
Year 3		
Fall		
GenEd Breadth Course		3
EPBI 2219	Biostatistics and Public Health	3
NURS 3589	Med-Surg II - Complex Care of the Adult	7
NURS 3687	Mental Health Nursing	2
NURS 3787	Population Health	3
Credit Hours		18
Spring		
GenEd Breadth Course		3
GenEd Breadth Course		3
NURS 3296	Perspectives on Health, Thinking Globally ²	3
NURS 3889	Maternal Infant Nursing	4

NURS 3487	Pediatric Health Nursing	4
Credit Hours		17
Year 4		
Fall		
GenEd Breadth Course		3
GenEd Breadth Course		3
NURS 4189	Leadership and Management	4
NURS 4401	Senior Seminar I: Transition to Practice	2
Credit Hours		12
Spring		
NURS 4886	General Nursing Practice Internship	9
NURS 4402	Senior Seminar I: Synthesis of Nursing	2
NURS 3496	Intro to Nursing Research	3
Credit Hours		14
Total Credit Hours		124

1

The GS requirements will be satisfied upon the successful completion of KINS 1223 and KINS 1224.

2

Indicates writing-intensive capstone for the major.

Nutrition Minor

Overview

The **Minor in Nutrition** is designed for students interested in understanding food, where it comes from, and how it affects health. Students in the minor develop knowledge and skills that supplement their major, and that are helpful for improving overall health in individuals and communities.

Completing the Nutrition minor improves students' marketability in many professional paths, including public health, nursing, kinesiology, psychology, tourism and hospitality, business, education, health communication and journalism, marketing, health professions, and sports and recreational management. The minor also prepares students to pursue graduate training or research in dietetics and nutrition, and to enhance their personal understanding of rapidly changing messages about diet and health.

Campus Location: Main

Contact Information

To declare this minor, contact:

Laura Windisch, Last Names A-K
laura.windisch@temple.edu

Brianna Boyd, Last Names L-Z
brianna.boyd@temple.edu

Learn more about the Nutrition minor.

Requirements

The requirements for the Nutrition minor are:

Code	Title	Credit Hours
Required Courses		
SBS 1104	Nutrition and Health	3
SBS 1114	Cultural Nutrition	3
SBS 2104	Nutrition in the Lifecycle	3
Nutrition Minor Electives		
Select three of the following: ¹		9
SBS 1124	Cooking and Presenting Food Fundamentals	

SBS 2103	Health Psychology and Human Behavior
SBS 2105	Nutrition and the Community
SBS 2204	Diet and Weight Management
KINS 4315	Applied Performance Nutrition
CTRP 2251	Sustainable Food Systems Planning
HORT 2334 or HORT 2353	Food Crops I Food Crops II

Total Credit Hours**18**

1

Others by advisement.

Public Health BS

Overview

The **Bachelor of Science in Public Health** is offered by the Department of Social and Behavioral Sciences (SBS) in the College of Public Health. The undergraduate curriculum prepares students for diverse careers in the public health field that focus on creating, implementing and evaluating interventions and programs designed to improve the health status and quality of life for all individuals.

As one of the earliest accredited undergraduate public health programs in the country, the BS in Public Health serves as a national model in which students take a set of common theoretical courses designed to promote an understanding of health, wellness, and disease prevention and health promotion.

Coursework topics include

- Health psychology and human behavior,
- Health communication,
- Biostatistics and epidemiology,
- Health policy and services,
- Research methods,
- Community program planning, implementation, and evaluation.

Students learn to use educational interventions to provide health information, gain experience in assessing the needs of target populations, clarify program goals and objectives, and develop strategies to motivate and involve their clients/patients in educational interventions. Students also participate in 300 hours of fieldwork experience in public health agencies, organizations, or other entities to gain invaluable real-world experience in the field.

The Public Health major trains entry-level public health workers to provide frontline preventive health information, services, and health behavior interventions at the community level, particularly in communities with high-risk populations. Majors receive intensive pre-professional training and direct public health work experience through their internship experience available throughout the city of Philadelphia and surrounding area. There are also opportunities to work alongside faculty members in one of the many research labs and centers in the SBS department and College of Public Health. Graduates typically work in public health departments, hospitals, rehabilitation centers, corporate work sites, community health organizations, nonprofit agencies, family planning clinics, and managed-care facilities.

Some graduates also go on to graduate public health programs (such as the Master of Public Health or Master of Science in Epidemiology) or programs in other health-related professions. Eligible students in the Public Health BS program also can apply for the +1 BSPH-MPH accelerated program, in which they can earn a Master of Public Health degree at Temple typically in one additional year after completing the BS in Public Health.

Campus Location: Main

Program Code: HP-PBHL-BS

Accreditation

The Bachelor of Science in Public Health program at Temple University is accredited by the Council on Education for Public Health (CEPH).

Accelerated Programs

The College of Public Health has developed a rigorous five-year (4+1) accelerated BS to MPH program in which outstanding Public Health majors can earn a Bachelor of Science (BS) in Public Health and a Master of Public Health (MPH) degree in five years, rather than six.

This combined degree program offers exceptional students an opportunity to work closely with faculty, while developing critical skills in public health and completing graduate work for professional careers in research, policy, administration or real-world public health practice.

The public health curriculum at Temple University is diverse, offering both undergraduate and graduate students access to faculty from a broad range of public health areas. The MPH requirements will be satisfied by the end of the fifth year of study. The accelerated degree program will consist of a minimum of 108 semester hours of undergraduate coursework, a maximum of 12 (twelve) semester hours of graduate coursework to count towards both the undergraduate and the graduate degrees, and a minimum of 30 semester hours of additional graduate coursework to count towards the graduate degree.

The +1 Accelerated BS in Public Health/MPH program is currently available with the following graduate programs:

- MPH in Epidemiology
- MPH in Health Policy and Management
- MPH in Social and Behavioral Sciences

Contact Information

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Learn more about the Bachelor of Science in Public Health.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

All students are required to complete the university's General Education (GenEd (p. 83)) curriculum.

All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses required for this major are SBS 3496 and SBS 3596.

College Requirement

All College of Public Health undergraduates must successfully complete the College Core Course, HRPR 1001 Public Health: The Way We Live, Work and Play.

Clearance Requirements

Please note the Public Health program requires students to complete clinical/field education experiences at facilities both on and off the University campus. These placements may require criminal background checks, Act 33/34 clearances and perhaps a drug screen. Placements may also require the student to maintain personal health insurance. The results of these requirements may limit and potentially eliminate placement options which can, in turn, result in an inability to meet graduation requirements. See www.nchec.org for information about credentialing in public health.

Public Health Program Requirements

Students must complete a set of specific courses in the major, including the College Core course and Public Health Major courses, including one credit-earning internship (SBS 4185). Also required are three public health electives, two Cognate electives and three general (free) electives. The major requires a minimum of 120 total credits.

All Public Health College and Major Core course work (those courses with an ENVH, EPBI, HPM, or SBS designation and courses approved as a cognate elective) must be completed with a grade of C or higher.

Code	Title	Credit Hours
General Electives		
Three courses are required. These may be the choice of the student.		9
College Core Requirement		
HRPR 1001	Public Health: The Way We Live, Work and Play	3
Public Health Major Core		
Lower-Division Public Health Coursework		
1000 Level Courses		
SBS 1003	Public Health Careers	1
HIM 1055	IT Applications for Health	3

Select two of the following:		6
SBS 1104	Nutrition and Health	
SBS 1105	Substance Use and Society	
SBS 1106	Human Sexuality	
2000 Level Courses		
SBS 2001	Biological Foundations of Population Health	3
SBS 2003	Introduction to Public Health Writing	1
SBS 2101	Disease Prevention and Control	3
ENVH 2102	Environmental Health	3
SBS 2103	Health Psychology and Human Behavior	3
SBS 2201	Health Communication	3
HPM 2214	Politics and Payments in US Healthcare System	3
SBS 2216	Ethnicity, Culture and Health	3
EPBI 2219	Biostatistics and Public Health	3
Upper-Division Public Health Coursework		
3000+ Level Courses		
EPBI 3101	Introduction to Epidemiology	3
EPBI 3102	Introduction to Research Methods	3
SBS 3104	Professional Seminar	2
SBS 3105	Fundamentals of Health Education	3
SBS 3496	Community-Based Health Program Planning I (WI)	3
SBS 3596	Community-Based Health Program Planning II (WI)	3
SBS 4185	Public Health Internship	6
Public Health Electives		
Select three of the following: ¹		9
SBS 1114	Cultural Nutrition	
SBS 1201	Contemporary Health Issues	
SBS 2104	Nutrition in the Lifecycle	
SBS 2203	AIDS and Society	
SBS 2204	Diet and Weight Management	
SBS 2205	Coping with Life Stress Workshop	
SBS 2301	Contemporary Slavery and Public Health	
SBS 2302	Maternal and Child Health	
SBS 2304	HEART Peer Educator Training	
SBS 3001	Community-Based Participatory Research I	
SBS 3103	Counseling Techniques for Health Professionals	
ENVH 1103 or ENVH 1903	International Health Honors International Health	
EPBI 2301	Public Health Beyond Borders	
EPBI 2361	Epidemiology 360: Determinants, Disease and Health-related Outcomes	
EPBI 3203	Applied Survey Methods	
EPBI 3205	Introduction to Statistical Computing	
HPM 2202	Man-Made Disasters: Radiological, Chemical & Biological Terrorism	
HPM 2208	Natural Disasters: Response and Recovery	
HPM 3207	Principles of Emergency Management: A Public Health Perspective	
HPM 3215	Special Populations: Strategic Community Outreach	
HRPR 1005	Introduction to Mindfulness	
Cognate Electives		
Select two courses with approval of a departmental academic advisor:		6
AAAS 2248	Public Policy and the Black Community	
AOD 1016	Introduction to Adult Learning and Training	
AOD 1166	Interpersonal Processes through the Life Span	

CDEV 2255	Environmental Justice in Communities
CDEV 3113	Nonprofit Management
CDEV 3155	Healthy Community Design and Development
CJ 3406	Youth and Crime
CSCD 1002	American Sign Language II
CSCD 1003	American Sign Language III
CSCD 2011	American Deaf Culture
CTRP 2251	Sustainable Food Systems Planning
EES 2096	Climate Change: Oceans To Atmosphere
ENST 2051	The Urban Environment
ENST 2157	Environmental Ethics
GUS 1021	Urban Society: Race, Class, and Community
GUS 1025	World Urban Patterns
or GUS 1961	Honors World Urban Patterns
GUS 1961	Honors World Urban Patterns
GUS 3062	Fundamentals of Geographic Information Systems
GSWS 3259	Women and Poverty
GSWS 3722	Women and Political Violence
HCM 3502	Healthcare Financing and Information Technology
HCM 4596	Healthcare Quality and Risk Management
HIM 1101	Medical Terminology
HRPR 1101	Contemporary Aspects of Disability
HRPR 1444	Movement Injuries: Prevention and Care
KINS 2203	Physiology of Physical Activity
KINS 2362	
LGBT 2400	Topics in LGBT Studies
PHIL 2157	Environmental Ethics
or PHIL 2957	Honors Environmental Ethics
PHIL 3249	Ethics in Medicine
POLS 3124	Politics of Sexual Orientation and Gender Identity
PSY 2301	Foundations of Developmental Psychology
REL 2006	Death and Dying
or REL 2996	Honors Death and Dying
SSWU 4302	Emotional Disorders in Children and Adolescents
SSWU 4309	Societal Responses to Aging
SSWU 4312	Loss and Grief
SOC 2553	
SOC 2565	Race, Science, Health, and Medicine
SOC 3249	Social Inequality
SOC 3511	Environmental Sociology: The End of the World as We Know It?
SOC 3525	Urban Health
SPAN 3601	Spanish for Health Professions
RCTH 1102	Inclusive Recreation and Sports Services
RCTH 2103	Foundations of Recreational Therapy Practice
ARBC 1002	Arabic Elements II
CHI 1002	Chinese Elements II
FREN 1003	Introduction to French III
GER 1002	Introduction to German II
HEBR 1002	Elements II
HIN 1002	Hindi Elements II
ITAL 1002	Italian Language II
JPNS 1002	Japanese Elements II

KRN 1002	Korean Elements II
LAT 1002	Latin 2
PORT 1002	Basic II
RUS 1002	First-Year Russian II
SPAN 1003	Intermediate
VTNM 1002	

Total Credit Hours **85**

1

Additional listings may be obtained from the academic advisor and approved for elective credit.

Suggested Academic Plan

Bachelor of Science in Public Health

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Breadth Course		3
HRPR 1001	Public Health: The Way We Live, Work and Play	3
HIM 1055	IT Applications for Health	3
Select one of the following 1000 level SBS courses:		3
SBS 1104	Nutrition and Health	
SBS 1105	Substance Use and Society	
SBS 1106	Human Sexuality	
Credit Hours		16
Spring		
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
GenEd Quantitative Literacy Course ^{GQ}		4
GenEd Breadth Course		3
SBS 1003	Public Health Careers	1
Select one of the following 1000 level SBS courses:		3
SBS 1104	Nutrition and Health	
SBS 1105	Substance Use and Society	
SBS 1106	Human Sexuality	
ENVH 2102	Environmental Health	3
Credit Hours		17
Year 2		
Fall		
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
SBS 2001	Biological Foundations of Population Health	3
SBS 2003	Introduction to Public Health Writing	1
SBS 2201	Health Communication	3
HPM 2214	Politics and Payments in US Healthcare System	3
General Elective		3
Credit Hours		16
Spring		
EPBI 2219	Biostatistics and Public Health	3
SBS 2101	Disease Prevention and Control	3

SBS 2103	Health Psychology and Human Behavior	3
SBS 2216	Ethnicity, Culture and Health	3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
SBS 3105	Fundamentals of Health Education	3
SBS 3496	Community-Based Health Program Planning I	3
EPBI 3102	Introduction to Research Methods	3
GenEd Breadth Course		3
General Elective		3
Credit Hours		15
Spring		
EPBI 3101	Introduction to Epidemiology	3
SBS 3596	Community-Based Health Program Planning II	3
Public Health Elective		3
Public Health Cognate Elective		3
GenEd Breadth Course		3-4
Credit Hours		15-16
Year 4		
Fall		
SBS 3104	Professional Seminar	2
Public Health Elective		3
Public Health Cognate Elective		3
General Elective		3
GenEd Breadth Course		3
Credit Hours		14
Spring		
SBS 4185	Public Health Internship	6
GenEd Breadth Course		3
Public Health Elective		3
Credit Hours		12
Total Credit Hours		120-121

Public Health Minor

Overview

The **Minor in Public Health**, offered by the Department of Social and Behavioral Sciences, expands students' understanding of how the natural sciences, social sciences and technology can be used to help solve human health problems. Students in the minor explore the fundamentals of public health research and practice and learn to see the world through a public health lens.

The minor's required coursework explores the core areas of public health, preparing students to examine a variety of issues from a population health perspective. Additional elective courses allow students to shape the minor to complement their major, as well as their specific interests and career goals.

Completing the Public Health minor improves students' marketability in many professional paths, including social work, kinesiology, education, business, health professions, psychology, health communication and others. The minor also prepares students to pursue graduate training in public health.

Campus Location: Main

Contact Information

To declare this minor, contact:

Laura Windisch, Last Names A-K
laura.windisch@temple.edu

Brianna Boyd, Last Names L-Z
brianna.boyd@temple.edu

Requirements

An overall GPA of 2.0 or permission from the Public Health Undergraduate Director is required to apply for the minor. Students pursuing the minor in Public Health should consult with an advisor in the school or college in which they are pursuing their degree and with a Public Health Undergraduate Advisor. A minimum grade of "C" is required for each course and an overall 2.5 GPA is required for the courses taken in the minor. Additionally, no more than two (2) courses may be taken prior to declaring the Public Health minor.

The curriculum for the Public Health minor is:

Code	Title	Credit Hours
HRPR 1001	Public Health: The Way We Live, Work and Play	3
SBS 2103	Health Psychology and Human Behavior	3
EPBI 3101	Introduction to Epidemiology	3
Select three of the following elective courses: ¹		9
ENVH 1103	International Health	
SBS 1104	Nutrition and Health	
SBS 1105	Substance Use and Society	
SBS 1106	Human Sexuality	
SBS 2101	Disease Prevention and Control	
SBS 2201	Health Communication	
SBS 2203	AIDS and Society	
SBS 2205	Coping with Life Stress Workshop	
SBS 2301	Contemporary Slavery and Public Health	
SBS 2216	Ethnicity, Culture and Health	
EPBI 2219	Biostatistics and Public Health	
ENVH 2102	Environmental Health	
HPM 2214	Politics and Payments in US Healthcare System	
Total Credit Hours		18

1

Others by advisement

Recreational Therapy BS

Overview

The **Bachelor of Science in Recreational Therapy** is offered by the Recreational Therapy Program within the Department of Health and Rehabilitation Sciences.

Recreational therapists use a systematic process involving play, recreation and leisure activities as a means to promote psychosocial adaptation, health, rehabilitation, community engagement and life quality for children and adults of all ages who have illnesses and disabilities. The Recreational Therapy curriculum's primary goal is to prepare competent entry-level recreational therapists in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains to enable them to function as recreational therapists in traditional and emerging service delivery settings. Alumni of Temple's recreational therapy (formerly therapeutic recreation) program can be found in a wide range of health and human services agencies. They are employed in diverse settings, including hospitals, rehabilitation centers, nursing homes, assisted-living facilities, schools and community recreation agencies. According to the U.S. Department of Labor, employment opportunities are expected to increase approximately 10% over the next ten years, as fast as the average for all other occupations. A growth in employment opportunities will be most prevalent in the areas of aging/nursing care facilities, working with students with disabilities in schools, and outpatient medical facilities versus inpatient care.

Campus Location: Main

Program Code: HP-RLTH-BS

Accelerated Program

The Department of Health and Rehabilitation Sciences offers a 4+1 accelerated Bachelor of Science in Recreational Therapy (BSRT) and Master of Science in Recreational Therapy (MSRT) program which provides the opportunity for qualifying students studying recreational therapy as an

undergraduate to begin taking graduate level courses within their undergraduate curriculum and therefore complete the MSRT typically within a year after completing the BSRT. Students complete the first four years of the accelerated program on Temple University's Main Campus and the fifth year online. Learn more about the accelerated BSRT to MSRT program.

Mission of the Program

The Recreational Therapy Program strives to be a world-class academic and research unit committed to advancing the role of play, recreation and leisure opportunities in health promotion, rehabilitation and disease prevention for diverse individuals with chronic illnesses and disabilities across the life span. The program provides exceptional educational experiences, conducts discipline-expanding research and contributes to society via programs that explore and test evidence-based innovations in practice and policy. The program's mission includes:

- instilling knowledge, values, ethics and skills that will guide students in their future academic pursuits and their professional practice in recreational therapy at the local, national and international levels;
- being a leading contributor to the ever-changing knowledge base in recreational therapy, health, leisure and disability studies through research and other scholarly activities;
- providing innovative and responsive educational opportunities, research and service in collaboration with local, regional and national agencies and organizations; and
- fostering interdisciplinary collaborations to promote a better understanding of the importance of physically and socially active lifestyles to health, wellbeing and quality of life.

Central to the overall mission of the Recreational Therapy Program is a commitment to access and diversity. This is realized through a commitment to ensuring equal access to all qualified applicants and a commitment to promoting equal access to recreation and leisure opportunities for all people regardless of age, economics, race, gender, culture, sexual orientation, religion or abilities.

Accreditation

The Bachelor of Science in Recreational Therapy is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) / Committee on Accreditation of Recreational Therapy Education (CARTE).

Licensure/Certification

A license is required to practice recreational therapy in the following states: New Hampshire, New Jersey, North Carolina, Oklahoma and Utah. The National Council for Therapeutic Recreation Certification (NCTRC) administers an examination students must pass in order to become a Certified Therapeutic Recreation Specialist (CTRS). Graduates from Temple's Bachelor of Science in Recreational Therapy and Master of Science in Recreational Therapy programs meet the educational eligibility requirements to sit for the NCTRC exam.

<https://www.atra-online.com/page/CertandLicense>

Contact Information

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Learn more about the Bachelor of Science in Recreational Therapy.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

A Bachelor of Science (BS) degree in Recreational Therapy is awarded to students upon satisfactory completion of a minimum of 121 semester hours of credit with a minimum GPA of 2.00 overall and a minimum GPA of 2.5 for classes in the major. Students completing this degree are eligible to sit for the national credentialing examination for recreational therapists.

Summary of Requirements

University Requirements

- All students are required to complete the General Education (GenEd (p. 83)) curriculum. Please note that the University GenEd curriculum has specific rules regarding the completion of this university requirement (for example, the number of courses a student may take in one department to satisfy GenEd Requirements), so careful review of the GenEd section of this *Bulletin* is encouraged.
- MATH 0701 (4 credits) and/or ENG 0701 (4 credits), if required by placement testing.

- All Temple students must take a minimum of two writing-intensive courses as part of the major. Writing Intensive classes in Recreational Therapy include:

Code	Title	Credit Hours
RCTH 3096	Assessment and Documentation in Recreational Therapy	3
RCTH 4196	Recreational Therapy Clinical Procedures	3

- Students are also encouraged to review university requirements for successful progression through their academic careers. Knowledge of course repeat policies, including the withdrawal policy, academic standing, and rules on taking courses elsewhere can be found in the Academic Policies (p. 1835) section of this *Bulletin*.

College Requirement

All College of Public Health undergraduates must successfully complete the College Core Course, HRPR 1001 Public Health: The Way We Live, Work and Play.

Clearance Requirements

Please note the Recreational Therapy program requires students to complete clinical/field education experiences at facilities both on and off the University campus. These placements will require criminal background checks, Act 33/34 clearances and perhaps a drug screen. Placements may also require the student to maintain personal health insurance and/or submit a physical and immunization records. The results of these requirements may limit and potentially eliminate placement options which can, in turn, result in an inability to meet graduation requirements. Additionally, conviction of a misdemeanor, felony, or felonious or illegal act may prevent you from becoming credentialed and/or licensed to practice in recreational therapy. Please see <https://www.atra-online.com/page/CertandLicense> for more information about certification and licensure.

Recreational Therapy Program Requirements

Students must complete a set of specific courses in the major, including Health Related Professions Core, Cognate Core, Recreational Therapy major courses, and two credit-earning field-based clinical internships (RCTH 3185 and RCTH 4185). Students must also complete other non-credit earning requirements as part of the major, including 70 hours of professional development / volunteer experiences relevant to the major, criminal and child abuse clearances, health immunization and physical documentation, and certification in First-Aid/CPR.

All Recreational Therapy courses must be completed with a grade of C or higher.

Code	Title	Credit Hours
Health Related Professions Core ¹		
HRPR 1001	Public Health: The Way We Live, Work and Play	3
SBS 2103	Health Psychology and Human Behavior	3
Cognate Core ¹		
EPBI 2219 or PSY 1003 or SOC 1167	Biostatistics and Public Health Statistics for Psychology Social Statistics	3
KINS 1223 or KINS 1221	Human Anatomy and Physiology I ² Principles of Anatomy and Physiology I	3-4
KINS 1224 or KINS 1222	Human Anatomy and Physiology II ² Principles of Anatomy and Physiology II	3-4
KINS 2204	Motor Behavior	3
PSY 1001	Introduction to Psychology	3
PSY 2201	Foundations of Psychopathology	3
PSY 2301	Foundations of Developmental Psychology	3
Lower-Division Recreational Therapy Coursework		
RCTH 1102	Inclusive Recreation and Sports Services	3
RCTH 2103	Foundations of Recreational Therapy Practice	3
Upper-Division Recreational Therapy Coursework		
RCTH 2104	Recreational Therapy Modalities	3
RCTH 3096	Assessment and Documentation in Recreational Therapy	3
RCTH 3111	Health Promotion through Leisure Education	3
RCTH 3801	Physical and Neurological Health Conditions Across the Lifespan	3

RCTH 3802	Developmental Disabilities and Mental Health Conditions Across the Lifespan	3
RCTH 4102	Research and Evaluation in Recreational Therapy	3
RCTH 4103	Professional Issues in Recreational Therapy	3
RCTH 4111	Administration of Recreational Therapy	3
RCTH 4196	Recreational Therapy Clinical Procedures	3

Internship Experience

RCTH 3185	Internship I in Recreational Therapy	3
RCTH 4185	Internship II in Recreational Therapy	12

Recreational Therapy Electives

Select two of the following: 6

RCTH 2201	Recreational Therapy and Developmental Disabilities	
RCTH 2203	Assistive Technology in Recreation	
RCTH 2205	Adventure Challenge/Programming	
RCTH 3201	Health, Activity, and Aging	
RCTH 3202	Recreational Therapy and Mental Health	
RCTH 4205	Recreational Therapy in Geriatric Service Settings	
RCTH 4211	Recreational Therapy and Physical Disabilities	
RCTH 4213	Therapeutic Play, Recreation and Children's Health	

Total Credit Hours**81-83**

1

Students must successfully pass all Health Related Professions courses and Cognate Core courses with a minimum grade of C. Students not demonstrating the ability to meet this academic requirement will not be permitted to progress to the upper-division Recreational Therapy Core and related electives in the curriculum.

2

Students should consult with their advisor for information on the distinctions between Anatomy and Physiology selection sequence and its implication for the degree and career goals. Satisfactory completion of KINS 1221 and KINS 1222 sequence or KINS 1223 and KINS 1224 sequence will meet the two-course GenEd Science and Technology requirement. The courses are similar, but not interchangeable, and must be taken in the correct sequence. Students choosing the KINS 1221 and KINS 1222 sequence may need to take an additional 2-credit elective to meet the minimum 121 credit hour degree requirement. Please see a departmental advisor for clarification.

Suggested Academic Plan

Bachelor of Science in Recreational Therapy

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

The following academic plan displays required courses. Please note that, unless specified otherwise, students may select from a number of university-approved courses in the various areas of the GenEd curriculum. The Recreational Therapy Program Director and the Recreational Therapy Advisor are available to work with students, as needed, to adjust their academic plan.

Year 1		Credit Hours
Fall		
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
HRPR 1001	Public Health: The Way We Live, Work and Play	3
RCTH 1102	Inclusive Recreation and Sports Services	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Spring		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Quantitative Literacy Course ^{GQ}		4
PSY 1001	Introduction to Psychology	3
GenEd Breadth Course		3

RCTH 2103	Foundations of Recreational Therapy Practice	3
Credit Hours		16
Year 2		
Fall		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
KINS 1223 or KINS 1221	Human Anatomy and Physiology I ¹ or Principles of Anatomy and Physiology I	3-4
SBS 2103	Health Psychology and Human Behavior	3
PSY 2301	Foundations of Developmental Psychology	3
GenEd Breadth Course		3
Credit Hours		15-16
Spring		
KINS 1224 or KINS 1222	Human Anatomy and Physiology II ¹ or Principles of Anatomy and Physiology II	3-4
GenEd Breadth Course		3-4
Elective		3
PSY 2201	Foundations of Psychopathology	3
Select one of the following:		3
EPBI 2219	Biostatistics and Public Health	
PSY 1003	Statistics for Psychology	
SOC 1167	Social Statistics	
Credit Hours		15-17
Year 3		
Fall		
RCTH 3096	Assessment and Documentation in Recreational Therapy ²	3
RCTH 2104	Recreational Therapy Modalities	3
KINS 2204	Motor Behavior	3
Elective		3
Select one of the following: ³		3
RCTH 2201	Recreational Therapy and Developmental Disabilities	
RCTH 2203	Assistive Technology in Recreation ⁴	
RCTH 2205	Adventure Challenge/Programming	
RCTH 3201	Health, Activity, and Aging	
RCTH 3202	Recreational Therapy and Mental Health	
RCTH 4205	Recreational Therapy in Geriatric Service Settings ⁵	
RCTH 4211	Recreational Therapy and Physical Disabilities ⁵	
RCTH 4213	Therapeutic Play, Recreation and Children's Health	
Credit Hours		15
Spring		
RCTH 3111	Health Promotion through Leisure Education	3
RCTH 3185	Internship I in Recreational Therapy	3
RCTH 3801	Physical and Neurological Health Conditions Across the Lifespan	3
Elective		3
Select one of the following: ³		3
RCTH 2201	Recreational Therapy and Developmental Disabilities	
RCTH 2203	Assistive Technology in Recreation ⁴	
RCTH 2205	Adventure Challenge/Programming	
RCTH 3201	Health, Activity, and Aging	
RCTH 3202	Recreational Therapy and Mental Health	
RCTH 4205	Recreational Therapy in Geriatric Service Settings ⁵	
RCTH 4211	Recreational Therapy and Physical Disabilities ⁵	

RCTH 4213	Therapeutic Play, Recreation and Children's Health	
Credit Hours		15
Year 4		
Fall		
RCTH 4103	Professional Issues in Recreational Therapy	3
RCTH 4196	Recreational Therapy Clinical Procedures ²	3
RCTH 4102	Research and Evaluation in Recreational Therapy	3
RCTH 3802	Developmental Disabilities and Mental Health Conditions Across the Lifespan	3
Elective		2-3
Credit Hours		14-15
Spring		
RCTH 4111	Administration of Recreational Therapy	3
RCTH 4185	Internship II in Recreational Therapy	12
Credit Hours		15
Total Credit Hours		121-125

1

You should consult your advisor for information on the distinctions between the anatomy and physiology selection sequence and its implication for your degree and career goals. Satisfactory completion of the KINS 1221 and KINS 1222 sequence or the KINS 1223 and KINS 1224 sequence will meet the two-course GenEd Science & Technology requirement. These courses are similar but not interchangeable. Courses must be taken in the correct sequence. Students choosing KINS 1221 and KINS 1222 should be sure to take a sufficient number of elective credits to meet the minimum 121 credit hour degree requirement. Please see a departmental advisor for clarification.

2

Indicates Writing Intensive course for the major.

3

Two Recreational Therapy Elective courses (6 credits) are required for graduation.

4

These courses are offered in the fall semester only.

5

These courses are offered in the spring semester only.

Note: Students may lighten their academic load in the fall and spring semesters by taking classes during the summer sessions. Please see a departmental advisor to explore summer course offerings and suitable options.

Speech, Language and Hearing Science BA

Overview

The **Bachelor of Arts in Speech, Language and Hearing Science** is offered by the Department of Communication Sciences and Disorders. This is a degree program for students interested in becoming speech-language pathologists or audiologists. Both of those professions require a graduate degree in addition to the prerequisites obtained in the undergraduate major. Speech-language pathologists and audiologists diagnose, treat and work to prevent a variety of speech, language and hearing disorders. This major is also excellent preparation for those interested in going on to graduate programs in education, linguistics, neuroscience and a variety of health professions.

Majors have opportunities to observe and work with clients and to participate in research as well.

Campus Location: Main

Program Code: HP-SPLH-BA

Distinction in the Major

Students who complete the Speech, Language and Hearing Science major may graduate with distinction in the department if they meet the requirements outlined below:

1. GPA of 3.50 or better in the major and overall;
2. No grade below B in the major;

3. Completion of an honors paper at the end of a 3-credit independent study (CSCD 4979) during which the student will engage in an empirical study or library research in the field of Communication Sciences and Disorders under the supervision of a faculty advisor;
4. Completion of 20 hours of volunteer work, internship or fieldwork in consultation with the advisor.

Contact Information

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Learn more about the Bachelor of Arts in Speech, Language and Hearing Science.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

The Bachelor of Arts in Speech, Language and Hearing Science may be conferred upon a student by recommendation of the faculty upon the satisfactory completion of 122 credit hours. A grade of C is the lowest acceptable final grade for courses required of majors as well as departmental electives taken by majors. A grade of C- (C minus) is the lowest acceptable grade in GenEd courses. The Department of Communication Sciences and Disorders requires that students show a basic level of proficiency in a language other than English. This requirement may be met by taking college-level courses up to or beyond the equivalent of the 1002-level or by showing similar knowledge through a placement examination. Students may take American Sign Language to satisfy this requirement.

Summary of Requirements

University Requirements

Students must complete the requirements of the General Education (GenEd (p. 83)) program.

All Temple students must take a minimum of two writing-intensive (WI) courses as part of the major. The specific writing-intensive courses that are required for the Speech-Language-Hearing major are CSCD 1296 and CSCD 4496.

College Requirement

Students must complete the College Core Course, HRPR 1001 Public Health: The Way We Live, Work and Play.

Major Requirements

All of the following major requirements must be passed with a grade of C or better in order to successfully complete the major.

Code	Title	Credit Hours
Communication Sciences & Disorders		
CSCD 1107	Introduction to Communication Disorders	3
CSCD 1108	Introduction to Linguistics	3
CSCD 1296	Studies in Psycholinguistics	3
CSCD 2108	Phonetics	3
CSCD 2203	Anatomy and Physiology of the Speech and Hearing Mechanism	3
CSCD 2301	Development of Speech and Language	3
CSCD 2303	Foundations in Hearing Science	3
CSCD 3203	Audiology	3
CSCD 3403	Foundations in Speech Science	3
CSCD 3503	Foundations in Human Neuroscience	3
CSCD 4221	Speech and Language Disorders: Children	3

or CSCD 4222	Speech and Language Disorders: Adults	
CSCD 4302	Aural Rehabilitation	3
CSCD 4496	Diagnosis and Treatment in Speech-Language Pathology ¹	3

Related Discipline Courses

PSY 1001	Introduction to Psychology	3
PSY 2301	Foundations of Developmental Psychology	3

Biological Science

BIOL 1001	Human Biology	4
or BIOL 1012	General Biology II	

Another course in biological science may be substituted with advisor approval.

One Physics or Chemistry Course

Select one of the following: 3-4

PHYS 1001	Physics: Matter and Motion	
PHYS 1021	Introduction to General Physics I	
CHEM 1011	Chemistry: The Study of Matter I	
CHEM 1021	Introduction to Chemistry I	

Another course in physics or chemistry may be substituted with advisor approval.

Foreign Language

Two semesters of a foreign language / ASL at the introductory level or one at the intermediate level. 3-8

Statistics

Select one of the following courses: 3

PSY 1003	Statistics for Psychology	
PSY 1167		
SOC 1167	Social Statistics	
MATH 1013	Elements of Statistics	
EPBI 2219	Biostatistics and Public Health	

Total Credit Hours**58-64**

1

Indicates writing capstone for major.

Suggested Academic Plan

Bachelor of Arts in Speech, Language and Hearing Science

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
CSCD 1107	Introduction to Communication Disorders	3
CSCD 1108	Introduction to Linguistics	3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
HRPR 1001	Public Health: The Way We Live, Work and Play	3
Free Elective		3
Credit Hours		16
Spring		
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
CSCD 1296	Studies in Psycholinguistics	3
PSY 1001	Introduction to Psychology	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15

Year 2**Fall**

CSCD 2203	Anatomy and Physiology of the Speech and Hearing Mechanism	3
CSCD 2108	Phonetics	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Foreign Language/ASL I		3-4
Free Elective		3

Credit Hours**15-16****Spring**

CSCD 2303	Foundations in Hearing Science	3
CSCD 2301	Development of Speech and Language	3
Foreign Language/ASL II		3-4
GenEd Breadth Course		3
GenEd Breadth Course		3-4

Credit Hours**15-17****Year 3****Fall**

CSCD 3403	Foundations in Speech Science	3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Quantitative Literacy Course ^{GQ}		4
Free Elective		3

Credit Hours**16****Spring**

CSCD 3503	Foundations in Human Neuroscience	3
CSCD 3203	Audiology	3
GenEd Breadth Course		3
PSY 2301	Foundations of Developmental Psychology	3
Free Elective		3

Credit Hours**15****Year 4****Fall**

CSCD 4302	Aural Rehabilitation	3
Select one of the following:		3
CSCD 4221	Speech and Language Disorders: Children	
CSCD 4222	Speech and Language Disorders: Adults	
Select one of the following:		3
PSY 1003	Statistics for Psychology	
PSY 1167		
MATH 1013	Elements of Statistics	
SOC 1167	Social Statistics	
EPBI 2219	Biostatistics and Public Health	
Select one of the following:		4
BIOL 1001	Human Biology	
BIOL 1012	General Biology II	
Free Elective		2

Credit Hours**15****Spring**

CSCD 4496	Diagnosis and Treatment in Speech-Language Pathology	3
Select one of the following Physics or Chemistry courses:		3-4
PHYS 1001	Physics: Matter and Motion	

PHYS 1021	Introduction to General Physics I	
CHEM 1011	Chemistry: The Study of Matter I	
CHEM 1021	Introduction to Chemistry I	
Free Elective		3
Free Elective		3
Free Elective		3
	Credit Hours	15-16
	Total Credit Hours	122-126

School of Social Work

Overview

The School of Social Administration opened in 1969, with the goal of developing and promoting leadership in the public sector. The school's first Master of Social Work (MSW) class graduated in 1971, and the first Bachelor of Social Work (BSW) class graduated in 1973. In 2009, the school was renamed the School of Social Work (SSW) and merged with the College of Health Professions, which in 2015, was renamed the College of Public Health.

In 2017, the online MSW Program launched. The online BSW Program followed in 2021.

Launched in 2020 and housed within SSW, the Social Service Annex (SS Annex) is dedicated to empowering students who self-identify as in need of supportive services. The SS Annex offers prevention-focused and empowerment-based intervention support services to Temple students and the community at large—offering solutions and delivering effective, compassionate care that helps students achieve a better quality of life and a higher likelihood of degree completion.

The School of Social Work is committed to eliminating social, political and economic injustices for poor and oppressed populations and advancing the quality of life for all. Our faculty are committed to fostering societal transformation through education that emphasizes solutions and action; research that generates evidence-based strategies to resolve problems at local, national and global levels; and public service that shares this knowledge with a wider audience. In all of our work, we closely partner with communities, agencies and organizations to ensure that the needs of our constituents are represented and met.

The SSW mission and goals, BSW curricular objectives, National Association of Social Workers (NASW), and Council on Social Work Education (CSWE) inform all aspects of the School of Social Work.

Accreditation

The Bachelor of Social Work and the Master of Social Work programs are accredited by the Council on Social Work Education. This attests to the educational quality of the curricula and to the qualifications of graduates to assume professional positions that legally require applicants to have these degrees.

Mission and Goals

The School of Social Work is dedicated to societal transformations to eliminate social, political and economic injustices for poor and oppressed populations, and advance the quality of life for all through the following:

- Education emphasizing the discovery of knowledge and the use of critical inquiry and professional ethics to guide solution-seeking and action-taking to effect social change among professional social workers in front-line, supervisory, managerial and other leadership positions.
- Research and scholarship to advance applied knowledge and generate evidence-based strategies to resolve problems occurring between people and their social environments at local, state, national and global levels.
- Public service that aids the dissemination of knowledge and evidence-based strategies and that aids the responsiveness of the school to the needs of constituents through collaborations and partnerships with communities, agencies and organizations.

Student Groups

Alpha Delta Mu (ADM) National Social Work Honor Society: The purpose of ADM is to advance excellence in social work practice and to encourage, stimulate and maintain scholarship of its individual members. BSW and MSW students enrolled in Temple University's School of Social Work (online and on campus, full time and part time) are eligible for nomination. Please reach out to one of the leaders or the advisor for GPA requirements.

Social Work Student Collective: Including undergraduate and graduate social work students enrolled in all social work programs (online and on campus, full time and part time), the Social Work Student Collective represents a unified student voice that incorporates the diversity of the student body. The Collective sponsors social, educational and professional activities. Student representatives, selected by the Collective, sit on various school committees as voting members.

School of Social Work Alumni Association (SSWAA): Members serve as ambassadors for the School of Social Work, helping to unite social work alumni. All School of Social Work alumni are lifetime, dues-free members.

National Association of Social Workers (NASW): This is a membership organization with a dual mission to:

1. Promote, develop and protect the practice of social workers; and
2. Seek to enhance the effective functioning and well-being of individuals, families and communities through its work and advocacy.

The Pennsylvania Chapter of the National Association of Social Workers (NASW-PA) serves as the leading voice of the profession in the Commonwealth to enhance the value and respect of social workers, to influence public policy and to promote social justice. Learn more about student membership, benefits and resources.

The Southeast Division of the Pennsylvania Chapter of the National Association of Social Workers serves Philadelphia, Montgomery and Bucks Counties.

Latino Social Work Organization (LSWO): LSWO was founded in 1992 by a group of young social workers in Chicago. Temple students involved in LSWO have advocated for quality bilingual / bicultural services to Latinos and other oppressed communities.

Student Association of Black Social Workers (SABSW): The National Association of Black Social Workers, Inc., comprised of people of African ancestry, is committed to enhancing the quality of life and empowering people of African ancestry through advocacy, human services delivery and research. The Alliance of Black Social Workers, Inc. (ABSWS) is the Philadelphia chapter of the National Association of Black Social Workers, Inc. (NABSWS). It is a membership organization dedicated to the betterment of the lives of people of African descent in the Philadelphia area and beyond.

Pride in Social Work (PSW): PSW provides support, education and advocacy for gay, lesbian, bisexual and transgendered students, and their supporters. For additional information on Pride in Social Work at Temple University, contact Professor Bernie Newman, bernie.newman@temple.edu.

Administrators

Jennifer Ibrahim, Dean; PhD, University of California Berkeley.

Philip McCallion, School of Social Work Director; PhD, University at Albany.

Valarie Clemmons, Field Education Director; MSW, Temple University.

Brandi Crawford, Social Service Annex Assistant Director; MSW, Temple University.

Ashley Stewart, MSW Program Director; PhD, The Ohio State University.

Cheri Carter, BSW Program Director; PhD, University of Delaware.

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Undergraduate Program

- Social Work BSW (p. 1407)

Academic Policies and Regulations

Please see the Undergraduate Academic Policies (p. 1835). Students are responsible for complying with all university-wide academic policies that apply to their individual academic status. Additional and unique policies, or exceptions for the School of Social Work, appear below.

Laptop

Beginning in Fall 2020, all incoming students in the College of Public Health and the School of Social Work are required to have a laptop.

Academic programs in the college are technology intensive. They incorporate statistical and database analyses; utilize specialized tools for athletic training, kinesiology and physical therapy; stream audio and video for communication sciences; facilitate online interactive counseling for social work; and foster clinical experiences and online assessments. The laptop requirement enables the College of Public Health and the School of Social Work to improve opportunities for active learning and provide greater access to specialized software and required tools in and out of the classroom, better preparing students for the workforce. Learn more about device specifications and suggested vendors. Students can use excess financial aid (i.e., funds that are reimbursed after all tuition and fees are paid) to meet student needs, including the purchase of a laptop. Scholarships may also provide funding.

Re-enrollment Request

To re-enter the School of Social Work, students must complete a Re-Enrollment Request. Applications of students seeking re-enrollment after an absence of one or more semesters, not including summers, will be reviewed by the director of the BSW program. If the student is accepted for re-enrollment, their program for completion of degree requirements will be planned in accordance with those currently operative in the program. If courses were taken elsewhere, applicants are responsible for having official transcripts available when submitting the request form.

Transfer from Schools within the University

Students who are in good standing at Temple University may transfer to the School of Social Work at any point during their academic career. Before applying to transfer to Social Work, Temple students must attend a Change of Program session. Learn more about the change of major process.

Transfer applications will not be processed until the student attends the Change of Program session. Students will be notified of the decision regarding their request to change majors to Social Work in an e-mail from the university. A minimum GPA of 2.00 is required for admission.

Prior to transferring, students are encouraged to arrange to meet with both the original school advisor and the SSW academic advisor or BSW program director. Because of the professional requirements and the sequential nature of the curriculum, students are encouraged to enter the program as early as possible. Students must be majors in the social work program for a minimum of two years.

Dean's List

Each fall and spring semester, undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List (p. 1849) policy for specific GPA and credit-hour requirements.

Military Science Courses

Undergraduate students in the School of Social Work may apply up to 12 credits of military science courses at the 3000 and 4000 levels in Aerospace Studies (Air Force ROTC), Military Science (Army ROTC), and Naval Science (Navy ROTC) towards their degree as free electives. **These credits cannot count as Social Work credit towards the degree.**

School Requirements

Please see the Undergraduate Academic Policies (p. 1835). Students are responsible for complying with all university-wide academic policies that apply to their individual academic status. Additional and unique policies, or exceptions for the School of Social Work, appear below.

Program Performance

Social Work majors are required to maintain a cumulative GPA of 2.00 or above and grades of C or above in all social work courses and HRPR 1001. Students who obtain a C- or below in any social work course or HRPR 1001 will be required to repeat the course.

Collegial Warning will be issued to students whose GPA falls below 2.00 for one semester. Students are discouraged from registering for more than 12 credits until they have improved their GPA.

Collegial Probation: If a student's cumulative GPA falls below 2.00 they will be placed on academic probation and will not be permitted to register more than 12 credits for the next term, in order to optimize the chance of improving their GPA. If their GPA is still below a 2.00 after two semesters of academic probation, students are subject to being dropped from the Social Work program.

Being Dropped from the Program: If a student does not achieve a cumulative average of 2.00 or show evidence of substantive scholastic improvement after two semesters on collegial probation and a 12-credit roster, the student is subject to being dropped from the School of Social Work.

General Graduation Requirements

In order to receive a Bachelor of Social Work degree, a student must complete a minimum of 120 semester hours, which includes the University General Education (GenEd (p. 83)) curriculum, the College of Public Health Core course (HRPR 1001) and the School of Social Work curriculum. A potential graduate must also hold a cumulative GPA of 2.00 or better (having received a C or better in all social work courses and HRPR 1001) and meet any additional requirements, such as completion of a graduation application.

Field Practicum

The Council for Social Work Education (CSWE) identifies field practicum as the signature pedagogy of social work education. Students complete two semesters (200-hours in Fall and 200-hours in Spring) of field practicum courses during their final academic year. Hours are completed in a social service agency. Students are required to be in their practicum a minimum of 15 or 16 hours per week.

In preparation for this experience, all BSW students are required to submit a completed field application via SSW's Office of Practicum Education Portal. Information regarding deadlines can be found on the BSW Information Hub on Canvas.

Additionally, the Office of Practicum Education mandates all students obtain the maximum clearances required by the state in which their practicum is located. The results of an individual's clearances could limit or eliminate placement options, resulting in an inability to meet graduation requirements.

Advising

In line with the Council for Social Work Education (CSWE), professional and academic advising is provided by social work program faculty and staff. The BSW program has two academic advisors. Rebecca Dean advises BSW students enrolled in the BSW on-campus program and Alyssa Garnich advises BSW students enrolled in the BSW online program. Faculty, including Cheri Carter, are available for professional advising.

Early and regular contact with the advisor can be extremely helpful. The advisor is a knowledgeable person with whom students may discuss issues of concern in relation to university regulations, course selection and career paths.

Academic advisors are particularly important for social work majors. The Bachelor of Social Work curriculum is organized so that courses scheduled to be taken later in the program build on the knowledge and skill foundation provided in the liberal arts and social work courses taken earlier. For this

reason, most social work courses designate successful completion (with a C or better) of earlier courses as a prerequisite to taking later courses. This program of study for BSW students has been carefully designed and approved by faculty. It is intended to provide students with a coherent, integrated and high-quality learning experience.

Students must assume primary responsibility for knowing the requirements for their degree and for acquiring information about their academic status.

Advisor Contact Information

Cheri Carter, PhD, LSW
BSW Program Director
cheri.carter@temple.edu

Rebecca Dean, LSW, MSW
Academic Advisor for on-campus BSW students
rebecca.dean@temple.edu

Alyssa Garnich, LSW, MSS, MEd
Academic Advisor for online BSW students
agarnich@temple.edu

Faculty

For information on faculty in the School of Social Work, please refer to the College of Public Health faculty page (p. 1354) as well as the college's directory.

Social Work BSW

Overview

The **Bachelor of Social Work** (BSW), offered by the School of Social Work within the College of Public Health, prepares students for entry-level social work careers advancing social justice and working with individuals, families and communities in need.

Program Objectives

By completion of their undergraduate studies, BSW students will be able to:

- apply skills and knowledge of generalist social work practice with systems of all sizes;
- understand human behavior from holistic and developmental perspectives that encompass dynamic interaction among social, political, cultural, economic, psychological, spiritual and biological factors;
- critically select and apply theories and research findings to social work practice;
- understand and adhere to professional social work values and ethics;
- assess situations using knowledge about the effects of structural injustices based on race, class, gender, culture, sexual orientation, ability, age and other forms of oppression; and
- exercise self-awareness and reflection as part of the development of their professional and personal selves.

Curriculum

The BSW curriculum is organized so that courses scheduled to be taken later in the program assume, and build on, the knowledge and skill foundation provided in the General Education and social work courses taken earlier. For this reason, most social work courses designate successful completion (with a C or better) of earlier courses as prerequisite to taking later courses. This program of study for BSW students has been carefully designed and approved by faculty. It is intended to provide students with a coherent, integrated and high-quality learning experience.

Campus Location: Main, Online

Program Code: SW-SSWU-BSWK

Licensure/Certification

Social work is a licensed profession and BSW graduates are eligible for licensure. For license requirements by state or province view the interactive map provided by the Association of Social Work Boards (ASWB).

Contact Information

Cheri Carter, PhD, LSW, Assistant Professor and Undergraduate Program Director
Ritter Annex, Room 581
215-204-1228

cheri.carter@temple.edu

Learn more about the Bachelor of Social Work.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements for the Degree

University Requirements

- All students are required to complete the university General Education (GenEd (p. 83)) curriculum. (Students who entered prior to fall 2011 should check with their advisor for the appropriate year and program requirements.)
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of the major. The specific writing-intensive courses required for this major are SSWU 3096 and SSWU 4396.

College Requirement

- All CPH students, including SSW students, must complete the College Core Course, HRPR 1001.

Clearance Requirements

Please note the Social Work program requires students to complete clinical/field education experiences at facilities both on and off the University campus. These placements will require criminal background checks, Act 33/34 clearances and perhaps a drug screen. Placements may also require the student to maintain personal health insurance. The results of these requirements may limit and potentially eliminate placement options which can, in turn, result in an inability to meet graduation requirements. Additionally, conviction of a misdemeanor, felony, or felonious or illegal act may prevent you from becoming credentialed and/or licensed to practice social work. Please see <https://www.aswb.org/licenses/> for more information about state licensure.

School of Social Work Requirements

- Satisfactory completion of a minimum of 120 semester hours of credit.
- A minimum cumulative GPA of 2.00 overall and in the major.
- A grade of C or higher is required in all social work courses and HRPR 1001.

BSW Program Requirements

Code	Title	Credit Hours
University and College Courses		
HRPR 1001	Public Health: The Way We Live, Work and Play	3
CSI 1111	Introduction to Public Speaking	3
PSY 1001	Introduction to Psychology	3
SOC 1176	Introduction to Sociology	3
KINS 1223	Human Anatomy and Physiology I	4
or BIOL 1001	Human Biology	
*Any Biology course with a course number of 1000 or above will satisfy the BSW BIO requirement; however, some graduate programs may require successful completion of an undergraduate Human Biology course.		
Select one of the following:		3
ECON 1001	Introduction to the Economy	
ECON 1101	Macroeconomic Principles	
ECON 1102	Microeconomic Principles	
ECON 1103	Global Economics	
ECON 0858	The American Economy	
POLS 1101	The American Political System	3
or POLS 1911	Honors Introduction to American Politics	
Select one of the following:		3
SOC 1167	Social Statistics	
SOC 1967	Honors Social Statistics	
MATH 1013	Elements of Statistics	
PSY 1003	Statistics for Psychology	

*Any Statistics course with a course number of 1000 or above will satisfy the BSW STAT requirement.

Electives

Social Work Specific Elective Course	3
Free Electives	5

Professional Courses in Social Work

SSWU 2005	Introduction to the Social Work Profession I	3
SSWU 2006	Introduction to the Social Work Profession II	3
SSWU 2089	Service Learning in the Social Work Profession	2
SSWU 3003	History and Values of Social Welfare	3
SSWU 3004	Social Welfare in the US	3
SSWU 3007	Human Behavior in the Social Environment	3
SSWU 3009	Human Behavior and the Social Environment: Communities and Organizations	3
SSWU 3011	The Social Worker in the Group	3
SSWU 3096	Institutional Racism	3
SSWU 4001	Seminar in Social Work Practice	3
SSWU 4002	Seminar in Social Work Practice	3
SSWU 4187	Social Work Field Practicum I	5
SSWU 4107	BSW Field Seminar I	2
SSWU 4287	Social Work Field Practicum II	5
SSWU 4207	BSW Field Seminar II	2
SSWU 4396	Introduction to Social Research	3
SSWU 4407	Evaluating Programs and Practice in Social Work	3

Total Credit Hours

85

Field Work Practice

A minimum of 400 hours in supervised field settings is required. Students are overseen by an MSW (or BSW with at least two years of experience). They are directly involved in professional tasks in the agency and in the community. This component of the educational program of study facilitates the integration of classroom learning, particularly in the social work subject areas of human behavior, policy, practice and research. Students apply what they are learning and receive feedback from both classroom and field instructors on their work. Field work practice consists of 10 credits of the 55 credits of professional social work courses specified above.

Some of the fields of practice in the five-county Philadelphia area in which majors do their field work are these:

- **Ageing:** including adult service centers as well as assistance in a variety of public and private organizations with treatment and protective functions;
- **Children and Youth:** child abuse, foster care and adoption agencies, parenting and support services;
- **Community Organization/Planning:** public issues and policies, neighborhood services at settlements, Y's, community centers;
- **Correctional/Justice:** probation, parole, prison, community rehabilitation organizations;
- **Developmental Disabilities:** community-living arrangements, day programs, other public and private functions;
- **Education:** schools and alternative education programs;
- **Family Services:** material aid, crisis intervention, ongoing counseling;
- **Health/Hospitals:** advising, counseling, direct service with and on behalf of patients; a variety of functions in hospitals and community health centers;
- **Legal:** public agencies assisting low-income population in matters relating to law, housing, and discrimination;
- **Mental Health:** small and large institutions, community-based units, public and private auspices;
- **Substance Abuse:** counseling and other direct service in a variety of settings, both public and private;
- **Violence and Domestic Issues:** domestic violence of all kinds, sexual assault, and child abuse, in a wide variety of settings.

Suggested Academic Plan

Bachelor of Social Work

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Note: The symbols (F) or (S) after the course number indicate that the class is offered ONLY in a specific semester:

Code	Title	Credit Hours
(F) = offered only in fall semester		
(S) = offered only in spring semester		
Year 1		
Fall		Credit Hours
HRPR 1001	Public Health: The Way We Live, Work and Play	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3-4
GenEd Breadth Course		3
Free Elective		2
Credit Hours		15-16
Spring		
CSI 1111	Introduction to Public Speaking	3
SOC 1176	Introduction to Sociology	3
GenEd Quantitative Literacy Course ^{GQ}		4
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
PSY 1001	Introduction to Psychology	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
SSWU 2005	Introduction to the Social Work Profession I	3
GenEd Breadth Course		3
Select one of the following (other STAT courses will be considered):		3
SOC 1167	Social Statistics	
MATH 1013	Elements of Statistics	
SOC 1967	Honors Social Statistics	
PSY 1003	Statistics for Psychology	
Credit Hours		15
Spring		
SSWU 2006	Introduction to the Social Work Profession II	3
SSWU 2089	Service Learning in the Social Work Profession	2
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Select one of the following (*any BIO course will satisfy this requirement; however, some graduate programs may require successful completion of an undergraduate Human Biology course):		4
KINS 1223	Human Anatomy and Physiology I ¹	
BIOL 1001	Human Biology	
Credit Hours		15
Year 3		
Fall		
SSWU 3003	History and Values of Social Welfare	3
SSWU 3007	Human Behavior in the Social Environment (F)	3
SSWU 3011	The Social Worker in the Group	3
POLS 1101 or POLS 1911	The American Political System or Honors Introduction to American Politics	3

Free Elective		3
Credit Hours		15
Spring		
SSWU 3004	Social Welfare in the US	3
SSWU 3009	Human Behavior and the Social Environment: Communities and Organizations	3
SSWU 3096	Institutional Racism (F, S)	3
Select one of the following:		3
ECON 1001	Introduction to the Economy (F)	
ECON 1101	Macroeconomic Principles	
ECON 1102	Microeconomic Principles	
ECON 1103	Global Economics	
ECON 0858	The American Economy ²	
GenEd Breadth Course		3
Credit Hours		15
Year 4		
Fall		
SSWU 4001	Seminar in Social Work Practice (F)	3
SSWU 4187	Social Work Field Practicum I (F) ³	5
SSWU 4107	BSW Field Seminar I (SW 4187 & SW 4107 are concurrent)	2
SSWU 4396	Introduction to Social Research (F)	3
Social Work Elective		3
Credit Hours		16
Spring		
SSWU 4002	Seminar in Social Work Practice (S)	3
SSWU 4287	Social Work Field Practicum II (S) ³	5
SSWU 4207	BSW Field Seminar II (SW 4287 & SW 4207 are concurrent.)	2
SSWU 4407	Evaluating Programs and Practice in Social Work	3
Credit Hours		13
Total Credit Hours		120-121

1

Refer to GenEd Science & Technology (p. 98) for information on a GS Waiver.

2

ECON 0858 satisfies the University GenEd U.S. Society requirement as well as SSW's Economics requirement.

3

16 hour/week field practicum requirement.

In order to receive a Bachelor of Social Work degree, a student must complete a minimum of 120 semester hours, which includes the University General Education (GenEd (p. 83)) curriculum and the School of Social Work curriculum. A potential graduate must also hold a cumulative GPA of 2.00 or better (having received a C or better in all social work courses and HRPR 1001), and meet any additional requirements, such as the Exit Interview.

College of Science and Technology

Overview

Science and technology were responsible for a profound transformation of the world in the 20th century and will drive the economy of the 21st century. The objectives of the undergraduate programs of the College of Science and Technology are to prepare students for careers in these important areas and to graduate informed, responsible citizens.

The college approaches science and technology as a body of knowledge that has an advancing frontier and a complex interface with society. The traditional mandate for a university is to provide undergraduate students with a comprehensive education and the opportunity to focus closely on a particular area of study. The College of Science and Technology embraces this mandate and extends additional opportunities to our students. Science and Technology students are encouraged to participate in faculty research projects and thus experience the advancement of this body of knowledge.

Bachelor of Science programs offer a greater concentration in major coursework, while Bachelor of Arts programs offer a greater variety of coursework. All programs offer undergraduates the opportunity to work with distinguished faculty and a richly-diverse and stimulating student body as they prepare for active roles in society.

Mission Statement

The mission of the College of Science and Technology is to seek academic excellence by providing outstanding instruction in the sciences, and to foster scientific research of the highest quality. In pursuing its mission, the College is committed to meeting the needs of a diverse student body, and is truly dedicated to the founding principles of Temple University in providing a superior education to the prepared student. The educational mission of the College is pursued through offering a current curriculum that incorporates the fundamental principles as well as the latest discoveries in the major scientific disciplines.

Interdisciplinary degree programs and independent research projects allow the student to explore scientific boundaries. The College offers a general education curriculum that provides the opportunity for non-science majors to be better informed of the complex scientific and ethical issues facing society. The College also strives to improve science and mathematics education in the Philadelphia schools. All of these aspects of the educational mission of the College are achieved through the dedicated efforts of the faculty, who are leading scholars in their field.

The research mission of the College is pursued through a sustained effort to recruit the best and brightest new faculty, to aggressively develop promising research initiatives, and to create a modern science campus with facilities fully supportive of cutting-edge research. The College also strives to support the scholarly pursuits and professional activities of its faculty, who in turn advance their respective disciplines. In doing so, the College provides an outstanding environment for graduate and undergraduate research, with the Departments and Centers as focal points for interdisciplinary research initiatives and graduate degree programs. In pursuing its research mission, the College of Science and Technology will be a vital participant in establishing Temple University as a recognized center of excellence in scientific research and development.

Academic Departments

The College of Science and Technology consists of the following departments:

- Biology
- Chemistry
- Computer and Information Sciences
- Earth and Environmental Science
- Mathematics
- Physics

Admissions

See Undergraduate Admissions (p. 24) for more details.

Awards and Achievements

Awards & Scholarships

Rising sophomores, juniors and seniors are often honored for outstanding performance in a variety of academic areas and for exceptional service to the College and the University. The college offers both awards and scholarships.

Distinction in Major

Many programs allow exceptional students to receive a Distinction in Major. Please see the program pages for the specific requirements for any particular major.

Honor Societies

Temple University is in partnership with several national honor societies including Phi Beta Kappa (p. 61).

Financial Aid and Scholarships

See Financial Aid (p. 1809) for more details.

Special Facilities

The College of Science and Technology (CST) is home to the advanced Science Education and Research Center (SERC). One of the largest facilities of its kind on the East Coast, SERC is home to teaching and research labs, sophisticated instrumentation and collaborative spaces to facilitate innovation and discovery. Learn more about CST's facilities.

CST's advanced research institutes and centers provide the facilities and support needed for scientists to conduct advanced investigation, partner with similar entities around the world, disseminate new discoveries and turn scientific breakthroughs into advances that improve society.

Additionally, students have access to the Ambler Arboretum at Temple University, The Temple University Field Station at Ambler, and the Temple University Ambler Campus Greenhouse Education and Research Complex where faculty and students can use these resources in coursework and research.

Special Programs

The College of Science and Technology offers the following opportunities for students.

Accelerated Bachelor of Arts/Professional Programs

Temple Professional School Programs (within the Lewis Katz School of Medicine at Temple University, Temple University Kornberg School of Dentistry, Temple University School of Podiatry, and Temple University School of Pharmacy) agree to cooperate in providing an accelerated 3 + 4 undergraduate/professional school education leading to both a Bachelor of Arts degree in the College of Science and Technology and a Doctorate degree from the professional school. The Temple University College of Public Health agrees to cooperate in providing an accelerated 3 + 3 undergraduate/graduate education leading to both a Bachelor of Arts degree in the College of Science and Technology and a Doctorate of Physical Therapy in the College of Public Health.

Students in the College of Science and Technology who are in the joint program above, have been admitted to the professional program at the end of their third year, and have completed 90 semester hours, may transfer their first year in professional study toward the completion of the credit requirements for the degree of Bachelor of Arts. Biology and Chemistry majors may also transfer approved courses in their first year of professional study toward the elective courses in their major.

Students in the College of Science and Technology who have been admitted to other health-related professional schools at the end of their third year with a cumulative GPA of at least 3.5 and who have completed 90 semester hours, including all course requirements of the major, college and university, may petition the dean for the transfer of their first year of professional study toward the completion of the credit requirements for the degree of Bachelor of Arts. University residency (p. 1838) requirements must also be met.

Accelerated Bachelor of Science/Professional Programs

The Temple University School of Pharmacy agrees to cooperate in providing an accelerated 3 + 4 undergraduate/professional school education leading to both a Bachelor of Science degree in Pharmaceutical Sciences in the College of Science and Technology and a Doctor of Pharmacy degree from the Temple University School of Pharmacy.

Students in the College of Science and Technology who are in the joint program above, have been admitted to the professional program at the end of their third year, and have completed 90 semester hours, may transfer their first year in professional study toward the completion of the credit requirements for the degree of Bachelor of Science.

Accelerated Bachelor/Master and Bachelor/Professional Science Master (PSM) in CST Programs

Many departments in the College of Science and Technology cooperate in providing an accelerated +1 undergraduate/graduate education leading to a Bachelor of Arts or Science degree as well as a Master of Arts or Science, or a Professional Science Master (PSM) degree from the Graduate School.

Accelerated Bachelor/Master of Education Programs with Teacher Certification

Temple's College of Education and Human Development cooperates in providing an accelerated +1 undergraduate/graduate education leading to a Bachelor of Arts or Science degree in the College of Science and Technology as well as a Master of Education degree from the College of Education and Human Development. The Biology, Chemistry, Earth and Environmental Science, Mathematics, and Physics departments enable talented students to complete both a Bachelor's degree in one of the above departments and a Master of Education degree typically in a total of five years. After completing the Bachelor's degree in one of the aforementioned disciplines, students spend an additional year as a graduate student in the College of Education and Human Development. Students must apply for the accelerated +1 Bachelor/Master of Education program during their sophomore year. If accepted, they will take both undergraduate major courses as well as Master of Education courses beginning in their junior year. They typically complete their undergraduate major in their fourth year and their Master of Education degree in their fifth year. Students who complete this program earn a Master

of Education degree and may apply for a Pennsylvania Instructional I Teaching Certificate after passing all required licensure examinations. See the College of Education and Human Development (p. 552) for more details.

For a complete list, see Accelerated Degree Programs (p. 1792).

CST Science Scholars Program

The CST Science Scholars Program offers exceptional and motivated students additional paid research opportunities and academic and professional development. Students must be invited to apply based on their admissions information or performance in their first year of courses.

CST TTeach Certification for Secondary Education

Bachelor of Science programs enable students to prepare for secondary education certification while mastering the content of their field.

CST Undergraduate Research Program

The CST Undergraduate Research Program offers students in the College of Science and Technology an opportunity to work directly with world-class scientists on real-world research. Completing hands-on independent research is critical to the next step in a student's educational or professional career.

Study Abroad

See Education Abroad and Overseas Campuses (p. 55) and Temple University's Education Abroad and Overseas Campuses web site for more information about study abroad options.

University Honors Program

Students in the College of Science and Technology may apply to the University Honors Program. Honors students are eligible to enroll in CST honors courses, provided that they have satisfied the prerequisites and co-requisites. Honors courses are designated with a nine as the second digit in the four-digit number, e.g. MATH 1941 is *Honors Calculus I*. See Academic Opportunities: University Honors Program (p. 58) for more information.

Student Associations

Many of the departments within the College of Science and Technology support student interest organizations known as Majors' Associations and Societies. Each department organization provides an opportunity for students to interact with faculty and other students who share similar interests. It is through these venues that students may influence course offerings, faculty recruitment, and departmental policy. Temple University has many pre-professional health organizations that may interest students in the College of Science and Technology. These organizations allow students to interact with others with similar professional interests and gain more knowledge about admissions requirements and examinations.

Contact Information

Michael Klein, Dean
400 Carnell Hall
1803 North Broad Street
215-204-2888
<https://cst.temple.edu/>
cst@temple.edu

For information about the College of Science & Technology, please contact the Center for Academic Advising and Professional Development, 215-204-2890 or at cstadv@temple.edu.

Undergraduate Programs

- Accelerated Programs in CST (p. 1430)
- Advanced Core Science Studies Postbaccalaureate Certificate (p. 1448)
- Applied Mathematics BS (p. 1449)
- Astrophysics Certificate (p. 1454)
- Astrophysics Minor (p. 1455)
- Basic Core Science Studies Postbaccalaureate Certificate (p. 1455)
- Biochemistry BS (p. 1457)
- Biology BA (p. 1465)
- Biology BS (p. 1471)
- Biology Minor (p. 1476)
- Biology with Teaching BS (p. 1478)
- Biophysics BS (p. 1484)
- Chemistry BA (p. 1489)

- Chemistry BS (p. 1494)
- Chemistry Minor (p. 1501)
- Chemistry with Teaching BS (p. 1503)
- Computer Science and Physics BS (p. 1509)
- Computer Science BA (p. 1513)
- Computer Science BS (p. 1518)
- Computer Science Minor (p. 1523)
- Computer Security and Digital Forensics Certificate (p. 1524)
- Data Science BS with Computation and Modeling Concentration (p. 1526)
- Data Science BS with Computational Analytics Concentration (p. 1530)
- Data Science BS with Genomics and Bioinformatics Concentration (p. 1535)
- Data Science: Computational Analytics Certificate (p. 1540)
- Data Science: Computational Analytics Minor (p. 1541)
- Digital Media Technologies Minor (CST) (p. 1543)
- Earth and Space Science with Teaching BS (p. 1544)
- Ecology, Evolution and Biodiversity BS (p. 1549)
- Environmental Professional Training Certificate (p. 1556)
- Environmental Science BS with Applied Ecology Concentration (p. 1558)
- Environmental Science BS with Climate Concentration (p. 1564)
- Environmental Science BS with Environmental Geochemistry Concentration (p. 1569)
- Environmental Science BS with Hydrology Concentration (p. 1574)
- Fundamentals of Physics Certificate (p. 1580)
- Fundamentals of Programming Certificate (p. 1581)
- General Science and Technology with Teaching BS (p. 1582)
- General Science with Teaching BS (p. 1587)
- Genomic Medicine BS (p. 1592)
- Genomic Medicine BS with Pre-Medicine Concentration (p. 1599)
- Genomic Medicine Certificate (p. 1605)
- Geology BA (p. 1608)
- Geology BS (p. 1612)
- Geology Minor (p. 1618)
- Information Science and Technology BA (p. 1619)
- Information Science and Technology BS (p. 1623)
- Information Science and Technology Minor (p. 1629)
- Materials Science BS (p. 1630)
- Mathematical Economics BA (CST) (p. 1635)
- Mathematics and Computer Science BS (p. 1640)
- Mathematics and Computer Science with Teaching BS (p. 1645)
- Mathematics and Physics BS (p. 1650)
- Mathematics and Technology with Teaching BS (p. 1654)
- Mathematics BA (p. 1661)
- Mathematics BS (p. 1665)
- Mathematics Minor (p. 1669)
- Mathematics with Teaching BS (p. 1670)
- Mobile Application Development Certificate (p. 1676)
- Natural Sciences BA with Biology Concentration (p. 1677)
- Natural Sciences BA with Chemistry Concentration (p. 1682)
- Natural Sciences BA with Earth and Environmental Sciences Concentration (p. 1688)
- Natural Sciences BA with Physics Concentration (p. 1694)
- Natural Sciences BS with Biology Concentration (p. 1699)
- Natural Sciences BS with Chemistry Concentration (p. 1705)
- Natural Sciences BS with Earth and Environmental Sciences Concentration (p. 1711)

- Natural Sciences BS with Physics Concentration (p. 1716)
- Natural Sciences Minor (p. 1722)
- Neuroscience: Cellular and Molecular BS (p. 1723)
- Pharmaceutical Sciences BS (p. 1729)
- Physics BA (p. 1734)
- Physics BS (p. 1738)
- Physics Minor (p. 1742)
- Physics with Teaching BS (p. 1743)
- Science and Technology Writing Certificate (p. 1748)

Academic Policies and Regulations

Please see the Undergraduate Academic Policies (p. 1835) for details. Students are responsible for complying with all university-wide academic policies that apply to their individual academic status. Additional and unique policies, or exceptions for the College of Science and Technology (CST), appear below.

Changing Majors

CST Students: In order to add or change majors within the College of Science and Technology, a CST student must meet with an advisor in the CST's Center for Academic Advising and Professional Development. The advisor will evaluate the student's record in accordance with the following policy:

1. CST students in their first semester at Temple University who wish to add or change majors within the CST will be automatically approved.
2. Continuing CST students who wish to add or change declared majors within the CST should have a cumulative grade point average (GPA) of 2.00 or higher. Continuing CST students who wish to change their major to undeclared will be automatically approved, provided that the total of completed and registered credits is fewer than 60 credits.
3. CST students can complete a second major in the CST. For more details, please refer to the Second Major section within the Requirements (p. 1418) page.

Non-CST Students: To transfer into the College of Science and Technology (CST), a non-CST student must be in accordance with the following policy:

1. Complete the CST Change of Program (COP) requirements on the Temple University COP Canvas.
2. Students in their first semester at Temple University who wish to transfer into CST will be automatically approved.
3. Continuing students who wish to transfer into CST must have a cumulative grade point average (GPA) of 2.00 or higher.

Course Eligibility

The College of Science and Technology offers four types of undergraduate courses as well as graduate courses:

1. Preparatory courses numbered 0700-0799: open to all students, including non-degree seeking students who have completed appropriate course prerequisites and have completed or are in the process of completing required co-requisite courses. If required, students must complete these courses before enrolling in any higher level courses in the same department.
2. General Education courses numbered 0800-0999: open to all students, including non-degree seeking students who have completed appropriate course prerequisites and have completed or are in the process of completing required co-requisite courses. These courses satisfy University General Education requirements as indicated in the course description.
3. Lower-level courses numbered 1000-1999: open to all students, including non-degree seeking students who have completed appropriate course prerequisites and have completed or are in the process of completing required co-requisite courses. These are general foundation level courses in the various disciplines.
4. Upper-level courses numbered 2000-4999: open to all students, including non-degree seeking students who have completed appropriate course prerequisites and have completed or are in the process of completing required co-requisite courses. These courses build on the foundation courses (and on other upper-level courses) to provide a focused exploration of field-specific content.
5. Graduate-level courses numbered 5000-9999: undergraduate students are generally prohibited from taking graduate-level courses. In rare circumstances, special permission may be granted for undergraduate students to take graduate courses. Graduate-level courses numbered 5000-5999 require permission of the course instructor, the Undergraduate Faculty advisor for the student's undergraduate major, the Graduate Chair of the department housing the course, and the College of Science and Technology's Center for Academic Advising and Professional Development. Graduate-level courses numbered 8000-9999 require permission from those listed above as well as the Vice Provost for Undergraduate Studies and the Vice Provost for Graduate Studies.

Courses Over Five Years Old

For transfer and re-enrolling students, courses over five years old will be reviewed by the College to determine whether they will be accepted toward the degree. Final determination of the acceptability of such courses is the responsibility of the Center for Academic Advising and Professional Development.

Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria are placed on the Dean's List. See the Dean's List (p. 1849) policy for specific GPA and credit-hour requirements.

Grading

Major, Minor, and GenEd courses must be completed with a letter grade of C- or higher unless otherwise specified. Certain courses require a higher minimum grade in order to advance to the next level.

Graduation Procedures

Fly in 4 requires students to complete a graduation review prior to the start of the senior year. To meet this requirement, all CST students will have a graduation review prepared by an advisor in Spring of the junior year. Students must apply for graduation online via Self-Service Banner (SSB) early in the semester in which they will complete their degree requirements. For application deadlines, see the University's Undergraduate Graduation Procedures (p. 1854).

Grievance Procedure

The College of Science and Technology grievance procedure is available on the CST web site.

Non-Traditional Credits

A maximum of 12 semester hours of credit will be allowed by CST for life experience, upper-level military science (ROTC) courses, and CLEP/DSST examinations.

CLEP

A maximum of 8 semester hours of credit will be allowed by CST for CLEP examinations.

Life Experience

A maximum of 8 semester hours of credit will be allowed by CST for Life Experience. Students are required to write what proficiencies are developed by their life experience and designate courses similar to their background. The experience will be reviewed by the appropriate faculty. Students need a 2.5 minimum cumulative GPA in order to apply.

ROTC

A maximum of 4 courses or up to 12 semester hours will be allowed for upper-level Military Science (Army ROTC), Naval Science (Navy ROTC) or Aerospace Studies (Air Force ROTC) courses.

Overload Requests

Students in the College of Science and Technology must petition through the Center for Academic Advising and Professional Development for approval of an overload when they request to take more than 18 credits in either the fall or spring semesters or more than 8 credits in either summer session. Credits over 18 carry additional tuition charges (p. 1800). The following items are considered when reviewing an overload petition:

- Minimum 2.75 GPA overall and in the last semester of graded coursework at Temple.
- The number of credits completed in previous semesters.
- The number of science and math courses taken previously in each semester.
- The amount of credits requested.
- The type of courses requested including requests for repeated coursework. The office focuses particularly on the number of science and math courses in the student's proposed roster.

Placement Assessment

The results of placement assessments determine the best place for students to start in their English, Foreign Language and Mathematics courses. Please see Placement Assessment for additional information.

All CST transfer students are required to complete the Math placement assessment unless they transfer in the equivalent of MATH 1041, MATH 1042, MATH 2043 or MATH 3041.

Pre-Pharmacy Track Students

Students can be admitted to the Pre-Pharmacy track. Pre-Pharmacy students will need to declare a major before reaching 30 earned credits. Pre-Pharmacy students who have completed 30 or more credits without declaring a major will have a "declaration of major" hold added to their account and will need to see an advisor to declare a major before being able to register for a future semester.

Prerequisites and Co-Requisites

Students will be de-enrolled from courses for which they do not meet prerequisites and co-requisites. Please see the University's Prerequisites and Co-requisites (p. 1860) for additional information.

Re-enrollment to the College of Science and Technology

College of Science and Technology students who have not enrolled for one or more semesters and are not on an approved Leave of Absence (p. 1856) must submit a Request to Re-Enroll.

Repeating a Course

Please refer to the University policy on Repeating a Course (p. 1860) for further information.

Undeclared Majors

Due to the sequencing of our coursework, CST encourages undeclared students to declare a major by the time they have earned 30 credits. In accordance with University policy, students must declare a degree-earning major by the time they have earned 60 credits. Undeclared students who have 60 or more credits will have a "declaration of major" hold added to their account and will need to meet with an advisor to declare a major before being able to register for a future semester.

General College Graduation Requirements

The College of Science and Technology offers two undergraduate degrees: a Bachelor of Arts (BA) and a Bachelor of Science (BS). The BA degree gives students a broad-based education, including the study of a foreign language. The BS degree is for those students who wish for more specialized training in their chosen disciplines.

Credit Hour Requirements

The College of Science and Technology requires that students complete a total of 123 credits for most programs. The TUteach programs require students to complete a total of 124 credits. Of these totals, 90 credits must be in the College of Science and Technology, the College of Liberal Arts or the College of Engineering. A course shall count as a College of Science and Technology or College of Liberal Arts or College of Engineering course if it is offered by a department or program in these respective colleges, or if it is in the department of Art History, or if it is taken to satisfy a major, minor or certificate requirement in the College of Science and Technology. Of those 90 credits, 45 must be in upper-level courses. Upper-level courses consist of course numbers at the 2000 level or above.

Seminar Requirement

All students in the College of Science and Technology are required to take a one credit first year seminar. SCTC 1001 CST First Year Seminar is the appropriate course option for every entering first year CST major as well as those students changing from another School/College at Temple during the first year. UNVS 1001 First Year Seminar I and HNRS 1901 Honors First Year Seminar I can also fulfill this requirement.

Transfer students and students changing their major to CST after the first year should use SCTC 2001 CST Transfer Seminar to fulfill this requirement. UNVS 2002 Transfer Seminar: Planning for Success can also fulfill this requirement.

Students are allowed a maximum of three attempts in total to fulfill the Seminar Requirement.

General Education

All students are required to complete the General Education (GenEd (p. 83)) requirements.

Grade Point Average (GPA) Requirement

The College of Science and Technology requires that students have a GPA of at least 2.00 overall and at least 2.00 in the courses applicable to their major and/or minor GPA.

Calculation of Major GPA

Unless otherwise noted, all courses listed under the major requirements for the degree will be included in the calculation of the major GPA. Courses that do not apply toward the major as an elective or required course would not be counted in the calculation of the major GPA. Please refer to degree programs for any variations from this.

Residency Requirements

Students must satisfy general Temple University residency requirements (p. 1838). Please refer to degree programs for the specific number of major, minor, or certificate courses required to be completed at Temple.

Bachelor of Science Requirements

Major

Students must also complete the requirements of a departmental major. The minimum acceptable grade in a course taken to fulfill major requirements is a C- unless otherwise specified. Bachelor of Science majors are offered in the following programs:

- Applied Mathematics
- Biochemistry
- Biology
- Biology with Teaching
- Biophysics
- Chemistry
- Chemistry with Teaching
- Computer Science
- Computer Science and Physics
- Data Science with Concentration in Computation and Modeling
- Data Science with Concentration in Computational Analytics
- Data Science with Concentration in Genomics and Bioinformatics
- Earth and Space Science with Teaching
- Ecology, Evolution, and Biodiversity
- Environmental Science with Concentration in Applied Ecology
- Environmental Science with Concentration in Climate
- Environmental Science with Concentration in Environmental Geochemistry
- Environmental Science with Concentration in Hydrology
- General Science with Teaching
- General Science and Technology with Teaching¹
- Genomic Medicine
- Genomic Medicine with Concentration in Pre-Medicine
- Geology
- Information Science and Technology
- Materials Science
- Mathematics
- Mathematics and Computer Science
- Mathematics and Physics
- Mathematics with Teaching
- Mathematics and Computer Science with Teaching
- Mathematics and Technology with Teaching
- Natural Sciences with Concentration in Biology
- Natural Sciences with Concentration in Chemistry
- Natural Sciences with Concentration in Earth and Environmental Sciences
- Natural Sciences with Concentration in Physics
- Neuroscience: Cellular and Molecular
- Pharmaceutical Sciences
- Physics
- Physics with Teaching

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Pending the approval of the Department of Education, the General Science and Technology with Teaching program may be available for students in the 2023-2024 academic year. Students should see an advisor to confirm that the program has received approval prior to selecting this major.

Bachelor of Arts Requirements

Language Requirement

Bachelor of Arts candidates are required to successfully complete the second semester (typically courses numbered 1002) of a foreign language with a C- or better or demonstrate this proficiency through placement. In addition to the language offerings in the College of Liberal Arts, American Sign Language coursework can also fulfill this requirement.

Upper-Level Distribution Requirements

Bachelor of Arts students must complete a minimum of six credits of upper-level coursework (courses numbered 2000 and above) in one or more departments of the College of Liberal Arts or the department of Art History with a C- or better.

Major

Bachelor of Arts candidates must complete the requirements of a major. It is important to note that students enter the College of Science and Technology as Bachelor of Science majors. If students wish to change their degree choice to Bachelor of Arts, they must do so with an advisor in the Center for Academic Advising and Professional Development. The minimum acceptable grade in a course taken to fulfill major requirements is a C- unless otherwise specified. BA majors are offered in the following programs:

- Biology
- Chemistry
- Computer Science
- Geology
- Information Science and Technology
- Mathematics
- Mathematical Economics
- Natural Sciences with Concentration in Biology
- Natural Sciences with Concentration in Chemistry
- Natural Sciences with Concentration in Earth and Environmental Sciences
- Natural Sciences with Concentration in Physics
- Physics

Optional Minors, Certificates and Second Majors

Minors

Students may also choose to complete the requirements for a minor. The minimum acceptable grade in a course taken to fulfill minor requirements is a C- unless otherwise specified. At least three of the courses credited towards the minor must be courses that were not credited towards a CST major, additional CST minor, or CST certificate. Minors are available in the following programs:

- Astrophysics
- Biology
- Chemistry
- Computer Science
- Data Science: Computational Analytics
- Digital Media Technologies (CIS/MSP)
- Geology
- Information Science and Technology
- Mathematics
- Natural Sciences
- Physics

Certificates

Students may also choose to complete the requirements for a certificate. The minimum acceptable grade in a course taken to fulfill certificate requirements is a C- unless otherwise specified. At least two of the courses credited towards the certificate must be courses that were not credited towards a CST major, CST minor, or CST additional certificate. Certificates are available in the following programs:

- Astrophysics
- Computer Security and Digital Forensics
- Data Science: Computational Analytics

- Environmental Professional Training
- Fundamentals of Physics
- Fundamentals of Programming
- Genomic Medicine
- Mobile Application Development
- Science and Technology Writing

Second Major

Students may complete a second major by fulfilling all requirements for the primary and second majors, including at least four distinct courses in the primary major and four distinct courses in the second major. General Education requirements must be satisfied in accordance with the requirements of the primary major. In instances of a double major, only one degree will be conferred.

Academic Advising

The Center for Academic Advising and Professional Development
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1809 North 13th Street
Philadelphia, PA 19122-6073
215-204-2890
<https://cst.temple.edu/students/academic-advising>
cstadv@temple.edu

The College of Science and Technology's Center for Academic Advising and Professional Development utilizes best practices to facilitate undergraduate student development and academic growth while guiding students from pre-admission to degree completion. By establishing a support network of connections with faculty, campus resources and the Temple University community, our academic advisors encourage positive and independent thinking, provide professional planning, promote resource utilization and foster quality academic strategies for the students we serve. Through teamwork, collaboration and open lines of communication, we empower our students to take ownership of their decisions, choices, and goals relating to academic and professional aspirations.

Professional advisors help students plan courses, explore majors, research career opportunities, and understand Temple's resources. CST's advising model consists of a First Year Advising team, which serves students from the time of admission throughout the successful completion of the first academic year, and advising by two Discipline teams for sophomores through to graduation. One discipline team oversees the majors, minors, and certificates in the Biology, Chemistry and Earth and Environmental Science (BCE) departments and the other does the same for the Computer and Information Sciences, Mathematics and Physics (CMP) departments. This model allows students to develop a connection with advisors who specialize in their area of study.

Our CST Peer Team assists our students with a variety of questions. The peer advisors are trained on CST and Temple University policies, services, and procedures. They serve as a point of contact as students arrive at the Center for Academic Advising and Professional Development. Our peers help with student-related programs and projects. Any general questions can be directed to our CST Peers at cstpeers@temple.edu.

CST also has Faculty advisors. Faculty advisors use their knowledge of departmental curriculum to help students choose courses consistent with their specific career objectives. Each faculty advisor is knowledgeable within their field and can help with questions involving research and real work experience within each field. Faculty advising is very important in developing ties between a student's academic program and his or her professional goals. Faculty advisors may assist students in finding research opportunities and professional internships and will help students choose courses that will best prepare them for their field of interest within a particular discipline. A list of Faculty Advisors may be found on the CST web site.

The Student Professional Development office prepares students for academic and professional careers through a variety of workshops, professional development training sessions, networking events, and job fairs. Hands-on independent research and internships are considered to be critical steps in a students' preparation for pursuing additional educational opportunities or their professional career.

The office facilitates the Undergraduate Research Program (URP) which provides world class research opportunities for undergraduate students in labs on campus as well as at the Temple University Health Science Campus.

Pre-Professional Advising

The College of Science and Technology works in conjunction with the Office of Pre-Professional Health Advising to advise students interested in professional schools. Knowledge gained in the College of Science and Technology curricula provides the foundation needed in preparing for Professional Health School entrance exams. Many of the courses required by professional programs such as dentistry, medicine, pharmacy, and veterinary medicine are incorporated into College of Science and Technology curricula. This approach allows our students to fulfill degree requirements, while at the same time meeting admissions criteria for professional and graduate programs. Students interested in professional health programs should contact the Office of Pre-Professional Health Advising early in their academic career for detailed advising.

CST offers a variety of ways in which students can pursue health professional programs.

- Students may complete a bachelor's degree and apply to health professional programs.
- Students may apply to the 3+4 and 3+3 accelerated programs (p. 1430) linked to particular Temple health professional programs by which they may complete both their bachelor and professional degree. For more information on accelerated programs, please visit the Office of Pre-Professional Health Advising web site.
- Students may apply to the direct admit 3+4 Pharmaceutical Sciences (p. 1729) and Temple University School of Pharmacy by which students would complete a Bachelor of Science in Pharmaceutical Sciences (BS-PS) and a Doctor of Pharmacy (PharmD).
- Students who have completed prerequisite courses may apply to the Temple University School of Pharmacy without completing their Undergraduate degree requirements such that students would only complete a Doctor of Pharmacy (PharmD).
- Students who have completed prerequisite courses may apply to the Temple University School of Podiatric Medicine without completing their Undergraduate degree requirements such that students would only complete a Doctor of Podiatric Medicine (DPM).

Faculty

Please go to the College of Science & Technology web site at <https://cst.temple.edu> and click on the individual department at the bottom of the page for a list of faculty in each department. See also <https://directory.temple.edu/>.

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Accelerated Programs in CST

Overview

The College of Science and Technology (CST) has a variety of accelerated programs in partnership with professional and graduate programs. For a complete list, see Accelerated Degree Programs (p. 1792) in the About Temple University section of the *Undergraduate Bulletin*.

3+3, 3+4 Bachelor/Professional Accelerated Programs

Temple Professional School Programs (Lewis Katz School of Medicine at Temple University, Temple University Kornberg School of Dentistry, Temple University School of Podiatry, Temple University School of Pharmacy) agree to cooperate in providing an accelerated 3+4 undergraduate/professional school education leading to both a Bachelor of Arts degree in the College of Science and Technology and a Doctorate degree from the Professional School. The Temple University College of Public Health agrees to cooperate in providing an accelerated 3+3 undergraduate/graduate education leading to both a Bachelor of Arts degree in the College of Science and Technology and a Doctor of Physical Therapy in the College of Public Health.

Students in the College of Science and Technology who are in a joint program listed above, have been admitted to the professional program at the end of their third year, and have completed 90 semester hours, may transfer their first year in professional study toward the completion of the credit requirements for the degree of Bachelor of Arts. Biology and Chemistry majors may also transfer approved courses in their first year of professional study toward the elective courses in their major.

Students in the College of Science and Technology who have been admitted to other health-related professional schools at the end of their third year with a cumulative GPA of at least 3.50 and who have completed 90 semester hours, including all course requirements of the major, college and

university, may petition the dean for the transfer of their first year of professional study toward the completion of the credit requirements for the degree of Bachelor of Arts. University residency (p. 1838) requirements must also be met.

The specific Bachelor/Professional accelerated programs are:

- Dental 3+4 Program
- Medical 3+4 Program
- Pharmacy 3+4 Program
- Physical Therapy 3+3 Program
- Podiatry 3+4 Program
- Pharmaceutical Sciences BS

Accelerated Programs within the College of Science and Technology

Many departments in the College of Science and Technology cooperate in providing an accelerated +1 undergraduate/graduate education leading to a Bachelor of Arts or Bachelor of Science degree as well as a Master of Arts, a Master of Science, or a Professional Science Master (PSM) degree from the Graduate School.

The specific accelerated +1 programs available within CST are:

- BA or BS in Biology / PSM in Scientific Writing
- BA or BS in Biology / PSM in Bioinformatics and Biological Data Science
- BA or BS in Biology / PSM in Bioinnovation
- BA or BS in Biology / PSM in Biotechnology
- BS in Biochemistry / PSM in Bioinformatics and Biological Data Science
- BS in Biochemistry / PSM in Bioinnovation
- BS in Biochemistry / PSM in Biotechnology
- BS in Biochemistry / PSM in Forensic Chemistry
- BS in Chemistry / MS in Chemistry
- BA or BS in Chemistry / PSM in Forensic Chemistry
- BS in Computer Science / MS in Computer Science
- BS in Computer Science / MS in Computational Data Science
- BS in Data Science / MS in Computational Data Science
- BA in Mathematics / MS in Mathematics
- BS in Mathematics / MS in Mathematics
- BS in Mathematics and Computer Science / MS in Computational Data Science
- BA or BS in Natural Sciences / PSM in Scientific Writing
- BA or BS in Natural Sciences / PSM in Bioinnovation
- BA or BS in Natural Sciences / PSM in Biotechnology
- BS in Neuroscience: Cellular and Molecular / PSM in Biotechnology
- BS in Neuroscience: Cellular and Molecular / PSM in Bioinformatics and Biological Data Science
- BS in Neuroscience: Cellular and Molecular / PSM in Bioinnovation
- BA in Physics / MS in Physics
- BS in Physics / MS in Physics

Accelerated Programs with the College of Education and Human Development

Temple's College of Education and Human Development cooperates in providing an accelerated +1 undergraduate/graduate education leading to a Bachelor of Arts or Bachelor of Science degree in the College of Science and Technology as well as a Master of Education degree from the College of Education and Human Development. The Biology, Chemistry, Earth and Environmental Science, Mathematics, and Physics departments enable talented students to complete both a Bachelor's degree in one of the above departments and a Master in Education degree in a total of five years. After completing the Bachelor's degree in one of the aforementioned disciplines, students spend an additional year as a graduate student in the College of Education and Human Development.

Students must apply for the accelerated +1 Bachelor of Arts or Bachelor of Science / Master of Education program during their sophomore year. If accepted, they will take both undergraduate major courses as well as Master in Education courses beginning in their junior year. They typically complete their undergraduate major in their fourth year and their Master of Education degree in their fifth year. Students who complete this program earn a Master

of Education degree and may apply for a Pennsylvania Instructional I Teaching Certificate after passing all required licensure examinations. See the Secondary Education/Science Education MEd for more details.

The specific accelerated +1 programs available between the College of Science and Technology and the College of Education and Human Development are:

- BA in Biology / MEd in Middle Grades Education with a Concentration in Science
- BA in Biology / MEd in Middle Grades Education with a Concentration in Science and Language Arts
- BS in Biology / MEd in Middle Grades Education with a Concentration in Science
- BS in Biology / MEd in Middle Grades Education with a Concentration in Mathematics and Science
- BA in Chemistry / MEd in Middle Grades Education with a Concentration in Science
- BA in Chemistry / MEd in Middle Grades Education with a Concentration in Science and Language Arts
- BS in Chemistry / MEd in Middle Grades Education with a Concentration in Science
- BS in Chemistry / MEd in Middle Grades Education with a Concentration in Mathematics and Science
- BA in Geology / MEd in Middle Grades Education with a Concentration in Science
- BA in Geology / MEd in Middle Grades Education with a Concentration in Science and Language Arts
- BS in Geology / MEd in Middle Grades Education with a Concentration in Science
- BS in Geology / MEd in Middle Grades Education with a Concentration in Mathematics and Science
- BA in Mathematics / MEd in Middle Grades Education with a Concentration in Mathematics
- BA in Mathematics / MEd in Middle Grades Education with a Concentration in Mathematics and Language Arts
- BS in Mathematics / MEd in Middle Grades Education with a Concentration in Mathematics
- BS in Mathematics / MEd in Middle Grades Education with a Concentration in Mathematics and Science
- BA in Natural Sciences / MEd in Middle Grades Education with a Concentration in Science
- BA in Natural Sciences / MEd in Middle Grades Education with a Concentration in Science and Language Arts
- BA in Physics / MEd in Middle Grades Education with a Concentration in Science
- BA in Physics / MEd in Middle Grades Education with a Concentration in Science and Language Arts
- BS in Physics / MEd in Middle Grades Education with a Concentration in Science
- BS in Physics / MEd in Middle Grades Education with a Concentration in Mathematics and Science
- BA in Mathematics / MEd in Secondary Education with a Concentration in Mathematics Education
- BS in Mathematics / MEd in Secondary Education with a Concentration in Mathematics Education

For more specific details on some of the agreements with Temple's graduate and professional schools, see the following links. For a complete list, see the Accelerated Degree Programs (p. 1792) section of the *Undergraduate Bulletin*.

Programs

- Biology BA/MEd (p. 1433)
- Biology BS/MEd (p. 1433)
- Chemistry BA/MEd (p. 1434)
- Chemistry BS/MEd (p. 1435)
- Chemistry BS/MS (p. 1436)
- Computer Science, BS/MS (p. 1437)
- Dental 3+4 Program (p. 1438)
- Geology BA/MEd (p. 1438)
- Geology BS/MEd (p. 1439)
- Information Science and Technology BS/MS (p. 1439)
- Mathematics BA/MEd (p. 1440)
- Mathematics BA/MS (p. 1441)
- Mathematics BS/MEd (p. 1442)
- Mathematics BS/MS (p. 1442)
- Medical 3+4 Program (p. 1443)
- Pharmaceutical Sciences BS (p.)
- Pharmacy 3+4 Program (p. 1444)
- Physical Therapy 3+3 Program (p. 1445)
- Physics BA/MEd (p. 1445)

- Physics BA/MS (p. 1446)
- Physics BS/MEd (p. 1446)
- Physics BS/MS (p. 1447)
- Podiatry 3+4 Program (p. 1447)

Biology BA/MEd

Overview

The five-year Bachelor of Arts in Biology and Master of Education in Secondary Education program with Teacher Certification in Secondary Education is a combined program between the College of Science and Technology and the College of Education and Human Development. For more information, see the following program pages: Biology BA (p. 1465) and Secondary Education/Science Education MEd.

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Biology BS/MEd

Overview

The five-year Bachelor of Science in Biology and Master of Education in Secondary Education program with Teacher Certification in Secondary Education is a combined program between the College of Science and Technology and the College of Education and Human Development. For more information, see the following program pages: Biology BS (p. 1471) and Secondary Education/Science Education MEd.

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Chemistry BA/MEd

Overview

The five-year Bachelor of Arts in Chemistry and Master of Education in Secondary Education program with Teacher Certification in Secondary Education is a combined program between the College of Science and Technology and the College of Education and Human Development. For more information, see the following program pages: Chemistry BA (p. 1489) and Secondary Education/Science Education MEd.

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Chemistry BS/MS

Overview

The +1 Bachelor of Science and Master of Science in Chemistry is an accelerated program within the College of Science and Technology. This program allows a talented student to obtain a master's degree in one additional year after completion of a bachelor's degree. A chemistry major may apply for the program prior to the junior or senior year. Interested students should contact their advisor for details about the application process and required approvals. For more information, see the following program pages: Chemistry BS (p. 1494) and Chemistry MS.

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Computer Science, BS/MS

Overview

The +1 Bachelor of Science in Computer Science and Master of Science in Computer Science program is an accelerated degree program within the College of Science and Technology. High achieving Computer Science majors with at least 4 semesters at Temple are qualified to apply to the +1 program.

- Students may apply to the accelerated degree program after completing a progress review in CST advising and meeting with the Faculty advisor. These steps must be completed during the Spring of the Sophomore or Junior year. *In addition to having a GPA of 3.25 or higher, junior status entrants must be able to complete their BS degree within two years of program entry, while senior status entrants must be able to complete their BS degree within one year of program entry. Please note that many of the graduate Computer Science electives expect a background in networking and math (e.g., Calculus III, Linear Algebra Statistics), so students should select their undergraduate courses appropriately.*
- The +1 program provides 12 credits of graduate coursework that have been approved to fulfill up to 12 credits of undergraduate degree requirements as either Computer Science electives or free electives. The graduate coursework will also fulfill up to 12 credits of graduate degree requirements.
- After earning the BS degree, students must be able to complete the graduate degree in one additional year including one summer.

Interested students should contact their advisor for details. For more information, see the following program pages: Computer Science BS (p. 1518) and Computer Science MS and the Department of Computer and Information Sciences' Graduate Page.

Undergraduate Contact Information

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Dental 3+4 Program

Overview

The seven-year Bachelor of Arts in any College of Science and Technology major and Doctor of Dental Medicine is a combined program between the College of Science and Technology and the Temple University Kornberg School of Dentistry.

The program is designed for high-achieving students. Students must apply through the Office of Pre-Professional Health Advising.

Students must meet the admissions requirements for early admission to the Temple University Kornberg School of Dentistry. The 3+4 option is only with Temple University Kornberg School of Dentistry. If interested in applying to other schools, students will need to follow a 4+4 option.

Contact Information

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Office of Pre-Professional Health Advising
Mitten Hall, Suite 110
215-204-2513
healthadvising@temple.edu

Guidelines for Completion of the Bachelor of Arts Degree in the College of Science & Technology

- Bachelor of Arts candidates in the College of Science and Technology (CST) must complete all requirements for the major before entering the School of Dentistry with the exception of the following:
 1. Biology majors may count the following three first year School of Dentistry courses as Biology electives:
 - DENT D100 Biochemistry so long as the student has not previously earned credit for BIOL 4375 General Biochemistry I;
 - DENT D101 General and Oral Histology so long as the student has not previously earned credit for BIOL 2235 General Histology;
 - DENT D202 Gross Anatomy so long as the student has not previously earned credit for BIOL 2233 Mammalian Anatomy.
 2. Chemistry majors may count the following first year School of Dentistry course as a Chemistry elective:
 - DENT D100 Biochemistry so long as the student has not previously earned credit for BIOL 4375 General Biochemistry I/CHEM 4401 Biochemistry I CHEM 3401 Applications of Biochemistry.
- College of Science and Technology students may count up to 33 equivalent credit hours from the first year at the School of Dentistry as equivalents of upper-level credits in the College of Science and Technology.
- College of Science and Technology students may count up to 33 equivalent credit hours from the first year at the School of Dentistry to fulfill their general credit hour requirements for the Bachelor of Arts degree in the College of Science and Technology.
- Appropriate course sequences for majors offered by the College of Science and Technology will be available in the Center for Academic Advising and Professional Development (Tuttleman Learning Center, Suite 111) or Pre-Professional Health Advising (Mitten Hall, Suite 110) and will be shared with prospective and current students.

Academic Plan

Individual academic plans will vary based on previous course work, AP credits, performance on University placement tests and specific undergraduate major. Students who qualify for the 3+4 program will develop an individual academic plan with Pre-Professional Health Advising and a CST academic advisor during the first academic year at Temple University.

Geology BA/MEd

Overview

The five-year Bachelor of Arts in Geology and Master of Education in Secondary Education program with Teacher Certification in Secondary Education is a combined program between the College of Science and Technology and the College of Education and Human Development. For more information, see the following program pages: Geology BA (p. 1608) and Secondary Education/Science Education MEd.

Undergraduate Contact Information

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Graduate Contact Information

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Geology BS/MEd

Overview

The five-year Bachelor of Science in Geology and Master of Education in Secondary Education program with Teacher Certification in Secondary Education is a combined program between the College of Science and Technology and the College of Education and Human Development. For more information, see the following program pages: Geology BS (p. 1612) and Secondary Education/Science Education MEd.

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Graduate Contact Information

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Information Science and Technology BS/MS

Overview

The +1 Bachelor of Science in Information Science and Technology and Master of Science in Information Science and Technology program is an accelerated program within the College of Science and Technology. High achieving Information Science and Technology (IS&T) majors with at least 4 semesters at Temple are qualified to apply to the +1 Accelerated Program.

- Students may apply to the accelerated degree program after completing a progress review in CST advising and meeting with the faculty advisor. These steps must be completed during the Spring of the Junior year. *In addition to having a GPA of 3.5 or higher, applicants must be able to complete their BS degree within one year of program entry and also be able to complete at least 99 credits (including MATH 2031 Probability and Statistics, CIS 3329 Network Architectures, and CIS 3342 Server-Side Web Application Development) before the start of their Senior year.*
- During their Senior year, students take 24 credits, 9 credits of which are graduate. These 9 graduate credits count three ways: (a) as general undergraduate credit, (b) as upper level undergraduate IS&T elective credit, (c) as graduate credit.
- After their Senior year, students receive their undergraduate degree, then are formally admitted to the graduate program (with 9 graduate credits already completed).
- During their +1 year, students take an additional 21 graduate credits to earn the Master's degree.

Interested students should contact their advisor for details. For more information, see the following program pages: Information Science and Technology BS (p. 1623) and Information Science and Technology MS and the Department of Computer and Information Sciences' Graduate Page.

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Mathematics BA/MEd

Overview

The five-year Bachelor of Arts in Mathematics and Master of Education in Secondary Education program with Teacher Certification in Secondary Education is a combined program between the College of Science and Technology and the College of Education and Human Development. For more information, see the following program pages: Mathematics BA (p. 1661) and Secondary Education/Mathematics Education MEd.

Undergraduate Contact Information

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Graduate Contact Information

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Mathematics BA/MS

Overview

The +1 Bachelor of Arts in Mathematics and Master of Science in Mathematics program is an accelerated program within the College of Science and Technology. To participate in this +1 program, a mathematics major should be enrolled in the BA program. Application to continue in the MS program must be made to the graduate chair of the department no later than the first semester of the senior year. To be accepted by the MS program, a student must have a GPA of at least 3.25 in Mathematics courses when the application is made. Students must complete MATH 3141, MATH 3142 and MATH 4051 in place of MATH 3137 and MATH 3138, and MATH 3098 in place of MATH 3096 in order to be considered for admission to the Master's program. In addition to completing the BA requirements, the student must complete four additional graduate-level mathematics courses numbered 5000 and above by the end of her/his senior year. If the General Education and college requirements have also been met, the student will be awarded the BA degree at the conclusion of this portion of the program. All courses must be passed with a grade of C- or better, and no more than two graduate courses can carry a grade less than B- for the student to continue with the MS portion of the program.

+1 Year Course Requirements

The student will take a total of six graduate-level courses, selected to conform to the MS requirements. At the end of the +1 year, the student must either write a master's thesis or pass one of the following examinations:

- Master's Comprehensive Examination in Pure Mathematics
- Master's Comprehensive Examination in Applied Mathematics
- PhD Combined Comprehensive Examination (MS level pass)

For more information, see the following program pages: Mathematics BA (p. 1661) and Mathematics MS.

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Mathematics BS/MEd

Overview

The five-year Bachelor of Science in Mathematics and Master of Education in Secondary Education program with Teacher Certification in Secondary Education is a combined program between the College of Science and Technology and the College of Education and Human Development. For more information, see the following program pages: Mathematics BS (p. 1665) and Secondary Education/Mathematics Education MEd.

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Mathematics BS/MS

Overview

The +1 Bachelor of Science in Mathematics and Master of Science in Mathematics program is an accelerated program within the College of Science and Technology. To participate in this +1 program, a mathematics major should be enrolled in the BS degree program. Application to continue in the MS program must be made to the graduate chair of the department no later than the first semester of the senior year. In addition to completing the BS requirements, the student must complete four additional graduate-level mathematics courses numbered 5000 and above by the end of her/his senior year. If the General Education and college requirements have also been met, the student will be awarded the BS degree at the conclusion of this portion of the program. All courses must be passed with a grade of C- or better, and no more than two graduate courses can carry a grade less than B- for the student to continue with the MS portion of the program.

+1 Year Course Requirements

The student will take a total of six graduate-level courses, selected to conform to the MS requirements. At the end of the +1 year, the student must either write a master's thesis or pass one of the following examinations:

- Master's Comprehensive Examination in Pure Mathematics
- Master's Comprehensive Examination in Applied Mathematics
- PhD Combined Comprehensive Examination (MS level pass)

For more information, see the following program pages: Mathematics BS (p. 1665) and Mathematics MS.

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Medical 3+4 Program

Overview

The seven-year Bachelor of Arts in any College of Science and Technology major and Doctor of Medicine program is a combined program between the College of Science and Technology and the Lewis Katz School of Medicine.

The program is designed for high-achieving students. Students must apply to be a Temple University Health Scholar through the Office of Pre-Professional Health Advising.

Students who entered Temple University as Health Scholars are able to be considered for early admissions to the Lewis Katz School of Medicine at Temple University as BA/MD Accelerated Option candidates. The 3+4 option is only with Lewis Katz School of Medicine. If interested in applying to other schools, students will need to follow a 4+4 option.

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Guidelines for Completion of the Bachelor of Arts Degree in the College of Science & Technology

- Health Scholar Bachelor of Arts candidates in the College of Science and Technology (CST) must complete all requirements for the major before entering the Lewis Katz School of Medicine.
- College of Science and Technology Health Scholars may count up to 33 of the credit hours from the first year at the Lewis Katz School of Medicine as equivalents of upper-level credits in the College of Science and Technology.
- College of Science and Technology Health Scholars may count up to 33 of the credit hours from the first year at the Lewis Katz School of Medicine to fulfill their general credit hour requirements for the Bachelor of Arts degree in the College of Science and Technology.
- Appropriate course sequences for majors offered by the College of Science and Technology will be available in the Center for Academic Advising and Professional Services (Tuttleman Learning Center, Suite 111) and will be shared with prospective students and current Health Scholars. Advising on progress toward career goal and eventual presentation as a Health Scholar (3+4 or 4+4) will occur through Pre-Professional Health Advising (Mitten Hall, Suite 110).

Academic Plan

Individual academic plans will vary based on previous course work, AP credits, performance on University placement tests and specific undergraduate major. Students who qualify for the 3+4 program will develop an individual academic plan with Pre-Professional Health Advising and a CST academic advisor during the first academic year at Temple University.

Pharmacy 3+4 Program

Overview

The seven-year Bachelor of Arts in any College of Science and Technology major and Doctor of Pharmacy program is a combined program between the College of Science and Technology and the School of Pharmacy. The program is designed for high-achieving students. Students must apply through the Office of Pre-Professional Health Advising.

Students must meet the admissions requirements for early admission to the Temple University School of Pharmacy. The 3+4 option is only with Temple University School of Pharmacy. If interested in applying to other schools, students will need to follow a 4+4 option in order to obtain both a Bachelor of Arts degree and a Doctor of Pharmacy (PharmD) degree.

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Guidelines for Completion of the Bachelor of Arts Degree in the College of Science & Technology

- Bachelor of Arts candidates in the College of Science and Technology (CST) must complete all requirements for the major before entering the School of Pharmacy with the exception of the following:

1. Biology majors may count up to three of the following first year Temple University School of Pharmacy's Pharmaceutical Sciences courses as Biology electives:

PS P155 Principles of Infectious Diseases so long as the student has not previously earned credit for BIOL 3317 General Microbiology;

PS P151 Medicinal Chemistry I or PS P164 Pharmacology so long as the student has not previously earned credit for BIOL 4375 General Biochemistry I;

PS P152 Medicinal Chemistry II so long as the student has not previously earned credit for BIOL 4376 General Biochemistry II.

2. Chemistry majors may count the following first year Temple University School of Pharmacy course as a Chemistry elective:

PS P151 Medicinal Chemistry I so long as the student has not previously earned credit for BIOL 4375 General Biochemistry I/CHEM 4401 Biochemistry I/CHEM 3401 Applications of Biochemistry

- College of Science and Technology students may count up to 33 equivalent credit hours from the first year at the School of Pharmacy as equivalents of upper-level credits in the College of Science and Technology.
- College of Science and Technology students may count up to 33 equivalent credit hours from the first year at the School of Pharmacy to fulfill their general credit hour requirements for the Bachelor of Arts degree in the College of Science and Technology.
- Appropriate course sequences for majors offered by the College of Science and Technology will be available in the Center for Academic Advising and Professional Development (Tuttleman Learning Center, Suite 111) or Pre-Professional Health Advising (Mitten Hall, Suite 110) and will be shared with prospective and current students.

Academic Plan

Individual academic plans will vary based on previous course work, AP credits, performance on University placement tests and specific undergraduate major. Students who qualify for the 3+4 program will develop an individual academic plan with Pre-Professional Health Advising and a CST academic advisor during the first academic year at Temple University.

Physical Therapy 3+3 Program

Overview

The six-year Bachelor of Arts in any College of Science and Technology major and Doctor of Physical Therapy program is a combined program between the College of Science and Technology and the College of Public Health's Doctor of Physical Therapy program. The program is designed for high-achieving students. Students must apply through the Office of Pre-Professional Health Advising.

Students must meet the admissions requirements for early admission to the Doctor of Physical Therapy program in Temple University's College of Public Health. The 3+3 option is only with the Doctor of Physical Therapy program in Temple University's College of Public Health. If interested in applying to other schools, students will need to follow a 4+3 option.

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Guidelines for the Completion of the Bachelor of Arts Degree from the College of Science & Technology

- Bachelor of Arts candidates in the College of Science and Technology (CST) must complete all requirements for their major before entering the Doctor of Physical Therapy (DPT) Program in the College of Public Health (CPH) with the exception of the following:

Biology majors may count one of the following first year DPT Program courses as one of their three required Biology electives:

PHTH 8114 Neuroscience

PHTH 8115 Human Physiology and Pathology II

PHTH 8116 Motor Control and Learning

- CST students may count up to 33 equivalent credit hours from the first year at the DPT Program in the CPH as equivalents of upper-level credits in the College of Science and Technology.
- CST students may count up to 33 equivalent credit hours from the first year at the DPT Program in the CPH to fulfill their general credit hour requirements for the BA degree in the CST.
- Appropriate course sequences for majors offered by the College of Science and Technology will be available in the Center for Academic Advising and Professional Development (Tuttleman Learning Center, Suite 111) or Pre-Professional Health Advising (Mitten Hall, Suite 110) and will be shared with prospective and current students.

Academic Plan

Individual academic plans will vary based on previous course work, AP credits, performance on University placement tests, and specific undergraduate major. Students who qualify for the 3+4 program will develop an individual academic plan with Pre-Professional Health Advising and a CST academic advisor during the first academic year at Temple University.

Physics BA/MEd

Overview

The five-year Bachelor of Arts in Physics and Master of Education in Secondary Education program with Teacher Certification in Secondary Education is a combined program between the College of Science and Technology and the College of Education and Human Development. For more information, see the following program pages: Physics BA (p. 1734) and Secondary Education/Science Education MEd.

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Physics BA/MS

Overview

The +1 Bachelor of Arts in Physics and Master of Science in Physics program is an accelerated program within the College of Science and Technology. This program allows a talented student to obtain a master's degree in one additional year after completion of a bachelor's degree. A physics major may apply for the program during the junior or senior year. Please consult the advisor for details. For more information, see the following program pages: Physics BA (p. 1734) and Physics MS.

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Physics BS/MEd

Overview

The five-year Bachelor of Science in Physics and Master of Education in Secondary Education program with Teacher Certification in Secondary Education is a combined program between the College of Science and Technology and the College of Education and Human Development. For more information, see the following program pages: Physics BS (p. 1738) and Secondary Education/Science Education MEd.

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Physics BS/MS

Overview

The +1 Bachelor of Science in Physics and Master of Science in Physics program is an accelerated program within the College of Science and Technology. This program allows a talented student to obtain a master's degree in one additional year after completion of a bachelor's degree. A physics major may apply for the program during the junior or senior year. Please consult the advisor for details. For more information, see the following program pages: Physics BS (p. 1738) and Physics MS.

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Podiatry 3+4 Program

Overview

The seven-year Bachelor of Arts in any College of Science and Technology major and Doctor of Podiatric Medicine program is a combined program between the College of Science and Technology and Temple University School of Podiatric Medicine. The program is designed for high-achieving students. Students must apply through the Office of Pre-Professional Health Advising.

Students must meet the admissions requirements for early admission to the Temple University School of Podiatric Medicine. The 3+4 option is only with Temple University School of Podiatric Medicine. If interested in applying to other schools, students will need to follow a 4+4 option in order to obtain both a Bachelor's degree and a Doctor of Podiatric Medicine (DPM).

Contact Information

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Guidelines for Completion of the Bachelor of Arts Degree in the College of Science & Technology

- Bachelor of Arts candidates in the College of Science and Technology (CST) must complete all requirements for the degree program before entering the School of Podiatric Medicine with the exception of the following:
 1. Biology majors may use up to three of the following first year School of Podiatry Biomedical Studies (PBMS) courses as replacements for Biology electives:

PBMS P100 Histology as long as the student has not previously earned credit for BIOL 2235 General Histology;
PBMS P102 General Anatomy as long as the student has not previously earned credit for BIOL 2233 Mammalian Anatomy;

PBMS P104 Neurophysiology as long as the student has not previously earned credit for BIOL 3352 Systems Neuroscience or BIOL 3358 Cellular and Molecular Neuroscience;

PBMS P110 Biochemistry as long as the student has not previously earned credit for BIOL 4375 General Biochemistry I;

PBMS P111 Physiology as long as the student has not previously earned credit for BIOL 3334 Mammalian Physiology.

2. Chemistry majors may use up to one of the following first year Temple University School of Podiatry courses as replacements for Chemistry electives:

PBMS P110 Biochemistry as long as the student has not previously earned credit for BIOL 4375 General Biochemistry I or CHEM 4401 Biochemistry I or CHEM 3401 Applications of Biochemistry.

- College of Science and Technology students may count up to 33 equivalent credit hours from the first year at the School of Podiatric Medicine as equivalents of upper-level credits in the College of Science and Technology.
- College of Science and Technology students may count up to 33 equivalent credit hours from the first year at the School of Podiatric Medicine to fulfill their general credit hour requirements for the Bachelor of Arts degree in the College of Science and Technology.
- Appropriate course sequences for majors offered by the College of Science and Technology will be available in the Center for Academic Advising and Professional Development (Tuttleman Learning Center, Suite 111) or Pre-Professional Health Advising (Mitten Hall, Suite 110) and will be shared with prospective and current students.

Academic Plan

Individual academic plans will vary based on previous course work, AP credits, performance on University placement tests, and specific undergraduate major. Students who qualify for the 3+4 program will develop an individual academic plan with Pre-Professional Health Advising and a CST academic advisor during the first academic year at Temple University.

Advanced Core Science Studies Postbaccalaureate Certificate

Overview

The **Postbaccalaureate Certificate in Advanced Core Science Studies** is a postbaccalaureate program for students not enrolled in an undergraduate major who are planning to apply to medical, dental, podiatry, physician assistant, physical therapy or pharmacy school.

The curriculum is designed to prepare students for standardized tests and coursework in health professional school, with small, primarily postbaccalaureate exclusive classes, individual and group academic support sessions and test prep, and full application support including personalized advising, committee letters and mock interviews.

For more information about the program, please visit: <https://postbac.cst.temple.edu/>.

Program Code: ST-ACSS-CRPB

Learn more about the postbaccalaureate certificate in Advanced Core Science Studies.

Certificate Requirements

To earn a Certificate in Advanced Core Science Studies, students must complete the following courses and additional requirements.

Required Courses

The Certificate consists of a set of core course requirements and additional courses in one of 3 tracks based on the anticipated career path.

Track 1: For students interested in pursuing a career as an MD, DO, PharmD, DPM, or OD (26 Total Credit Hours)

Track 2: For students interested in pursuing a career as a DMD or DDS (27 Total Credit Hours)

Track 3: For students interested in pursuing a career as a PA (28 Total Credit Hours)

Residency Requirements: All coursework for the certificate must be completed at Temple while enrolled in the 10-month Post Baccalaureate Pre-Health Program in the College of Science and Technology.

Core Courses

Code	Title	Credit Hours
ACMS 4004	Fundamentals of Physiology for Pre-Health Postbaccalaureates	4
BIOL 4201	The Practice of Health Care: Competencies and Current Topics	1

BIOL 4218	Principles of Medical Genetics for Pre-Health Postbaccalaureates	4
BIOL 4233	Human Anatomy for Pre-Health Postbaccalaureates	4
BIOL 4275	Fundamentals of Medical Biochemistry for Pre-Health Postbaccalaureates	4
CHEM 1055	Introduction to Problem Solving and Logical Thinking for Pre-Health Postbaccalaureates	1
Total Credit Hours		18

Track Courses

Track 1: Additional Courses

Students interested in pursuing a career as an MD, DO, PharmD, DPM, or OD should complete the following courses:

Code	Title	Credit Hours
ACMS 4006	Cellular and Molecular Basis of Immunology and Microbiology for Pre-Health Postbaccalaureates	4
BIOL 4268	Fundamentals of Cell and Cancer Biology for Pre-Health Postbaccalaureates	4
Total Credit Hours		8

Track 2: Additional Courses

Students interested in pursuing a career as a DMD or DDS should complete the following courses:

Code	Title	Credit Hours
ACMS 4006	Cellular and Molecular Basis of Immunology and Microbiology for Pre-Health Postbaccalaureates	4
BIOL 4268	Fundamentals of Cell and Cancer Biology for Pre-Health Postbaccalaureates	4
CHEM 1005	Practice and Development of Spatial Visualization Skills	1
Total Credit Hours		9

Track 3: Additional Courses

Students interested in pursuing a career as a PA should complete the following courses:

Code	Title	Credit Hours
ACMS 4005	Fundamentals of Physiology Lab for Pre-Health Postbaccalaureates	1
BIOL 1004	Medical Terminology for Pre-Health Postbaccalaureates	1
BIOL 2001	Clinical Microbiology	4
BIOL 4234	Human Anatomy Lab for Pre-Health Postbaccalaureates	1
MATH 1013	Elements of Statistics	3
Total Credit Hours		10

Additional Requirements

1. Attend the appropriate standardized test preparatory course(s).
2. Participate in clinical enhancement and/or volunteer opportunities.
3. Attend mandatory advising sessions.

Applied Mathematics BS

Overview

The **Bachelor of Science in Applied Mathematics**, offered by the Department of Mathematics, focuses on mathematical and computational methods applicable in the sciences, engineering and industry. In particular, this degree is suitable preparation for professions featuring sophisticated mathematical modeling and/or scientific computing. This degree is also suitable preparation for graduate study in applied mathematics or related disciplines.

Campus Location: Main

Program Code: ST-APMA-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.25 cumulative GPA;
- achieve a minimum 3.50 GPA in the Mathematics courses required for the major;
- successful completion of MATH 3098 instead of MATH 3096; and
- achieve a minimum 3.50 GPA in the following courses:
 - MATH 3098
 - MATH 3141
 - MATH 3142
 - MATH 4051
 - Any additional courses from the following:
 - MATH 3043
 - MATH 3044
 - MATH 3101
 - Any 4000-level course other than Individual Study.

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Learn more about the Bachelor of Science in Applied Mathematics.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
MATH 3096	Introduction to Modern Algebra	3
MATH 3098	Modern Algebra	3
MATH 4096	Senior Problem Solving	3
SCTC 2396	Writing for Science and Technology	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).

- A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (71-73 s.h.)

At least 9 courses required for the major must be completed at Temple. At least 8 Math courses must be completed at Temple.

Code	Title	Credit Hours
Computer Programming courses		
MATH 1033	Computing in MATLAB	1.5
MATH 1034	Applications in MATLAB	1.5
Mathematics courses		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
MATH 2045	Differential Equations with Linear Algebra	4
MATH 2111	Basic Concepts of Math	3
MATH 2121	Mathematical Modeling and Simulation	3
MATH 3031	Probability Theory I	3
MATH 3043	Numerical Analysis I (F)	4
MATH 3044	Numerical Analysis II (S)	3
MATH 3051	Theoretical Linear Algebra	4
Select one of the following:		3
MATH 3137	Real & Complex Analysis I	
MATH 3141	Advanced Calculus I (F)	
Select one of the following:		3
MATH 3138	Real & Complex Analysis II	
MATH 3142	Advanced Calculus II (S)	
MATH 4041	Partial Differential Equations	3
MATH 4043	Applied Mathematics (F)	3
Two Mathematics electives at the 3000+ level or above - select from the following: ¹		6-8
MATH 3032	Mathematical Statistics	
MATH 4033	Probability Theory II	
MATH 4051	Complex Analysis	
Physics courses		
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	
Writing-Intensive Courses (Mathematics/College of Science & Technology)		
Select one of the following:		3
MATH 3096	Introduction to Modern Algebra	
MATH 3098	Modern Algebra	

SCTC 2396	Writing for Science and Technology	
MATH 4096	Senior Problem Solving	3
Total Credit Hours		71-73

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

Other courses are possible, subject to approval by a Mathematics faculty advisor.

Suggested Academic Plan

Bachelor of Science in Applied Mathematics

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MATH 1033	Computing in MATLAB	1.5
MATH 1034	Applications in MATLAB	1.5
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
SCTC 1001	CST First Year Seminar	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		16
Spring		
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Elective		4
Credit Hours		15
Year 2		
Fall		
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
MATH 2045	Differential Equations with Linear Algebra	4
MATH 2111	Basic Concepts of Math	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Elective		2
Credit Hours		16

Spring		
MATH 2121	Mathematical Modeling and Simulation	3
MATH 3031	Probability Theory I	3
Select one of the following:		3
MATH 3096	Introduction to Modern Algebra	
MATH 3098	Modern Algebra	
SCTC 2396	Writing for Science and Technology	
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
MATH 3043	Numerical Analysis I (F)	4
Select one of the following:		3
MATH 3137	Real & Complex Analysis I	
MATH 3141	Advanced Calculus I (F)	
3000+ Math Elective ¹		3-4
Elective		3
Elective		2-1
Credit Hours		15
Spring		
MATH 3044	Numerical Analysis II (S)	3
Select one of the following:		3
MATH 3138	Real & Complex Analysis II	
MATH 3142	Advanced Calculus II (S)	
MATH 3051	Theoretical Linear Algebra	4
GenEd Breadth Course		3-4
Elective		3-2
Credit Hours		16
Year 4		
Fall		
MATH 4043	Applied Mathematics (F)	3
3000+ Math Elective ¹		3-4
GenEd Breadth Course		3
GenEd Breadth Course		3
Elective		3-2
Credit Hours		15
Spring		
MATH 4041	Partial Differential Equations	3
MATH 4096	Senior Problem Solving	3
Elective		3
Elective		3
Elective		3
Credit Hours		15
Total Credit Hours		123
Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

1

Other courses are possible, subject to approval by a Mathematics faculty advisor.

Astrophysics Certificate

Overview

Student interest in astrophysical phenomenon has always been strong, and is on the rise with recent developments, such as the James Webb Space Telescope, NASA's Artemis Lunar program, black hole imaging and more. Astrophysics is a burgeoning field that not only captures the public interest, but has implications for terrestrial problems as we observe extreme environments in "nature's laboratory." In the last two decades the Nobel prize in physics has been awarded seven times for astrophysical discoveries. Offered by the Department of Physics, the **Certificate in Astrophysics** has scientific merit, student interest and employment value. The certificate provides students with the opportunity to do bright sky astronomy in a large city and to design and build instruments and analyze resulting data.

This certificate is open to all students.

Campus Location: Main

Program Code: ST-APHY-CERT

Contact Information

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Certificate Requirements

All courses listed below have prerequisites. For more information, please check the course descriptions or ask an advisor.

Students desiring a certificate in Astrophysics are required to satisfy the following:

Code	Title	Credit Hours
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I	
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II	
PHYS 2796	Introduction to Modern Physics ¹	4
PHYS 3424	Introduction to Astrophysics	3
Select one of the following:		2-4
PHYS 1004	Introduction to Astronomy	
PHYS 1454	Observational Astronomy Through Design	
PHYS 4091	Undergraduate Research	
Total Credit Hours		17-19

1

PHYS 2796 has a concurrent prerequisite of MATH 2043 or MATH 2943.

Astrophysics Minor

Overview

Student interest in astrophysical phenomenon has always been strong, and is on the rise with recent developments, such as the James Webb Space Telescope, NASA's Artemis Lunar program, black hole imaging and more. Astrophysics is a burgeoning field that not only captures the public interest, but has implications for terrestrial problems as we observe extreme environments in "nature's laboratory." In the last two decades the Nobel prize in physics has been awarded seven times for astrophysical discoveries. Offered by the Department of Physics, the **Minor in Astrophysics** has scientific merit, student interest and employment value. The certificate provides students with the opportunity to do bright sky astronomy in a large city and to design and build instruments and analyze resulting data.

This certificate is open to all students.

Campus Location: Main

Contact Information

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215-204-2642
matthew.newby@temple.edu

Minor Requirements

All courses listed below have prerequisites. For more information, please check the course descriptions or ask an advisor.

Students desiring a minor in Astrophysics are required to satisfy the following:

Code	Title	Credit Hours
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I	
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II	
PHYS 2796	Introduction to Modern Physics ¹	4
PHYS 3424	Introduction to Astrophysics	3
Select two of the following:		5-7
PHYS 1004	Introduction to Astronomy	
PHYS 1454	Observational Astronomy Through Design	
PHYS 4091	Undergraduate Research	
Total Credit Hours		20-22

1

PHYS 2796 has a concurrent prerequisite of MATH 2043 or MATH 2943.

Basic Core Science Studies Postbaccalaureate Certificate

Overview

The **Postbaccalaureate Certificate in Basic Core Science Studies** is a postbaccalaureate program for students not enrolled in an undergraduate major who are planning to apply to medical, dental, podiatry, physician assistant, physical therapy or pharmacy school.

The curriculum is designed to prepare students for standardized tests and coursework in health professional school, with small, primarily postbaccalaureate exclusive classes, individual and group academic support sessions and test prep, and full application support including personalized advising, committee letters and mock interviews.

For more information about the program, please visit: <https://postbac.cst.temple.edu/>.

Program Code: ST-BCSS-CRPB

Learn more about the postbaccalaureate certificate in Basic Core Science Studies.

Certificate Requirements

To earn a Certificate in Basic Core Science Studies, students must complete the following required courses and additional requirements.

Required Courses

The Certificate consists of a set of core course requirements and additional courses in one of 3 tracks based on the anticipated career path.

Track 1: For students interested in pursuing a career as an MD, DO, PharmD, DPM, or OD (37 Total Credit Hours)

Track 2: For students interested in pursuing a career as a DMD or DDS (38 Total Credit Hours)

Track 3: For students interested in pursuing a career as a PA (39 Total Credit Hours)

Residency Requirements: All coursework for the certificate must be completed at Temple while enrolled in the 12-month Post Baccalaureate Pre-Health Program in the College of Science and Technology.

Core Courses

Code	Title	Credit Hours
BCMS 4003	Fundamentals of Biochemistry for Pre-Health Postbaccalaureates	4
CHEM 1051 & CHEM 1053	General Chemistry I for Pre-Health Postbaccalaureates and General Chemistry I Lab for Pre-Health Postbaccalaureates	4
CHEM 1052 & CHEM 1054	General Chemistry II for Pre-Health Postbaccalaureates and General Chemistry II Lab for Pre-Health Postbaccalaureates	4
CHEM 2251 & CHEM 2253	Organic Chemistry for Pre-Health Postbaccalaureates and Organic Chemistry Lab for Pre-Health Postbaccalaureates	7
Total Credit Hours		19

Track Courses

Track 1: Additional Courses

Students interested in pursuing a career as an MD, DO, PharmD, DPM, or OD should complete the following courses:

Code	Title	Credit Hours
BIOL 2212	Introduction to Biology I for Pre-Health Postbaccalaureates	4
BIOL 2211	Introduction to Biology II for Pre-Health Postbaccalaureates	4
BIOL 4201	The Practice of Health Care: Competencies and Current Topics	1
CHEM 1055	Introduction to Problem Solving and Logical Thinking for Pre-Health Postbaccalaureates	1
PHYS 1031	Physics I for Pre-Health Postbaccalaureates	4
PHYS 1032	Physics II for Pre-Health Postbaccalaureates	4
Total Credit Hours		18

Track 2: Additional Courses

Students interested in pursuing a career as a DMD or DDS should complete the following courses:

Code	Title	Credit Hours
BIOL 2212	Introduction to Biology I for Pre-Health Postbaccalaureates	4
BIOL 2211	Introduction to Biology II for Pre-Health Postbaccalaureates	4
BIOL 4201	The Practice of Health Care: Competencies and Current Topics	1
PHYS 1031	Physics I for Pre-Health Postbaccalaureates	4
PHYS 1032	Physics II for Pre-Health Postbaccalaureates	4
CHEM 1005	Practice and Development of Spatial Visualization Skills	1

CHEM 1055	Introduction to Problem Solving and Logical Thinking for Pre-Health Postbaccalaureates	1
Total Credit Hours		19

Track 3: Additional Courses

Students interested in pursuing a career as a PA should complete the following courses:¹

Code	Title	Credit Hours
ACMS 4004	Fundamentals of Physiology for Pre-Health Postbaccalaureates	4
ACMS 4005	Fundamentals of Physiology Lab for Pre-Health Postbaccalaureates	1
BIOL 1004	Medical Terminology for Pre-Health Postbaccalaureates	1
BIOL 2001	Clinical Microbiology	4
BIOL 4201	The Practice of Health Care: Competencies and Current Topics	1
BIOL 4233	Human Anatomy for Pre-Health Postbaccalaureates	4
BIOL 4234	Human Anatomy Lab for Pre-Health Postbaccalaureates	1
CHEM 1055	Introduction to Problem Solving and Logical Thinking for Pre-Health Postbaccalaureates	1
MATH 1013	Elements of Statistics	3
Total Credit Hours		20

1

Students interested in Track 3 (career as a PA) have already taken Biology I and II before entering the program.

Additional Requirements

1. Attend the appropriate standardized test preparatory course(s).
2. Participate in clinical enhancement and/or volunteer opportunities.
3. Attend mandatory advising sessions.

Biochemistry BS

Overview

The Department of Chemistry is one of the oldest departments in the university and has a long record of preparing students for careers in science. Since a significant portion of America's chemical industry is centered in the Philadelphia region, there is a wide range of career opportunities locally available. Although most of our students have gone on to medicine, dentistry or the chemical industry, recent graduates have also gone on to careers in law, forensics and even art restoration.

The **Bachelor of Science in Biochemistry** prepares students for excellence in graduate or medical school, and employment in the chemical, biotechnological or pharmaceutical industries. Students learn a wide array of topics in biology, chemistry, mathematics and physics. In upper-division studies, Biochemistry majors learn to apply biochemical principles to real-life situations via problem-based approaches in their courses. Laboratory courses give students the tools they will need as biochemists to pursue research. Accomplished majors are encouraged to pursue independent research with a professor, and to present their work internally and at national meetings.

Campus Location: Main

Program Code: ST-BIOC-BS

Distinction in Major

To graduate with distinction in this major, a student must achieve a minimum 3.33 GPA in all the Biology and Chemistry courses required for the major.

Accelerated Programs

Accelerated programs provide a pathway for students to pursue both an undergraduate degree and an advanced degree in a shorter amount of time. Below is a list of available accelerated programs for students in the BS in Biochemistry.

- BS in Biochemistry / PSM in Bioinformatics and Biological Data Science
- BS in Biochemistry / PSM in Bioinnovation
- BS in Biochemistry / PSM in Biotechnology
- BS in Biochemistry / PSM in Forensic Chemistry

Undergraduate Contact Information

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Learn more about the Bachelor of Science in Biochemistry.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)
 - Students must complete all University requirements including those listed below.
 - All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
BIOL 2297	Research Techniques in Genetics (S)	3
CHEM 4196	Techniques of Chemical Measurement II	5
CHEM 4496	Research Techniques in Biochemistry	4

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (79-83 s.h.)

At least 10 courses required for the major must be completed at Temple. At least 4 Biology and 4 Chemistry courses must be completed at Temple.

Code	Title	Credit Hours
Chemistry		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2211 & CHEM 2213	Organic Chemistry for Majors I and Organic Majors Laboratory I (F)	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I (F)	
Select one of the following:		4
CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II	
CHEM 2212 & CHEM 2214	Organic Chemistry for Majors II and Organic Majors Laboratory II (S)	
CHEM 2922 & CHEM 2924	Organic Chemistry for Honors II and Organic Honors Laboratory II (S)	
CHEM 3103 & CHEM 3105	Techniques of Chemical Measurement I and Introduction to Chemical Research Techniques	4
CHEM 3405	Physical Chemistry of Biomolecules	3
CHEM 4401	Biochemistry I	3
CHEM 4496	Research Techniques in Biochemistry	4
Biology		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology Honors Introduction to Organismal Biology	4
Select one of the following:		4
BIOL 1112	Introduction to Biomolecules, Cells and Genomes	

or BIOL 1912	Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112	Introduction to Cellular and Molecular Biology	
or BIOL 2912	Honors Introduction to Cellular and Molecular Biology	
BIOL 2207	Genetics (S)	3
BIOL 2297	Research Techniques in Genetics (S) ¹	3
BIOL 3204	Cell Structure and Function (F)	4
BIOL 3324	Molecular Biology (S)	3
BIOL 4376	General Biochemistry II (F)	3
Biochemistry Electives		
Select three of the following: ¹		9-13
BIOL 3113	Genome Analytics	
BIOL 3128	Genomics and Infectious Disease Dynamics (F)	
BIOL 3201	Human Genetics (F)	
BIOL 3212	Introduction to Bioinformatics and Computational Biology	
BIOL 3225	Evolutionary Genetics (S)	
BIOL 3232	Behavioral Genetics (F)	
BIOL 3243	Parasitology (Not offered every year)	
BIOL 3265	Developmental Biology (F)	
BIOL 3301	Advanced Cell Biology (S)	
BIOL 3317	General Microbiology (S)	
BIOL 3322	Biology of Plants (F)	
BIOL 3325	Research Techniques in Molecular Biology (S)	
BIOL 3327	Immunology (S)	
BIOL 3328	Virology (F)	
BIOL 3329	Developmental Genetics (Not offered every year)	
BIOL 3333	Advanced Techniques in Microscopy (S)	
BIOL 3334	Mammalian Physiology (S)	
BIOL 3352	Systems Neuroscience	
BIOL 3356	Organization and Development of the Nervous System (S)	
BIOL 3358	Cellular and Molecular Neuroscience (S)	
BIOL 3361	Molecular Neuropharmacology (Not offered every year)	
BIOL 3367	Endocrinology (F)	
BIOL 3368	Biology of Cancer (S)	
BIOL 3371	Cell Proliferation (S)	
BIOL 3373	Cell Signaling (S)	
BIOL 3374	Physical Biochemistry (S)	
BIOL 3379	Biotechnology (S)	
BIOL 3380	Contemporary Biology	
BIOL 3396	Scientific Writing for Biology: The Art of Communicating (S)	
BIOL 3403	Genomic Biology	
BIOL 4338	Epigenetics (Not offered every year)	
BIOL 4341	Genome Editing	
BIOL 4364	Biochemistry of Embryogenesis (F)	
BIOL 4365	Evolutionary Developmental Biology: Evo-Devo (S)	
BIOL 4366	Stem Cell Biology (F)	
BIOL 4375	General Biochemistry I (F)	
BIOL 4483	Accelerated Research in Biochemistry ²	
BIOL 4491	Research in Biochemistry ²	
CHEM 3001	Inorganic Chemistry	
CHEM 3301	Physical Chemistry Lecture I	
CHEM 3302	Physical Chemistry Lecture II	
CHEM 3881	Cooperative Research ²	

CHEM 3891	Undergraduate Research ²	
CHEM 4000-4800		
CHEM 4881	Cooperative Research ²	
CHEM 4891	Undergraduate Research ²	
MATH 2043	Calculus III	
or MATH 2943	Honors Calculus III	
Mathematics		
MATH 1041	Calculus I	4
or MATH 1941	Honors Calculus I	
MATH 1042	Calculus II	4
or MATH 1942	Honors Calculus II	
Physics		
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	
Total Credit Hours		79-83

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

1

This course has a co-requisite of BIOL 2207.

2

A minimum of 6 credits of these research courses, in any combination, may be used to fulfill one of the Biochemistry Electives.

Note: Grades of C- or higher are required unless otherwise specified in all courses for the major, including course prerequisites. Most research and Independent Study courses are not available for major credit, such as:

Code	Title	Credit Hours
BIOL 3091	Research Methods	3
BIOL 3681	Cooperative Studies	2 to 4
BIOL 3685	Externship Studies	3
BIOL 4291	Extrdepartmental Research	1 to 4
BIOL 4391	Accelerated Research in Biology	1-4
BIOL 4591	Research in Neuroscience	1 to 4

Suggested Academic Plan

All prospective majors should schedule an appointment with one of the departmental advisors (names of current faculty advisors are available in the Overview section) to plan a program of study. The recommended order of courses for the major is listed below; a different order is acceptable as long as the student adheres to prerequisite requirements.

Bachelor of Science in Biochemistry

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
SCTC 1001	CST First Year Seminar	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Elective		2
Credit Hours		15
Spring		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology or Honors Introduction to Organismal Biology	4
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		15
Year 2		
Fall		
Select one of the following:		4
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes or Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology or Honors Introduction to Cellular and Molecular Biology	
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2211 & CHEM 2213	Organic Chemistry for Majors I and Organic Majors Laboratory I (F)	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I (F)	
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		15
Spring		
BIOL 2207	Genetics (S)	3

BIOL 2297	Research Techniques in Genetics (S)	3
Select one of the following:		4
CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II	
CHEM 2212 & CHEM 2214	Organic Chemistry for Majors II and Organic Majors Laboratory II (S)	
CHEM 2922 & CHEM 2924	Organic Chemistry for Honors II and Organic Honors Laboratory II (S)	
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	
Elective		2
Credit Hours		16
Year 3		
Fall		
BIOL 3204	Cell Structure and Function (F)	4
CHEM 3103	Techniques of Chemical Measurement I ¹	3
CHEM 3105	Introduction to Chemical Research Techniques ¹	1
Biochemistry Elective ²		3-4
GenEd Breadth Course		4-3
Credit Hours		15
Spring		
CHEM 3405	Physical Chemistry of Biomolecules ²	3
CHEM 4401	Biochemistry I	3
GenEd Breadth Course		3-4
GenEd Breadth Course		3
Elective		3-2
Credit Hours		15
Year 4		
Fall		
BIOL 4376	General Biochemistry II (F)	3
Biochemistry Elective ²		3-4
Biochemistry Elective ²		3-5
GenEd Breadth Course		3
Elective		4-1
Credit Hours		16
Spring		
CHEM 4496	Research Techniques in Biochemistry	4
BIOL 3324	Molecular Biology	3
GenEd Breadth Course		3
Elective		6
Credit Hours		16
Total Credit Hours		123

1

It is strongly encouraged that CHEM 3103/CHEM 3105 be taken prior to any laboratory courses numbered above CHEM 3105.

2

Biochemistry majors who want to take CHEM 4196 as a Biochemistry elective **must** take the CHEM 3301-CHEM 3302 sequence as CHEM 3405 does not serve as a prerequisite for these courses or any other course that has CHEM 3301 as a prerequisite or co-requisite.

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

Biochemistry Electives

Code	Title	Credit Hours
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Select three of the following:

9-13

BIOL 3113	Genome Analytics	
BIOL 3128	Genomics and Infectious Disease Dynamics (F)	
BIOL 3201	Human Genetics (F)	
BIOL 3212	Introduction to Bioinformatics and Computational Biology	
BIOL 3225	Evolutionary Genetics (S)	
BIOL 3232	Behavioral Genetics (F)	
BIOL 3243	Parasitology (Not offered every year)	
BIOL 3265	Developmental Biology (F)	
BIOL 3301	Advanced Cell Biology (S)	
BIOL 3317	General Microbiology (S)	
BIOL 3322	Biology of Plants (F)	
BIOL 3325	Research Techniques in Molecular Biology (S)	
BIOL 3327	Immunology (S)	
BIOL 3328	Virology (F)	
BIOL 3329	Developmental Genetics (Not offered every year)	
BIOL 3333	Advanced Techniques in Microscopy (S)	
BIOL 3334	Mammalian Physiology (S)	
BIOL 3352	Systems Neuroscience	
BIOL 3356	Organization and Development of the Nervous System (S)	
BIOL 3358	Cellular and Molecular Neuroscience (S)	
BIOL 3361	Molecular Neuropharmacology (Not offered every year)	
BIOL 3367	Endocrinology (F)	
BIOL 3368	Biology of Cancer (S)	
BIOL 3371	Cell Proliferation (S)	
BIOL 3373	Cell Signaling (S)	
BIOL 3374	Physical Biochemistry (S)	
BIOL 3379	Biotechnology (S)	
BIOL 3380	Contemporary Biology	
BIOL 3396	Scientific Writing for Biology: The Art of Communicating (S)	
BIOL 3403	Genomic Biology	
BIOL 4338	Epigenetics (Not offered every year)	
BIOL 4341	Genome Editing	
BIOL 4364	Biochemistry of Embryogenesis (F)	
BIOL 4365	Evolutionary Developmental Biology: Evo-Devo (S)	
BIOL 4366	Stem Cell Biology (F)	
BIOL 4375	General Biochemistry I (F)	
BIOL 4483	Accelerated Research in Biochemistry ¹	
BIOL 4491	Research in Biochemistry ¹	
CHEM 3001	Inorganic Chemistry	
CHEM 3301	Physical Chemistry Lecture I	
CHEM 3302	Physical Chemistry Lecture II	
CHEM 3881	Cooperative Research ¹	
CHEM 3891	Undergraduate Research ¹	

CHEM 4000-4800	
CHEM 4881	Cooperative Research ¹
CHEM 4891	Undergraduate Research ¹
MATH 2043	Calculus III
or MATH 2943	Honors Calculus III

1

A minimum of 6 credits of these research courses, in any combination, may be used to fulfill one of the Biochemistry Electives.

Biology BA

Overview

Biology spans a continuum of organization from molecules and cells to individuals and ecosystems. The Department of Biology offers programs designed to give students a broad base, while allowing a measure of sub-field specialization. All Biology majors are required to take a two-semester series of "Introduction to Biology" classes, plus a course in Genetics. In addition, students have the choice of Cell Biology, Biochemistry, or Molecular Biology, and Ecology or Evolution as part of their core program requirements, followed by upper-level electives.

The **Bachelor of Arts in Biology**, which also provides the essential background for professional schools, is appropriate for those who are planning for careers in fields where a science background with additional breadth is advantageous.

Campus Location: Main

Program Code: ST-BIOL-BA

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.2 cumulative GPA;
- achieve a minimum 3.2 major GPA;
- successfully complete BIOL 4391 Accelerated Research in Biology or BIOL 4291 Extradepartmental Research for a total of 6 credits over two semesters;
- write a final research paper; and
- present their research at a departmental research poster session.

Accelerated Programs

Accelerated programs provide a pathway for students to pursue both an undergraduate degree and an advanced degree in a shorter amount of time. Below is a list of available accelerated programs for students in the BA in Biology.

- BA in Biology / MEd in Middle Grades Education with a Concentration in Science
- BA in Biology / MEd in Middle Grades Education with a Concentration in Science and Language Arts
- BA or BS in Biology / PSM in Scientific Writing
- BA or BS in Biology / PSM in Bioinformatics and Biological Data Science
- BA or BS in Biology / PSM in Bioinnovation
- BA or BS in Biology / PSM in Biotechnology
- Dental 3+4 Program (p. 1438)
- Medical 3+4 Program (p. 1443)
- Pharmacy 3+4 Program (p. 1444)
- Physical Therapy 3+3 Program (p. 1445)
- Podiatry 3+4 Program (p. 1447)

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Learn more about the Bachelor of Arts in Biology.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Arts Requirements

Summary of Requirements for the Degree

1. University Requirements

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
BIOL 2297	Research Techniques in Genetics (S)	3
BIOL 3396	Scientific Writing for Biology: The Art of Communicating	3
BIOL 4396	Advanced Study in Biology	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
 - A minimum of 6 of these credits must be upper-level (courses numbered 2000 and above) CLA credits.
- Successful completion or waiver from the second level of a foreign language.
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Arts (64-68 s.h.)

At least 7 courses required for the major must be completed at Temple. At least 4 Biology courses must be completed at Temple.

Code	Title	Credit Hours
Biology		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology Honors Introduction to Organismal Biology	4
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes Honors Introduction to Biomolecules, Cells and Genomes	4
BIOL 2207	Genetics (S)	3
BIOL 2297	Research Techniques in Genetics (S) ¹	3

Select one of the following:		3
BIOL 2227	Principles of Ecology	
BIOL 3101	Evolution (F)	
Select one of the following: ²		3-4
BIOL 3204	Cell Structure and Function (F)	
BIOL 3324	Molecular Biology	
BIOL 4375	General Biochemistry I	
Select 3 Biology Electives numbered 2200 and above ^{3, 4}		9-12
Chemistry		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I (F)	
Select one of the following:		4
CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II	
CHEM 2922 & CHEM 2924	Organic Chemistry for Honors II and Organic Honors Laboratory II (S)	
College of Science and Technology		
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
Mathematics		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
Select one of the following:		4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
Physics		
Select one of the following:		4
PHYS 1021	Introduction to General Physics I	
PHYS 1061 or PHYS 1961	Elementary Classical Physics I Honors Elementary Classical Physics I	
PHYS 2021 or PHYS 2921	General Physics I Honors General Physics I	
Select one of the following:		4
PHYS 1022	Introduction to General Physics II	
PHYS 1062 or PHYS 1962	Elementary Classical Physics II Honors Elementary Classical Physics II	
PHYS 2022 or PHYS 2922	General Physics II Honors General Physics II	

Total Credit Hours**64-68**

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

This course has a co-requisite of BIOL 2207.

2

Only one of these courses need be selected to meet the requirement of the major. If additional courses from this group are taken they may be used to fulfill the requirement for upper-level electives.

3

See course descriptions for exceptions.

4

At least one upper-level biology elective must be writing-intensive.

The research and independent study courses shown below do not count as Biology electives, but they may count as free elective credits toward graduation. Most research courses can only be taken ONCE for a letter grade. Check individual course descriptions for details and/or exceptions.

Code	Title	Credit Hours
BIOL 2082	Independent Research I	1 to 4
BIOL 3082	Independent Research II	1 to 4
BIOL 3181	Cooperative Research in Biochemistry	3
BIOL 3681	Cooperative Studies	2 to 4
BIOL 3685	Externship Studies	3
BIOL 4291	Extrdepartmental Research	1 to 4
BIOL 4391	Accelerated Research in Biology	1 to 4
BIOL 4483	Accelerated Research in Biochemistry	3
BIOL 4491	Research in Biochemistry	3
BIOL 4591	Research in Neuroscience	1 to 4

Note: Grades of C- or higher are required unless otherwise specified in all courses for the major, including course prerequisites. The College of Science and Technology requires that students have a GPA of at least 2.00 overall and at least 2.00 in the courses applicable to their major and/or minor GPA to graduate.

A total of up to 3 credits of Biology research courses numbered lower than 4000 (to include: BIOL 2082, BIOL 3082, BIOL 3181, BIOL 3281, and BIOL 3681) may be taken for a letter grade. Any additional credits in research courses in this category can be taken only on a CR/NC basis.

Suggested Academic Plan

Bachelor of Arts in Biology

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology or Honors Introduction to Organismal Biology	4
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
SCTC 1001	CST First Year Seminar	1
GenEd Breadth Course		3
Credit Hours		15
Spring		
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes or Honors Introduction to Biomolecules, Cells and Genomes	4
Select one of the following:		4

CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I	
Select one of the following:		4
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		16
Year 2		
Fall		
Select one of the following:		3
BIOL 2227	Principles of Ecology	
BIOL 3101	Evolution (F)	
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3-4
Elective		2-1
Credit Hours		15
Spring		
BIOL 2207	Genetics (S)	3
BIOL 2297	Research Techniques in Genetics (S)	3
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I	
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Credit Hours		16
Year 3		
Fall		
Select one of the following: ¹		3-4
BIOL 3204	Cell Structure and Function (F)	
Elective		
Select one of the following:		4
CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II	
CHEM 2922 & CHEM 2924	Organic Chemistry for Honors II and Organic Honors Laboratory II	
Select one of the following:		4
PHYS 1021	Introduction to General Physics I	
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	

PHYS 2021 or PHYS 2921	General Physics I or Honors General Physics I	
Foreign Language 1001 - First Level		4
Elective		1-0
Credit Hours		16
Spring		
Select one of the following: ¹		3
BIOL 3324	Molecular Biology	
BIOL 4375	General Biochemistry I	
Elective		
Select one of the following:		4
PHYS 1022	Introduction to General Physics II	
PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	
PHYS 2022 or PHYS 2922	General Physics II or Honors General Physics II	
Upper-level Biology Elective (numbered 2200 and above) ^{2, 3}		3-4
Foreign Language 1002 - Second Level		4
Elective		1-0
Credit Hours		15
Year 4		
Fall		
Upper-level Biology Elective (numbered 2200 and above) ^{2, 3}		3-4
Upper-level CLA Course (numbered 2000 and above)		3
GenEd Breadth Course		3-4
GenEd Breadth Course		3
Elective		3-1
Credit Hours		15
Spring		
Upper-level Biology Elective (numbered 2200 and above) ^{2, 3}		3-4
Upper-level CLA Course (numbered 2000 and above)		3
Elective		3
Elective		3
Elective		3-2
Credit Hours		15
Total Credit Hours		123
Code	Title	Credit Hours

(F) - Fall only course

(S) - Spring only course

1

This program requires only one of the following courses: BIOL 3204, BIOL 3324 or BIOL 4375. Note that due to prerequisite requirements BIOL 3324 and BIOL 4375 are shown in the next term of the suggested academic plan. If BIOL 3204 is completed it is not necessary to take BIOL 3324 or BIOL 4375 as the program only requires one of these three courses. If taken in addition to BIOL 3204 these courses can be used to fulfill the upper-level biology electives (numbered 2200 and above) required by the program.

2

See course descriptions for exceptions. If the student has taken the necessary prerequisite courses, some of the Biology elective courses may be taken before the Spring semester of Year 3.

3

Select an upper-level biology elective (numbered 2200 and above). At least one of the electives must be a writing-intensive (WI) course.

Biology BS

Overview

Biology spans a continuum of organization from molecules and cells to individuals and ecosystems. The Department of Biology offers programs designed to give students a broad base, while allowing a measure of sub-field specialization. All Biology majors are required to take a two-semester series of "Introduction to Biology" classes, plus a course in Genetics. In addition, students have the choice of Cell Biology, Biochemistry, or Molecular Biology, and Ecology or Evolution as part of their core program requirements, followed by upper-level electives.

The **Bachelor of Science in Biology** provides a strong preparation for those wishing to attend professional or graduate school in biology or related disciplines such as cell or molecular biology, ecology, bioinformatics, biochemistry, biophysics, medicine, pharmacy, dentistry and allied health fields. It is also recommended for those who intend to enter the scientific workforce upon completion of a bachelor's degree.

Campus Location: Main

Program Code: ST-BIOL-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.2 cumulative GPA;
- achieve a minimum 3.2 major GPA;
- successfully complete BIOL 4391 Accelerated Research in Biology or BIOL 4291 Extradepartmental Research for a total of 6 credits over two semesters;
- write a final research paper; and
- present their research at a departmental research poster session.

Accelerated Programs

Accelerated programs provide a pathway for students to pursue both an undergraduate degree and an advanced degree in a shorter amount of time. Below is a list of available accelerated programs for students in the BS in Biology.

- BS in Biology / MEd in Middle Grades Education with a Concentration in Science
- BS in Biology / MEd in Middle Grades Education with a Concentration in Mathematics and Science
- BA or BS in Biology / PSM in Scientific Writing
- BA or BS in Biology / PSM in Bioinformatics and Biological Data Science
- BA or BS in Biology / PSM in Bioinnovation
- BA or BS in Biology / PSM in Biotechnology

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Learn more about the Bachelor of Science in Biology.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
BIOL 2297	Research Techniques in Genetics (S)	3
BIOL 3396	Scientific Writing for Biology: The Art of Communicating	3
BIOL 4396	Advanced Study in Biology	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (73-80 s.h.)

At least 9 courses required for the major must be completed at Temple. At least 6 Biology courses must be completed at Temple.

Code	Title	Credit Hours
Biology		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology Honors Introduction to Organismal Biology	4
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes Honors Introduction to Biomolecules, Cells and Genomes	4
BIOL 2207	Genetics (S)	3
BIOL 2297	Research Techniques in Genetics (WI, S) ¹	3
Select one of the following:		3
BIOL 2227	Principles of Ecology	
BIOL 3101	Evolution (F)	
Select one of the following: ²		3-4
BIOL 3204	Cell Structure and Function (F)	
BIOL 3324	Molecular Biology	
BIOL 4375	General Biochemistry I	
Select 6 Biology Electives numbered 2200 and above ^{3, 4, 5}		18-24
Chemistry		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	

Select one of the following: 4

CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)

Select one of the following: 4

CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I (F)

Select one of the following: 4

CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II
CHEM 2922 & CHEM 2924	Organic Chemistry for Honors II and Organic Honors Laboratory II (S)

College of Science and Technology

SCTC 1013 Elements of Data Science for the Physical and Life Sciences 3

Mathematics

MATH 1041 Calculus I 4
or MATH 1941 Honors Calculus I

Select one of the following: 4

MATH 1042 or MATH 1942	Calculus II Honors Calculus II
MATH 1044	Introduction to Probability and Statistics for the Life Sciences

Physics

Select one of the following: 4

PHYS 1021	Introduction to General Physics I
PHYS 1061 or PHYS 1961	Elementary Classical Physics I Honors Elementary Classical Physics I
PHYS 2021 or PHYS 2921	General Physics I Honors General Physics I

Select one of the following: 4

PHYS 1022	Introduction to General Physics II
PHYS 1062 or PHYS 1962	Elementary Classical Physics II Honors Elementary Classical Physics II
PHYS 2022 or PHYS 2922	General Physics II Honors General Physics II

Total Credit Hours 73-80

Code	Title	Credit Hours
------	-------	--------------

(F) - Fall only course

(S) - Spring only course

1

This course has a co-requisite of BIOL 2207.

2

Only one of these courses need be selected to meet the requirement of the major. If additional courses from this group are taken they may be used to fulfill the requirement for upper-level electives.

3

Up to two (2) Biology Electives (6-8 s.h.) may be replaced by Cognate electives selected from the following (B.S. degree only): ANTH 2764; CHEM 3301, CHEM 3302; MATH 1042/MATH 1942; or MATH 2043/MATH 2943 (but only one of these math courses, and MATH 1042/MATH 1942 may only count if MATH 1044 is used to satisfy the second math course requirement in the major); PHYS 2511 and PHYS 3511, PHYS 4301; STAT 5002 (if substituted for BIOL 3312; students are not allowed to use both BIOL 3312 and STAT 5002 as upper-level electives).

4

Students may fulfill one upper-level elective by completing a total of 6 credits of research. A maximum of 3 credits may come from the junior level research course BIOL 3082 and the remaining 3 credits must come from a senior level (**4000+**) research course. Students may also complete all 6 credits using two semesters of the senior research course if they prefer. Consult with your departmental advisor to determine which course(s) are appropriate. Once completed, students must seek approval from a CST advisor to obtain the waiver for credit towards one upper-level elective.

5

At least one upper-level biology elective must be writing intensive.

With the exception in footnote 4 above, the research and independent study courses shown below do not count as Biology electives, but they may count as free elective credits toward graduation. Most research courses can only be taken ONCE for a letter grade. Check individual course descriptions for details and/or exceptions.

Code	Title	Credit Hours
BIOL 2082	Independent Research I	1 to 4
BIOL 3082	Independent Research II	1 to 4
BIOL 3181	Cooperative Research in Biochemistry	3
BIOL 3681	Cooperative Studies	2 to 4
BIOL 3685	Externship Studies	3
BIOL 4291	Extrdepartmental Research	1 to 4
BIOL 4391	Accelerated Research in Biology	1 to 4
BIOL 4483	Accelerated Research in Biochemistry	3
BIOL 4491	Research in Biochemistry	3
BIOL 4591	Research in Neuroscience	1 to 4

Note: Grades of C- or higher are required unless otherwise specified in all courses for the major, including course prerequisites. The College of Science and Technology requires that students have a GPA of at least 2.00 overall and at least 2.00 in the courses applicable to their major and/or minor GPA to graduate.

A total of up to 3 credits of Biology research courses numbered lower than 4000 (to include: BIOL 2082, BIOL 3082, BIOL 3181, BIOL 3281, and BIOL 3681) may be taken for a letter grade. Any additional credits in research courses in this category can be taken only on a CR/NC basis.

Suggested Academic Plan

Bachelor of Science in Biology

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology or Honors Introduction to Organismal Biology	4
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
SCTC 1001	CST First Year Seminar	1
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
GenEd Breadth Course		3
Credit Hours		15
Spring		
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes or Honors Introduction to Biomolecules, Cells and Genomes	4
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I	
Select one of the following:		4

MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		16
Year 2		
Fall		
Select one of the following:		3
BIOL 2227	Principles of Ecology	
BIOL 3101	Evolution (F)	
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Elective		3-4
Elective		2-1
Credit Hours		15
Spring		
BIOL 2207	Genetics (S)	3
BIOL 2297	Research Techniques in Genetics (S)	3
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I	
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Credit Hours		16
Year 3		
Fall		
Select one of the following: ¹		3-4
BIOL 3204	Cell Structure and Function (F)	
Upper-level Biology Elective (numbered 2200 and above) ^{2,3}		
Select one of the following:		4
CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II	
CHEM 2922 & CHEM 2924	Organic Chemistry for Honors II and Organic Honors Laboratory II	
Select one of the following:		4
PHYS 1021	Introduction to General Physics I	
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	
PHYS 2021 or PHYS 2921	General Physics I or Honors General Physics I	
GenEd Breadth Course		3
Elective		2-1
Credit Hours		16

Spring

Select one of the following: ¹	3-4
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BIOL 3324	Molecular Biology	
BIOL 4375	General Biochemistry I	
Upper-level Biology Elective (numbered 2200 and above) ^{2, 3}		

Select one of the following:	4
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PHYS 1022	Introduction to General Physics II	
PHYS 1062	Elementary Classical Physics II	
or PHYS 1962	or Honors Elementary Classical Physics II	
PHYS 2022	General Physics II	
or PHYS 2922	or Honors General Physics II	

Upper-level Biology Elective (numbered 2200 and above) ^{2, 3}	3-4
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GenEd Breadth Course	3
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Elective	2-0
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Credit Hours	15
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Year 4**Fall**

Upper-level Biology Elective (numbered 2200 and above) ^{2, 3}	3-4
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Upper-level Biology Elective (numbered 2200 and above) ^{2, 3}	3-4
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GenEd Breadth Course	3-4
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Elective	3-0
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Elective	3
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Credit Hours	15
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Spring

Upper-level Biology Elective (numbered 2200 and above) ^{2, 3}	3-4
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Upper-level Biology Elective (numbered 2200 and above) ^{2, 3}	3-4
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Elective	3
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Elective	3
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Elective	3-1
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Credit Hours	15
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Total Credit Hours	123
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Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

This program requires only one of the following courses: BIOL 3204, BIOL 3324 or BIOL 4375. Note that due to prerequisite requirements, BIOL 3324 and BIOL 4375 are shown in the next term of the suggested academic plan. If BIOL 3204 is completed it is not necessary to take BIOL 3324 or BIOL 4375 as the program only requires one of these three courses. If taken in addition to BIOL 3204 these courses can be used to fulfill the upper-level biology electives (numbered 2200 and above) required by the program.

2

If the student has taken the necessary prerequisite courses, some of the Biology or Cognate elective courses may be taken before the Spring semester of Year 3.

3

Select an upper-level biology elective (numbered 2200 and above). At least one of the electives must be a writing-intensive (WI) course.

Biology Minor

Overview

Offered by the Department of Biology, the **Minor in Biology** is meant for students who wish to enhance their knowledge of the life sciences. After completion of the introductory courses, students may choose upper level courses in their particular area of interest.

Campus Location: Main

Undergraduate Contact Information

Robert Sanders, Chair
Biology-Life Sciences Building, Room 255
215-204-8851

Erik Cordes, Vice Chair
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Angela Bricker, Faculty Advisor for Biology Majors - junior and senior
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Jay Lunden, Faculty Advisor for Biology Majors - first and second year
Biology-Life Sciences Building, Room 248M
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Evelyn Vleck, Faculty Advisor for Biology Majors - transfer students
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evleck@temple.edu

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Susan Varnum, Faculty Advisor for Natural Sciences Majors
Senior Associate Dean for Undergraduate Affairs and Science Education
College of Science and Technology
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susan.varnum@temple.edu

Minor Requirements

Students interested in acquiring basic knowledge in biology but not wishing to major in the subject may pursue a minor by successful completion of the following courses:

Code	Title	Credit Hours
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology Honors Introduction to Organismal Biology	4
Select one of the following:		4
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology Honors Introduction to Cellular and Molecular Biology	
Three additional upper-level Biology electives numbered 2200 or higher (see course descriptions for exceptions); at least one of these electives must have a laboratory component		10
Total Credit Hours		18

Note: Grades of C- or higher are required unless otherwise specified in all courses for the minor, including course prerequisites. The College of Science and Technology requires that students have a GPA of at least 2.00 overall and at least 2.00 in the courses applicable to their major and/or minor GPA to graduate. Please consult a Biology departmental advisor when choosing the three additional courses to ensure that prerequisites have been satisfied.

A minimum of 18 credits in Biology is required for the minor.

Residency Requirements: At least 3 Biology courses required for the minor must be completed at Temple.

Biology with Teaching BS

Overview

Biology spans a continuum of organization from molecules and cells to individuals and ecosystems. The Department of Biology offers programs designed to give students a broad base, while allowing a measure of sub-field specialization. All Biology majors are required to take a two-semester series of "Introduction to Biology" classes, plus a course in Genetics. In addition, students have the choice of Cell Biology, Biochemistry, or Molecular Biology, and Ecology or Evolution as part of their core program requirements, followed by upper-level electives.

The **Bachelor of Science in Biology with Teaching** is part of Temple's innovative "TUteach" secondary education teacher-training program. The BS in Biology with Teaching provides broad training in Biology and prepares students for a career in secondary school teaching, further graduate study or an entry level position as a biologist. The education courses in this major include supervised teaching in school district classrooms and emphasize inquiry-based approaches to learning. Students in the BS in Biology with Teaching degree program become *eligible* for a Pennsylvania teacher certification when they complete all the requirements for the degree that include theoretical and practical courses in education specifically designed for science and mathematics majors. In order to be *recommended* for Pennsylvania teacher certification, students must graduate with:

1. a BS with Teaching degree and
2. meet GPA and testing requirements of the state of Pennsylvania.

Students will be scheduled once each semester to meet with the TUteach advisor to ensure that students have knowledge of academic programming, internships opportunities and testing options that include test preparation. The state of Pennsylvania has specific candidacy requirements. The TUteach advisor will also help the students complete and submit the candidacy documents. All students joining the program in their freshman year must complete the PAPA examination or acquire the PAPA waiver within their first 72 credits. Transfer students, from within Temple and those from other institutions, will build a tailored program with the academic and testing benchmarks structured for efficient degree completion with the TUteach advisor. Students are encouraged to complete the appropriate PRAXIS II examination prior to student teaching. Students are encouraged to take internship courses to expand their teaching portfolio or select elective courses that will extend their knowledge of science and teaching practice.

Campus Location: Main

Program Code: ST-BITC-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.5 major GPA;
- achieve a minimum 3.2 GPA in all Biology courses;
- achieve a minimum 3.9 GPA in the following courses:
 - SCES 2189 or SCTC 3485
 - SCES 4189 or SCTC 4485
 - EDUC 4802
 - EDUC 4388
- write a final research paper either in a topic combining both major content and pedagogy or a topic focused on research in Biology; and
- present at a departmental research poster session.

Undergraduate Contact Information

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Kenneth Ruff, TUTEACH Faculty Advisor, Academic Programs Director, and Assistant Professor of Practice
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Jay Lunden, Faculty Advisor for Biology Majors - first and second year
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Evelyn Vleck, Faculty Advisor for Biology Majors - transfer students
Biology-Life Sciences Building, Room 333
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Learn more about the Bachelor of Science in Biology with Teaching.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (124 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
BIOL 2297	Research Techniques in Genetics (S)	3
BIOL 3396	Scientific Writing for Biology: The Art of Communicating	3
BIOL 4396	Advanced Study in Biology	3
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete TUTEACH majors receive a waiver for 1 Human Behavior (GB), 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).

- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (95-99 s.h.)¹

At least 9 courses required for the major must be completed at Temple. At least 5 Biology courses and 3 Education courses must be completed at Temple. Though not required, students are strongly encouraged to increase training and field work experience by enrolling in SCTC 1385, SCTC 2385, or SCTC 2389. Students will also benefit from directed laboratory projects offered through SCTC 3185. These courses are offered every semester.

Code	Title	Credit Hours
Biology		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology Honors Introduction to Organismal Biology	4
Select one of the following:		4
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology Honors Introduction to Cellular and Molecular Biology	
BIOL 2207	Genetics (S)	3
BIOL 2297	Research Techniques in Genetics (WI, S) ²	3
Select one of the following:		3
BIOL 2227	Principles of Ecology	
BIOL 3101	Evolution (F)	
BIOL 3091	Research Methods (S)	3
Select one of the following:		3-4
BIOL 3324	Molecular Biology	
BIOL 3204	Cell Structure and Function (F)	
BIOL 4375	General Biochemistry I	
Three upper level Biology electives at the 2200 level or above ³		9-12
Chemistry		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I (F)	
Select one of the following:		4
CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II	
CHEM 2922 & CHEM 2924	Organic Chemistry for Honors II and Organic Honors Laboratory II (S)	
Mathematics		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
Select one of the following:		4

MATH 1042 or MATH 1942	Calculus II Honors Calculus II	
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
Physics		
Select one of the following:		4
PHYS 1021	Introduction to General Physics I	
PHYS 1061 or PHYS 1961	Elementary Classical Physics I Honors Elementary Classical Physics I	
PHYS 2021 or PHYS 2921	General Physics I Honors General Physics I	
Select one of the following:		4
PHYS 1022	Introduction to General Physics II	
PHYS 1062 or PHYS 1962	Elementary Classical Physics II Honors Elementary Classical Physics II	
PHYS 2022 or PHYS 2922	General Physics II Honors General Physics II	
College of Science and Technology		
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
SCTC 1389	Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners	2
SCTC 3001	History of Science	3
SCTC 3312	Coding STEM Lessons ⁴	1
Education		
EDUC 2179	Knowing and Learning in Mathematics and Science	3
EDUC 4388	TUteach Apprentice Teaching	4
EDUC 4802	TUteach Apprentice Teaching Seminar	3
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3
MGSE 2189 or SCTC 3485	Classroom Interactions (S) Science and Mathematics in the Classroom	3
MGSE 4189 or SCTC 4485	Project-Based Instruction (F) Integrating STEM Practice in Diverse Teaching Environments	3
SPED 2231	Introduction to Special Education	3
Total Credit Hours		95-99

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

The certification requirements need to meet Pennsylvania Department of Education standards and are subject to change. All students are strongly recommended to check with the TUteach Advisor in the College of Science and Technology to affirm the requirements that pertain to their specific major. In addition, students should check the *Undergraduate Bulletin* web site for the most current information about these programs or the TUteach web site. It is also recommended that all students meet with an advisor before enrolling in classes specific to these majors and leading to certification as a teacher. This is to assure that a candidate's intended program of study will be compatible with the new requirements.

2

This course has a co-requisite of BIOL 2207.

3

See course descriptions for exceptions.

4

All students are required to take a minimum of one credit.

Note: Grades of C- or higher are required unless otherwise specified in all courses for the major, including course prerequisites. The College of Science and Technology requires that students have a GPA of at least 2.00 overall and at least 2.00 in the courses applicable to their major and/or minor GPA to graduate.

Suggested Academic Plan

Bachelor of Science in Biology with Teaching

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology or Honors Introduction to Organismal Biology	4
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
SCTC 1001	CST First Year Seminar	1
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
SCTC 1389	Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners	2
GenEd Breadth Course		3
Credit Hours		17
Spring		
Select one of the following:		4
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes or Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology or Honors Introduction to Cellular and Molecular Biology	
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		16
Year 2		
Fall		
Select one of the following:		3
BIOL 2227 BIOL 3101	Principles of Ecology Evolution (F)	
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I (F)	
EDUC 2179	Knowing and Learning in Mathematics and Science	3
SPED 2231	Introduction to Special Education	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		16

Spring

Select one of the following: 4

MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	
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MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
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BIOL 2207	Genetics (S)	3
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BIOL 2297	Research Techniques in Genetics (S)	3
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Select one of the following: 4

CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II	
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CHEM 2922 & CHEM 2924	Organic Chemistry for Honors II and Organic Honors Laboratory II (S)	
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MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3
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Credit Hours		17
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Year 3**Fall**

Select one of the following: 3-4

BIOL 3204	Cell Structure and Function (F)	
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BIOL 3324	Molecular Biology	
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BIOL 4375	General Biochemistry I	
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Select one of the following: 4

PHYS 1021	Introduction to General Physics I	
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PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	
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PHYS 2021 or PHYS 2921	General Physics I or Honors General Physics I	
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SCTC 3001	History of Science	3
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IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
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GenEd Breadth Course		3
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Elective		1-0
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Credit Hours		17
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Spring

BIOL 3091	Research Methods (S)	3
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Select one of the following: 4

PHYS 1022	Introduction to General Physics II	
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PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	
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PHYS 2022 or PHYS 2922	General Physics II or Honors General Physics II	
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Select one of the following: 3

MGSE 2189	Classroom Interactions (S)	
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SCTC 3485	Science and Mathematics in the Classroom	
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GenEd Breadth Course		3
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Elective		2
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Credit Hours		15
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Year 4**Fall**

Upper-Level 2200+ Biology Elective ¹		3
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Upper-Level 2200+ Biology Elective ¹		3-4
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SCTC 3312	Coding STEM Lessons ²	1
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Select one of the following: 3

MGSE 4189	Project-Based Instruction (F)	
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SCTC 4485	Integrating STEM Practice in Diverse Teaching Environments	
GenEd Breadth Course		3-4
Elective		2-0
Credit Hours		15
Spring		
Upper-Level 2200+ Biology Elective ¹		3
EDUC 4388	TUteach Apprentice Teaching	4
EDUC 4802	TUteach Apprentice Teaching Seminar	3
Elective		1
Credit Hours		11
Total Credit Hours		124

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

1

See course descriptions for exceptions. If the student has taken the necessary prerequisite courses, some of the Biology elective courses may be taken before the Fall semester of Year 4.

2

All students are required to take a minimum of one credit.

Biophysics BS

Overview

The **Bachelor of Science in Biophysics**, offered by the Department of Physics, explores the fundamental principles of biology, chemistry, mathematics and physics and how these fields work together to advance scientific discovery. Biophysics students are prepared to pursue professional degrees in medicine and pharmacy, or advanced degrees in biology, biophysics, molecular biology or neuroscience, as well as the combined MD/PhD degree in medical physics, health physics or nuclear medicine.

Campus Location: Main

Program Code: ST-BIOP-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.5 major GPA and
- carry out an independent study or undergraduate thesis project.

Consult the undergraduate physics faculty advisor for more details.

Undergraduate Contact Information

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Learn more about the Bachelor of Science in Biophysics.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
BIOL 2297	Research Techniques in Genetics (S)	3
BIOL 3396	Scientific Writing for Biology: The Art of Communicating	3
BIOL 4396	Advanced Study in Biology	3
CHEM 3398	Physical Chemistry Laboratory II	2
CHEM 4196	Techniques of Chemical Measurement II	5
MATH 3098	Modern Algebra (F)	3
MATH 4096	Senior Problem Solving	3
PHYS 2796	Introduction to Modern Physics (S)	4
PHYS 4796	Experimental Physics	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (77-81 s.h.)

At least 10 courses required for the major must be completed at Temple. At least 3 Biology and 4 Physics courses must be completed at Temple.

Code	Title	Credit Hours
Biology		
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology	4
BIOL 2207	Genetics (S) ¹	3
BIOL 2297	Research Techniques in Genetics (S) ¹	3
BIOL 3204	Cell Structure and Function (F)	4
Physics		
	Select one of the following:	4

PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	
PHYS 2502	Mathematical Physics (S)	4
PHYS 2796	Introduction to Modern Physics (S)	4
PHYS 3301	Electricity and Magnetism (F)	4
PHYS 4101	Thermal Physics (F)	3

Chemistry

Select one of the following: 4

CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	

Select one of the following: 4

CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	

Select one of the following: 4

CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2211 & CHEM 2213	Organic Chemistry for Majors I and Organic Majors Laboratory I (F)	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I (F)	

Select one of the following: 4

CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II	
CHEM 2212 & CHEM 2214	Organic Chemistry for Majors II and Organic Majors Laboratory II (S)	
CHEM 2922 & CHEM 2924	Organic Chemistry for Honors II and Organic Honors Laboratory II (S)	

Mathematics

MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4

Biophysics Electives

Four 2000+ Biophysics Electives chosen in consultation with the Physics faculty advisor. At least two of the electives must be Physics courses. 12-16

Total Credit Hours 77-81

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

This course has a co-requisite of BIOL 2207.

The research and independent study courses shown below do not count as Biology electives, but they may count as free elective credits toward graduation. Most research courses can only be taken ONCE for a letter grade. Check individual course descriptions for details and/or exceptions.

Code	Title	Credit Hours
BIOL 2082	Independent Research I	1 to 4
BIOL 3082	Independent Research II	1 to 4
BIOL 3181	Cooperative Research in Biochemistry	3
BIOL 3681	Cooperative Studies	2 to 4
BIOL 3685	Externship Studies	3
BIOL 4291	Extrdepartmental Research	1 to 4
BIOL 4391	Accelerated Research in Biology	1 to 4
BIOL 4483	Accelerated Research in Biochemistry	3
BIOL 4491	Research in Biochemistry	3
BIOL 4591	Research in Neuroscience	1 to 4

Suggested Academic Plan

Bachelor of Science in Biophysics

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
SCTC 1001	CST First Year Seminar	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Elective		2
Credit Hours		15
Spring		
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Elective		5
Credit Hours		16
Year 2		
Fall		
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	

CHEM 2211 & CHEM 2213	Organic Chemistry for Majors I and Organic Majors Laboratory I (F)	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I (F)	
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3

Credit Hours **15**

Spring

Select one of the following:		4
CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II	
CHEM 2212 & CHEM 2214	Organic Chemistry for Majors II and Organic Majors Laboratory II (S)	
CHEM 2922 & CHEM 2924	Organic Chemistry for Honors II and Organic Honors Laboratory II (S)	
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	

GenEd Breadth Course 3-4

Elective 5-4

Credit Hours **16**

Year 3**Fall**

BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology or Honors Introduction to Cellular and Molecular Biology	4
PHYS 3301	Electricity and Magnetism (F)	4
2000+ Biophysics Elective ¹		3-4
GenEd Breadth Course		3
Elective		1-0

Credit Hours **15**

Spring

PHYS 2502	Mathematical Physics (S)	4
PHYS 2796	Introduction to Modern Physics (S)	4
2000+ Biophysics Elective ¹		3-4
GenEd Breadth Course		3
Elective		1-0

Credit Hours **15**

Year 4**Fall**

BIOL 3204	Cell Structure and Function (F)	4
PHYS 4101	Thermal Physics (F)	3
2000+ Biophysics Elective ¹		3-4
GenEd Breadth Course		3

Elective		2-1
	Credit Hours	15
Spring		
BIOL 2207	Genetics (S)	3
BIOL 2297	Research Techniques in Genetics (S)	3
2000+ Biophysics Elective ¹		3-4
GenEd Breadth Course		3
Elective		4-3
	Credit Hours	16
	Total Credit Hours	123

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

1

Four electives must be chosen in consultation with the physics advisor. All courses must be 2000-level or above. At least two electives must be Physics courses. Choose courses in Physics, Biology (Neuroscience, Genetics, Cell Structure, Physiology), Chemistry (Physical Chemistry), Biochemistry and Biophysics. Recommended for graduate school in Physics: PHYS 2101, PHYS 3302, PHYS 3701 and PHYS 4796 and as much of the BS program in Physics as time allows. Students planning to go to medical school should complete BIOL 1111 Introduction to Organismal Biology.

Chemistry BA

Overview

The Department of Chemistry is one of the oldest departments in the university and has a long record of preparing students for careers in science. Since a significant portion of America's chemical industry is centered in the Philadelphia region, there is a wide range of career opportunities locally available. Although most of our students have gone on to medicine, dentistry or the chemical industry, recent graduates have also gone on to careers in law, forensics and even art restoration.

The **Bachelor of Arts in Chemistry** is designed for students who are planning for a non-research career in a field related to chemistry. Students learn a wide array of topics in chemistry, mathematics and physics. Students learn how to write scientific reports, analyze data and place these results in a broader scientific context.

Campus Location: Main

Program Code: ST-CHEM-BA

Distinction in Major

To graduate with distinction in this major, a student must have a minimum 3.33 GPA in all the Chemistry courses required for the major.

Accelerated Programs

Accelerated programs provide a pathway for students to pursue both an undergraduate degree and an advanced degree in a shorter amount of time. Below is a list of available accelerated programs for students in the BA in Chemistry.

- BA in Chemistry / MEd in Middle Grades Education with a Concentration in Science
- BA in Chemistry / MEd in Middle Grades Education with a Concentration in Science and Language Arts
- BA or BS in Chemistry / PSM in Forensic Chemistry
- Dental 3+4 Program (p. 1438)
- Pharmacy 3+4 Program (p. 1444)
- Podiatry 3+4 Program (p. 1447)

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Learn more about the Bachelor of Arts in Chemistry.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Arts Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
CHEM 3398	Physical Chemistry Laboratory II	2
CHEM 4196	Techniques of Chemical Measurement II	5

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
 - A minimum of 6 of these credits must be upper-level (courses numbered 2000 and above) CLA credits.
- Successful completion or waiver from the second level of a foreign language.
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Arts (53 s.h.)

At least 7 courses required for the major must be completed at Temple. At least 5 Chemistry courses must be completed at Temple.

Code	Title	Credit Hours
Chemistry		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2211 & CHEM 2213	Organic Chemistry for Majors I and Organic Majors Laboratory I (F)	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I (F)	
Select one of the following:		4
CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II	
CHEM 2212 & CHEM 2214	Organic Chemistry for Majors II and Organic Majors Laboratory II (S)	
CHEM 2922 & CHEM 2924	Organic Chemistry for Honors II and Organic Honors Laboratory II (S)	
CHEM 3103 & CHEM 3105	Techniques of Chemical Measurement I and Introduction to Chemical Research Techniques	4
CHEM 3301	Physical Chemistry Lecture I	3
CHEM 3302	Physical Chemistry Lecture II	3
CHEM 3398	Physical Chemistry Laboratory II	2
CHEM 4196	Techniques of Chemical Measurement II	5
Mathematics		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
Physics		
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	

PHYS 2921	Honors General Physics I (F)	
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	
Total Credit Hours		53

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

Suggested Academic Plan

All prospective majors should schedule an appointment with one of the departmental advisors (names of current faculty advisors are available in the Overview section) to plan a program of study. The recommended order of courses for the major is listed below; a different order is acceptable as long as the student adheres to prerequisite requirements.

Bachelor of Arts in Chemistry

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
SCTC 1001	CST First Year Seminar	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Elective		2
Credit Hours		15

Spring		
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Elective		4
Credit Hours		15

Year 2		
Fall		
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2211 & CHEM 2213	Organic Chemistry for Majors I and Organic Majors Laboratory I (F)	

CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I (F)	
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		15
Spring		
Select one of the following:		4
CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II	
CHEM 2212 & CHEM 2214	Organic Chemistry for Majors II and Organic Majors Laboratory II (S)	
CHEM 2922 & CHEM 2924	Organic Chemistry for Honors II and Organic Honors Laboratory II (S)	
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	
GenEd Breadth Course		3
Electives		5
Credit Hours		16
Year 3		
Fall		
CHEM 3302	Physical Chemistry Lecture II	3
Foreign Language 1001 - First Level		4
GenEd Breadth Course		3
Electives		5
Credit Hours		15
Spring		
CHEM 3103	Techniques of Chemical Measurement I ¹	3
CHEM 3105	Introduction to Chemical Research Techniques ¹	1
CHEM 3301	Physical Chemistry Lecture I	3
Foreign Language 1002 - Second Level		4
GenEd Breadth Course		3
Electives		2
Credit Hours		16
Year 4		
Fall		
CHEM 3398	Physical Chemistry Laboratory II	2
Upper-level CLA Course (numbered 2000 and above)		3
GenEd Breadth Course		3-4
Electives		7-6
Credit Hours		15
Spring		
CHEM 4196	Techniques of Chemical Measurement II	5
Upper-level CLA Course (numbered 2000 and above)		3

GenEd Breadth Course	3
Electives	5
Credit Hours	16
Total Credit Hours	123

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

It is strongly encouraged that CHEM 3103/CHEM 3105 be taken before all chemistry laboratory courses numbered above 3105.

Chemistry BS

Overview

The Department of Chemistry is one of the oldest departments in the university and has a long record of preparing students for careers in science. Since a significant portion of America's chemical industry is centered in the Philadelphia region, there is a wide range of career opportunities locally available. Although most of our students have gone on to medicine, dentistry or the chemical industry, recent graduates have also gone on to careers in law, forensics and even art restoration.

The **Bachelor of Science in Chemistry** prepares students for excellence in graduate or medical school, and employment in the chemical, biotechnological or pharmaceutical industries. Students learn a wide array of topics in chemistry, mathematics and physics. The program emphasizes the "hands-on" nature of chemistry in laboratory courses, giving students the tools that chemists need to pursue research. They also learn how to write scientific reports, analyze data and place these results in a broader scientific context. Accomplished majors are encouraged to pursue independent research with a professor, and to present their work internally and at national meetings.

Campus Location: Main

Program Code: ST-CHEM-BS

Distinction in Major

To graduate with distinction in this major, a student must have a minimum 3.33 GPA in all the Chemistry courses required for the major.

Accelerated Programs

Accelerated programs provide a pathway for students to pursue both an undergraduate degree and an advanced degree in a shorter amount of time. Below is a list of available accelerated programs for students in the BS in Chemistry.

- BS in Chemistry / MEd in Middle Grades Education with a Concentration in Science
- BS in Chemistry / MEd in Middle Grades Education with a Concentration in Mathematics and Science
- BS in Chemistry / MS in Chemistry
- BA or BS in Chemistry / PSM in Forensic Chemistry

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Learn more about the Bachelor of Science in Chemistry.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
BIOL 2297	Research Techniques in Genetics (S)	3
BIOL 3396	Scientific Writing for Biology: The Art of Communicating	3
CHEM 3398	Physical Chemistry Laboratory II	2
CHEM 4196	Techniques of Chemical Measurement II	5
CHEM 4496	Research Techniques in Biochemistry	4
EES 2096	Climate Change: Oceans To Atmosphere (S - even years)	4
MATH 3098	Modern Algebra (F)	3
MATH 4096	Senior Problem Solving	3
PHYS 2796	Introduction to Modern Physics (S)	4
or PHYS 4796	Experimental Physics	

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).

- A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
 - Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.
3. Major Requirements for Bachelor of Science (70-74 s.h.)
At least 9 courses required for the major must be completed at Temple. At least 7 Chemistry courses must be completed at Temple.
4. American Chemical Society (ACS) Certification Requirements (optional, see Footnote 2 below for more details)
- A foundational course in each of the 5 areas of chemistry (analytical, biochemistry, inorganic, organic, and physical). General chemistry courses do not count as foundational courses.
 - In-depth courses in at least 4 of the 5 areas, where an in-depth course is defined as a second semester of study in that particular area. For example, CHEM 2202 Organic Chemistry II qualifies as an in-depth course in organic chemistry.
 - 400 laboratory hours.

Code	Title	Credit Hours
Chemistry		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2211 & CHEM 2213	Organic Chemistry for Majors I and Organic Majors Laboratory I (F)	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I (F)	
Select one of the following:		4
CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II	
CHEM 2212 & CHEM 2214	Organic Chemistry for Majors II and Organic Majors Laboratory II (S)	
CHEM 2922 & CHEM 2924	Organic Chemistry for Honors II and Organic Honors Laboratory II (S)	
CHEM 3001	Inorganic Chemistry	3
CHEM 3103 & CHEM 3105	Techniques of Chemical Measurement I and Introduction to Chemical Research Techniques	4
CHEM 3301	Physical Chemistry Lecture I	3
CHEM 3302	Physical Chemistry Lecture II	3
CHEM 3303	Physical Chemistry Laboratory I	2
CHEM 3398	Physical Chemistry Laboratory II	2
CHEM 4196	Techniques of Chemical Measurement II	5
Two Advanced Chemistry courses (4002 or above) ^{1,2}		6-8
Two Advanced Science courses - select from the following: ²		6-8
CHEM 2891	Introduction to Undergraduate Research ³	
CHEM 3881	Cooperative Research ³	
CHEM 3891	Undergraduate Research ³	

CHEM 4881	Cooperative Research ³	
CHEM 4891	Undergraduate Research ³	
All other Chemistry courses numbered 4002 and above		
BIOL 2207 & BIOL 2297	Genetics and Research Techniques in Genetics ⁴	
BIOL 3204	Cell Structure and Function (F)	
BIOL 3265	Developmental Biology (F)	
BIOL 3334	Mammalian Physiology	
All other Biology courses numbered above 3334		
EES 2011	Mineralogy I	
All other EES courses numbered above 2011		
MATH 2101	Linear Algebra	
MATH 3031	Probability Theory I	
All other Math courses numbered above 3031		
PHYS 2101	Classical Mechanics (S)	
PHYS 2502	Mathematical Physics (S)	
PHYS 2796	Introduction to Modern Physics (S)	
PHYS 3101	Analytical Mechanics (F)	
PHYS 3301	Electricity and Magnetism (F)	
PHYS 3302	Classical Electromagnetism (S)	
PHYS 4101	Thermal Physics (F)	
PHYS 4301	Electronics	
All other Physics courses numbered above 4301		
Mathematics		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
Physics		
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
Select one of the following		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	

Total Credit Hours **70-74**

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

CHEM 4881 and CHEM 4891 will not fulfill an Advanced Chemistry elective for the Chemistry BA or BS degree.

2

There are several course choices that can be used to meet the ACS certification requirements. See an advisor if you have any questions. The most straightforward pathway is for students to take the elective courses CHEM 4401 Biochemistry I and CHEM 4003 Inorganic Synthesis. Alternately, students could take CHEM 4401 Biochemistry I and CHEM 4002 Advanced Inorganic Chemistry, but this pathway would require additional lab courses (see a Chemistry faculty advisor). Another option is for students to take the elective courses CHEM 4401 Biochemistry I and CHEM 4196 Techniques of Chemical Measurement II or BIOL 4344 Research Techniques in Biochemistry. In order to fulfill the ACS-mandated requirement of 400 laboratory hours, students must complete either CHEM 4207 Synthesis and Identification of Organic and Medicinal Compounds OR any two (2) of the following: CHEM 3881 Cooperative Research and/or CHEM 3891 Undergraduate Research, CHEM 4004 Crystallography and Diffraction, CHEM 4103 Instrumental Design, CHEM 4107 Drug Analysis, CHEM 4108 Investigative Chemistry, or CHEM 4503 Introduction to Polymer Chemistry.

3

One advanced science course, for a total of 4 credits, may be satisfied by a total of 4 credits of any combination of CHEM 2891, CHEM 3881, CHEM 3891, CHEM 4881, or CHEM 4891. No more than 1 credit of CHEM 2891 may be used toward this total. The research courses may only be used as one advanced science course.

4

BIOL 2207 and BIOL 2297 are co-requisites to each other.

Suggested Academic Plan

All prospective majors should schedule an appointment with one of the departmental advisors (names of current faculty advisors are available in the Overview section) to plan a program of study. The recommended order of courses for the major is listed below; a different order is acceptable as long as the student adheres to prerequisite requirements.

Bachelor of Science in Chemistry

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
SCTC 1001	CST First Year Seminar	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Elective		2
Credit Hours		15
Spring		
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Electives		5
Credit Hours		16
Year 2		
Fall		
Select one of the following:		4

CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2211 & CHEM 2213	Organic Chemistry for Majors I and Organic Majors Laboratory I (F)	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I (F)	
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		15
Spring		
Select one of the following:		4
CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II	
CHEM 2212 & CHEM 2214	Organic Chemistry for Majors II and Organic Majors Laboratory II (S)	
CHEM 2922 & CHEM 2924	Organic Chemistry for Honors II and Organic Honors Laboratory II (S)	
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	
GenEd Breadth Course		3
Electives		5
Credit Hours		16
Year 3		
Fall		
CHEM 3103	Techniques of Chemical Measurement I ¹	3
CHEM 3105	Introduction to Chemical Research Techniques ¹	1
CHEM 3302	Physical Chemistry Lecture II	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Elective		2
Credit Hours		15
Spring		
CHEM 3001	Inorganic Chemistry	3
CHEM 3301	Physical Chemistry Lecture I	3
CHEM 3398	Physical Chemistry Laboratory II	2
GenEd Breadth Course		3
Electives		5
Credit Hours		16
Year 4		
Fall		
CHEM 3303	Physical Chemistry Laboratory I	2
Advanced Chemistry Course - 4002 or above ^{2,3}		3-4
Advanced Science Course ³		3-4

GenEd Breadth Course		3-4
Elective		4-1
Credit Hours		15
Spring		
CHEM 4196	Techniques of Chemical Measurement II	5
Advanced Chemistry Course - 4002 or above ^{2,3}		3-4
Advanced Science Course ³		3-4
Elective		4-2
Credit Hours		15
Total Credit Hours		123

1

It is strongly encouraged that CHEM 3103/CHEM 3105 be taken before all chemistry laboratory courses numbered above 3105.

2

Advanced Chemistry Courses for B.S. students consist of all courses in Chemistry having a number of 4002 or above (except CHEM 4881 and CHEM 4891). If the student has successfully completed the appropriate prerequisite course, a graduate course in Chemistry may be included in this category.

3

There are several course choices that can be used to meet the ACS certification requirements. See an advisor if you have any questions. The most straightforward pathway is for students to take the elective courses CHEM 4401 Biochemistry I and CHEM 4003 Inorganic Synthesis. Alternately, students could take CHEM 4401 Biochemistry I and CHEM 4002 Advanced Inorganic Chemistry, but this pathway would require additional lab courses (see a Chemistry faculty advisor). Another option is for students to take the elective courses CHEM 4401 Biochemistry I and CHEM 4196 Techniques of Chemical Measurement II or BIOL 4344 Research Techniques in Biochemistry. In order to fulfill the ACS-mandated requirement of 400 laboratory hours, students must complete either CHEM 4207 Synthesis and Identification of Organic and Medicinal Compounds OR any two (2) of the following: CHEM 3881 Cooperative Research and/or CHEM 3891 Undergraduate Research, CHEM 4004 Crystallography and Diffraction, CHEM 4103 Instrumental Design, CHEM 4107 Drug Analysis, CHEM 4108 Investigative Chemistry, or CHEM 4503 Introduction to Polymer Chemistry.

Advanced Science Courses for BS students consist of:

Code	Title	Credit Hours
Advanced Science Courses		6-8
Only one Advanced Science course may be satisfied by a total of 4 credits in any combination of the following:		4
CHEM 2891	Introduction to Undergraduate Research ¹	
CHEM 3881	Cooperative Research	
CHEM 3891	Undergraduate Research	
CHEM 4881	Cooperative Research	
CHEM 4891	Undergraduate Research	
All other Chemistry courses numbered 4002 or above		3-4
BIOL 2296	Genetics (S)	4
BIOL 3096	Cell Structure and Function (F)	4
BIOL 3265	Developmental Biology (F)	3
BIOL 3334	Mammalian Physiology	4
All other Biology courses numbered above 3334		3-4
EES 2011	Mineralogy I	4
All other EES courses numbered above 2011		3-4
MATH 2101	Linear Algebra	3
MATH 3031	Probability Theory I	3
All other Math courses numbered above 3031		3-4
PHYS 2101	Classical Mechanics (S)	3
PHYS 2502	Mathematical Physics (S)	4
PHYS 2796	Introduction to Modern Physics (S)	4
PHYS 3101	Analytical Mechanics (F)	3
PHYS 3301	Electricity and Magnetism (F)	4
PHYS 3302	Classical Electromagnetism (S)	3

PHYS 4101	Thermal Physics (F)	3
PHYS 4301	Electronics	3
All other Physics courses numbered above 4301		3-4

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

No more than one credit of CHEM 2891 may be used toward this total.

Chemistry Minor

Overview

Offered by the Department of Chemistry, the **Minor in Chemistry** is designed for students who are interested in acquiring basic knowledge in chemistry but not wishing to major in the subject. Biochemistry majors may not declare this minor.

Campus Location: Main

Undergraduate Contact Information

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daniele.ramella@temple.edu

Minor Requirements

All courses listed below have prerequisites. For more information, please check the course descriptions or ask an advisor.

At least 12 credits required for the minor must be completed at Temple. At least 12 Chemistry credits must be completed at Temple.

Code	Title	Credit Hours
CHEM 1031 or CHEM 1951	General Chemistry I Honors General Chemical Science I	3
CHEM 1032 or CHEM 1952	General Chemistry II Honors General Chemical Science II	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I Honors Chemical Science Laboratory I	1
CHEM 1034 or CHEM 1954	General Chemistry Laboratory II Honors Chemical Science Laboratory II	1
CHEM 2201 or CHEM 2921	Organic Chemistry I Organic Chemistry for Honors I	3
CHEM 2202 or CHEM 2922	Organic Chemistry II Organic Chemistry for Honors II	3
CHEM 2203 or CHEM 2923	Organic Chemistry Laboratory I Organic Honors Laboratory I	1
CHEM 2204 or CHEM 2924	Organic Chemistry Laboratory II Organic Honors Laboratory II	1
At least 7 credit hours from the following list:		7
CHEM 3001	Inorganic Chemistry	
CHEM 3103 & CHEM 3105	Techniques of Chemical Measurement I and Introduction to Chemical Research Techniques	
CHEM 3301	Physical Chemistry Lecture I	
CHEM 3302	Physical Chemistry Lecture II	
CHEM 3303	Physical Chemistry Laboratory I	
CHEM 3398	Physical Chemistry Laboratory II	
CHEM 3401	Applications of Biochemistry	
CHEM 3405	Physical Chemistry of Biomolecules	
CHEM 3881	Cooperative Research ¹	
CHEM 3891	Undergraduate Research ¹	
CHEM 4002	Advanced Inorganic Chemistry	
CHEM 4003	Inorganic Synthesis	
CHEM 4004	Crystallography and Diffraction	
CHEM 4103	Instrumental Design	
CHEM 4107	Drug Analysis	
CHEM 4108	Investigative Chemistry	
CHEM 4196	Techniques of Chemical Measurement II	
CHEM 4201	Organic Structure and Mechanisms	
CHEM 4202	Organic Synthesis Methodology	
CHEM 4207	Synthesis and Identification of Organic and Medicinal Compounds	
CHEM 4401	Biochemistry I	
CHEM 4496	Research Techniques in Biochemistry	
CHEM 4503	Introduction to Polymer Chemistry	

Total Credit Hours

23

1

One semester of research within the Chemistry department is approved to satisfy three elective credits toward the minor.

Chemistry with Teaching BS

Overview

The Department of Chemistry is one of the oldest departments in the university and has a long record of preparing students for careers in science. Since a significant portion of America's chemical industry is centered in the Philadelphia region, there is a wide range of career opportunities locally available. Although most of our students have gone on to medicine, dentistry or the chemical industry, recent graduates have also gone on to careers in law, forensics and even art restoration.

The **Bachelor of Science in Chemistry with Teaching** is part of Temple's innovative "TUteach" secondary education teacher-training program. The BS in Chemistry with Teaching provides broad training in chemistry and prepares students for a career in secondary school teaching, graduate study or an entry level position as a chemist. The education courses in this major include supervised teaching in school district classrooms and emphasize inquiry-based approaches to learning. Students in the BS in Chemistry with Teaching degree program become *eligible* for a Pennsylvania teacher certification when they complete all the requirements for the degree that include theoretical and practical courses in education specifically designed for science and mathematics majors. In order to be *recommended* for Pennsylvania teacher certification, students must graduate with:

1. a BS with Teaching degree and
2. meet GPA and testing requirements of the state of Pennsylvania.

Students will be scheduled once each semester to meet with the TUteach advisor to ensure that students have knowledge of academic programming, internships opportunities and testing options that include test preparation. The state of Pennsylvania has specific candidacy requirements. The TUteach advisor will also help the students complete and submit the candidacy documents. All students joining the program in their freshman year must complete the PAPA examination or acquire the PAPA waiver within their first 72 credits. Transfer students, from within Temple and those from other institutions, will build a tailored program with the academic and testing benchmarks structured for efficient degree completion with the TUteach advisor. Students are encouraged to complete the appropriate PRAXIS II examination prior to student teaching. Students are encouraged to take internship courses to expand their teaching portfolio or select elective courses that will extend their knowledge of science and teaching practice.

Campus Location: Main

Program Code: ST-CHTC-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.5 major GPA;
- achieve a minimum 3.33 GPA in all Chemistry courses required for the major; and
- achieve a minimum 3.9 GPA in the following courses:
 - SCES 2189 or SCTC 3485
 - SCES 4189 or SCTC 4485
 - EDUC 4802
 - EDUC 4388.

Undergraduate Contact Information

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Daniele Ramella, Faculty Advisor (Undergraduate research)
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215-204-1931
daniele.ramella@temple.edu

Learn more about the Bachelor of Science in Chemistry with Teaching.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (124 total s.h.)
 - Students must complete all University requirements including those listed below.
 - All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
CHEM 4196	Techniques of Chemical Measurement II	5
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete TTeach majors receive a waiver for 1 Human Behavior (GB), 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (88 s.h.)¹

At least 9 courses required for the major must be completed at Temple. At least 5 Chemistry courses and 3 Education courses must be completed at Temple. Though not required, students are strongly encouraged to increase training and field work experience by enrolling in SCTC 1385, SCTC 2385, or SCTC 2389. Students will also benefit from directed laboratory projects offered through SCTC 3185. These courses are offered every semester.

Code	Title	Credit Hours
Chemistry		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2211 & CHEM 2213	Organic Chemistry for Majors I and Organic Majors Laboratory I (F)	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I (F)	
Select one of the following:		4
CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II	
CHEM 2212 & CHEM 2214	Organic Chemistry for Majors II and Organic Majors Laboratory II (S)	
CHEM 2922 & CHEM 2924	Organic Chemistry for Honors II and Organic Honors Laboratory II (S)	
CHEM 3091	Research Methods (S)	3
CHEM 3103 & CHEM 3105	Techniques of Chemical Measurement I and Introduction to Chemical Research Techniques	4
Select one of the following:		3
CHEM 3001	Inorganic Chemistry	
CHEM 3401	Applications of Biochemistry	
CHEM 4401	Biochemistry I	

CHEM 3301	Physical Chemistry Lecture I	3
CHEM 3302	Physical Chemistry Lecture II	3
CHEM 4196	Techniques of Chemical Measurement II	5

Mathematics

MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4

Physics

PHYS 1061 or PHYS 1961 or PHYS 2021 or PHYS 2921	Elementary Classical Physics I Honors Elementary Classical Physics I General Physics I Honors General Physics I	4
PHYS 1062 or PHYS 1962 or PHYS 2022 or PHYS 2922	Elementary Classical Physics II Honors Elementary Classical Physics II General Physics II Honors General Physics II	4

College of Science & Technology

SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
SCTC 1389	Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners	2
SCTC 3001	History of Science	3
SCTC 3312	Coding STEM Lessons ²	1

Education

EDUC 2179	Knowing and Learning in Mathematics and Science	3
EDUC 4388	TUteach Apprentice Teaching	4
EDUC 4802	TUteach Apprentice Teaching Seminar	3
SPED 2231	Introduction to Special Education	3
MGSE 2189 or SCTC 3485	Classroom Interactions (S) Science and Mathematics in the Classroom	3
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3
MGSE 4189 or SCTC 4485	Project-Based Instruction (F) Integrating STEM Practice in Diverse Teaching Environments	3

Total Credit Hours		88
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Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

The certification requirements need to meet Pennsylvania Department of Education standards and are subject to change. All students are strongly recommended to check with the TUteach Advisor in the College of Science and Technology to affirm the requirements that pertain to their specific major. In addition, students should check the *Undergraduate Bulletin* web site for the most current information about these programs, or the TUteach web site. It is also recommended that all students meet with an advisor before enrolling in classes specific to these majors and leading to certification as a teacher. This is to assure that a candidate's intended program of study will be compatible with the new requirements.

2

All students are required to complete a minimum of one credit.

Suggested Academic Plan

Bachelor of Science in Chemistry with Teaching

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
SCTC 1001	CST First Year Seminar	1
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
SCTC 1389	Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners	2
GenEd Breadth Course		3
Credit Hours		17
Spring		
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
SPED 2231	Introduction to Special Education	3
Credit Hours		15
Year 2		
Fall		
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2211 & CHEM 2213	Organic Chemistry for Majors I and Organic Majors Laboratory I (F)	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I (F)	
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	
EDUC 2179	Knowing and Learning in Mathematics and Science	3
Elective		1
Credit Hours		16

Spring

Select one of the following:		4
CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II	
CHEM 2212 & CHEM 2214	Organic Chemistry for Majors II and Organic Majors Laboratory II (S)	
CHEM 2922 & CHEM 2924	Organic Chemistry for Honors II and Organic Honors Laboratory II (S)	
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3
GenEd Breadth Course		3
Elective		3
Credit Hours		17

Year 3**Fall**

CHEM 3103	Techniques of Chemical Measurement I	3
CHEM 3105	Introduction to Chemical Research Techniques	1
CHEM 3301	Physical Chemistry Lecture I	3
SCTC 3001	History of Science	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Credit Hours		16

Spring

CHEM 3091	Research Methods (S)	3
CHEM 3302	Physical Chemistry Lecture II	3
Select one of the following:		3
CHEM 3001	Inorganic Chemistry	
CHEM 3401	Applications of Biochemistry	
CHEM 4401	Biochemistry I	
Select one of the following:		3
MGSE 2189	Classroom Interactions (S)	
SCTC 3485	Science and Mathematics in the Classroom	
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Elective		3
Credit Hours		18

Year 4**Fall**

CHEM 4196	Techniques of Chemical Measurement II	5
Select one of the following:		3
MGSE 4189	Project-Based Instruction (F)	
SCTC 4485	Integrating STEM Practice in Diverse Teaching Environments	
SCTC 3312	Coding STEM Lessons ¹	1
GenEd Breadth Course		3-4
Elective		3
Elective		2-1
Credit Hours		17

Spring

EDUC 4388	TUteach Apprentice Teaching	4
EDUC 4802	TUteach Apprentice Teaching Seminar	3

Elective		1
	Credit Hours	8
	Total Credit Hours	124

1

All students are required to complete a minimum of one credit.

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

Computer Science and Physics BS

Overview

The **Bachelor of Science in Computer Science and Physics** is an interdisciplinary program offered by the Department of Physics in conjunction with the Department of Computer and Information Sciences. This program is intended for students with dual interests in physics and computer science who wish to complete the essential courses for both majors within their normal four-year career. The program will prepare students for a career in a computer-related field and/or physics research.

Campus Location: Main

Program Code: ST-CSPH-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- have a minimum 3.50 major GPA and
- carry out an independent study or undergraduate thesis project.

Consult the faculty advisor for more details.

Undergraduate Contact Information

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Learn more about the Bachelor of Science in Computer Science and Physics.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
CIS 3296	Software Design	4
CIS 4397	Independent Research in Computer Science	3
CIS 4398	Projects in Computer Science	3
PHYS 2796	Introduction to Modern Physics (S)	4
PHYS 4796	Experimental Physics (S)	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for the Bachelor of Science (77-78 s.h.)

At least 11 courses required for the major must be completed at Temple. At least 4 Computer Science and 5 Physics courses must be completed at Temple.

Code	Title	Credit Hours
Mathematics Courses		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
Computer Science Courses		
CIS 1068 or CIS 1968	Program Design and Abstraction Honors Program Design and Abstraction	4
CIS 1166 or CIS 1966	Mathematical Concepts in Computing I Honors Mathematical Concepts in Computing I	4
CIS 2107	Computer Systems and Low-Level Programming	4
CIS 2166	Mathematical Concepts in Computing II	4
CIS 2168	Data Structures	4
CIS 3207	Introduction to Systems Programming and Operating Systems	4
CIS 3223	Data Structures and Algorithms	3
Select one of the following:		3-4
CIS 3296	Software Design ¹	
CIS 3000+ Elective ^{1,2}		

Physics Courses

Select one of the following: 4

PHYS 1061 Elementary Classical Physics I

PHYS 1961 Honors Elementary Classical Physics I

PHYS 2021 General Physics I

PHYS 2921 Honors General Physics I (F)

Select one of the following: 4

PHYS 1062 Elementary Classical Physics II

PHYS 1962 Honors Elementary Classical Physics II

PHYS 2022 General Physics II

PHYS 2922 Honors General Physics II (S)

PHYS 2101 Classical Mechanics (S) 3

PHYS 3511 Scientific Computing II 1.5

PHYS 4511 Scientific Computing III 1.5

PHYS 2502 Mathematical Physics (S) 4

PHYS 2796 Introduction to Modern Physics (S) 4

PHYS 3301 Electricity and Magnetism (F) 4

PHYS 3701 Introduction to Quantum Mechanics I (S) 3

Select one of the following: 3

PHYS 4101 Thermal Physics (F)

Physics Elective ²**Capstone Course**

Select one of the following: 3

CIS 4397 Independent Research in Computer Science

CIS 4398 Projects in Computer Science ¹

PHYS 4796 Experimental Physics (S)

Total Credit Hours 77-78

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

CIS 3296 is the prerequisite for CIS 4398 and should be taken as a 3000+ Computer & Information Science elective if you plan to take CIS 4398 as the capstone course.

2

Electives are chosen in consultation with the faculty advisor.

Suggested Academic Plan**Bachelor of Science in Computer Science and Physics****Suggested Plan for New Students Starting in the 2023-2024 Academic Year**

Year 1		Credit Hours
Fall		
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
CIS 1068 or CIS 1968	Program Design and Abstraction or Honors Program Design and Abstraction	4
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I	
PHYS 2021	General Physics I	

PHYS 2921	Honors General Physics I (F)	
SCTC 1001	CST First Year Seminar	1
GenEd Breadth Course		3
Credit Hours		16
Spring		
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
CIS 1166 or CIS 1966	Mathematical Concepts in Computing I or Honors Mathematical Concepts in Computing I	4
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		16
Year 2		
Fall		
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
CIS 2168	Data Structures	4
PHYS 3511	Scientific Computing II	1.5
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Elective		3
Credit Hours		15.5
Spring		
CIS 2107	Computer Systems and Low-Level Programming	4
PHYS 2502	Mathematical Physics (S)	4
PHYS 2796	Introduction to Modern Physics (S)	4
PHYS 4511	Scientific Computing III	1.5
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		16.5
Year 3		
Fall		
CIS 3207	Introduction to Systems Programming and Operating Systems	4
CIS 2166	Mathematical Concepts in Computing II	4
PHYS 3301	Electricity and Magnetism (F)	4
GenEd Breadth Course		3
Credit Hours		15
Spring		
CIS 3223	Data Structures and Algorithms	3
PHYS 2101	Classical Mechanics (S)	3
PHYS 3701	Introduction to Quantum Mechanics I (S)	3
GenEd Breadth Course		3
Elective		3
Credit Hours		15
Year 4		
Fall		
Select one of the following:		3-4

CIS 3296	Software Design ¹	
CIS 3000+ Elective ^{1,2}		
Select one of the following:		3
PHYS 4101	Thermal Physics (F)	
Physics Elective ²		
GenEd Breadth Course		4-3
Elective		3
Elective		2
Credit Hours		15
Spring		
Select one of the following:		3
CIS 4397	Independent Research in Computer Science	
CIS 4398	Projects in Computer Science ¹	
PHYS 4796	Experimental Physics (S)	
GenEd Breadth Course		3
Elective		3
Elective		3
Elective		2
Credit Hours		14
Total Credit Hours		123

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

CIS 3296 is the prerequisite for CIS 4398 and should be taken as a 3000+ Computer & Information Science elective if you plan to take CIS 4398 as the capstone course.

2

Electives are chosen in consultation with the faculty advisor.

Computer Science BA

Overview

Science and technology are the foundations of our future. The Department of Computer and Information Sciences (CIS) is focused on the understanding of fundamental scientific principles and the application of these principles to solving complex problems, using computing technology.

The **Bachelor of Arts in Computer Science** provides an in-depth study of the science of computing, including mathematical/theoretical foundations as well as systems and application software development. Students are prepared (but not required) to take electives in topics such as artificial intelligence, machine learning, robotics, computer vision, graphics, game programming, bioinformatics, databases, big data, mobile and web application development, cloud computing, high performance computing, wireless and sensor networks, network and information security, and digital forensics. Students who select the BA in Computer Science can often have a second major and still be able to graduate within four years. This program is for students with an interest in the fundamentals of computing, who want to apply their computer science knowledge to a second area of interest and/or contribute to innovative research and product development. Our students have careers in software development, systems analysis and consulting; they are also prepared for graduate study and research in Computer and Information Sciences.

Campus Location: Main

Program Code: ST-CSCI-BA

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- have a minimum 3.50 major GPA and
- have a minimum 3.50 cumulative GPA.

Undergraduate Contact Information

Jamie Payton, Chair
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215-204-8450

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Learn more about the Bachelor of Arts in Computer Science.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Arts Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
Students MUST take:		
CIS 3296	Software Design	4
The second writing-intensive course can be chosen from:		
CIS 4397	Independent Research in Computer Science	3
CIS 4398	Projects in Computer Science	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
 - Students must satisfy general Temple University residency requirements (p. 1838).
- #### 2. College Requirements
- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
 - A minimum of 6 of these credits must be upper-level (courses numbered 2000 and above) CLA credits.
 - Successful completion or waiver from the second level of a foreign language.
 - Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.
- #### 3. Major Requirements for Bachelor of Arts (55 s.h.)

At least 7 courses required for the major must be completed at Temple. At least 5 CIS courses must be completed at Temple.

Code	Title	Credit Hours
Computer & Information Science courses		
CIS 1001	Introduction to Academics in Computer Science	1
CIS 1051 or CIS 1057	Introduction to Problem Solving and Programming in Python Computer Programming in C	4
CIS 1068 or CIS 1968	Program Design and Abstraction Honors Program Design and Abstraction	4
CIS 1166	Mathematical Concepts in Computing I	4

or CIS 1966	Honors Mathematical Concepts in Computing I	
CIS 2107	Computer Systems and Low-Level Programming	4
CIS 2166	Mathematical Concepts in Computing II	4
CIS 2168	Data Structures	4
CIS 3207	Introduction to Systems Programming and Operating Systems	4
CIS 3223	Data Structures and Algorithms	3
CIS 3296	Software Design	4
CIS 4397	Independent Research in Computer Science	3
or CIS 4398	Projects in Computer Science	
Mathematics courses		
MATH 1041	Calculus I	4
or MATH 1941	Honors Calculus I	
MATH 1042	Calculus II	4
or MATH 1942	Honors Calculus II	
Laboratory Science courses		
Two (2) laboratory science courses ¹		8
Total Credit Hours		55

1

Must select one Lab Science Sequence from the options listed below. Lab Science A and Lab Science B must be taken from the same department.

Sequenced Computer Science BA Laboratory Science Requirements

Code	Title	Credit Hours
Biology Sequence		
Select one Biology Lab Science A:		
BIOL 1011	General Biology I	
BIOL 1111	Introduction to Organismal Biology	
BIOL 1911	Honors Introduction to Organismal Biology (S)	
Select one Biology Lab Science B:		
BIOL 1012	General Biology II	
BIOL 1112	Introduction to Biomolecules, Cells and Genomes	
BIOL 1912	Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112	Introduction to Cellular and Molecular Biology	
BIOL 2912	Honors Introduction to Cellular and Molecular Biology (F)	
Chemistry Sequence ¹		
Select one Chemistry Lab Science A:		
CHEM 1021 & CHEM 1023	Introduction to Chemistry I and Introduction to Chemistry Laboratory I	
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one Chemistry Lab Science B:		
CHEM 1022 & CHEM 1024	Introduction to Chemistry II and Introduction to Chemistry Laboratory II	
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
Earth & Environmental Science Sequence ²		
Select this Lab Science A:		
EES 2001	Physical Geology	

Select one Lab Science B:

EES 2011	Mineralogy I (with CHEM 1031 prerequisite)
EES 2021	Sedimentary Environments (no CHEM 1031 prerequisite)
EES 2061	Introduction to Geochemistry (with CHEM 1031 prerequisite)

Physics Sequence³**Select one Physics Lab Science A:**

PHYS 1021	Introduction to General Physics I
PHYS 1061	Elementary Classical Physics I
PHYS 1961	Honors Elementary Classical Physics I (F)
PHYS 2021	General Physics I
PHYS 2921	Honors General Physics I (F)

Select one Physics Lab Science B:

PHYS 1022	Introduction to General Physics II
PHYS 1062	Elementary Classical Physics II
PHYS 1962	Honors Elementary Classical Physics II (S)
PHYS 2022	General Physics II
PHYS 2922	Honors General Physics II (S)

1

Students can choose to mix-and-match the Chemistry Sequence A and B courses. However, they must take at least 1 course from Chemistry Sequence A and 1 from Chemistry Sequence B. Note: Chemistry courses consist of a three-credit lecture plus a one-credit lab.

2

For the EES Sequence, two of the three Lab Science B options require students to take CHEM 1031 as a prerequisite, but EES 2021 does not.

3

Students can choose to mix-and-match the Physics Sequence A and B courses. However, they must take at least 1 course from Physics Sequence A and 1 from Physics Sequence B.

Suggested Academic Plan

Bachelor of Arts in Computer Science

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
CIS 1001	Introduction to Academics in Computer Science	1
Select one of the following:		4
CIS 1051	Introduction to Problem Solving and Programming in Python	
CIS 1057	Computer Programming in C	
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
SCTC 1001	CST First Year Seminar	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Elective		1
	Credit Hours	15
Spring		
CIS 1166 or CIS 1966	Mathematical Concepts in Computing I or Honors Mathematical Concepts in Computing I	4
CIS 1068 or CIS 1968	Program Design and Abstraction or Honors Program Design and Abstraction	4
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4

IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		15
Year 2		
Fall		
CIS 2168	Data Structures	4
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Elective		3
Elective		3
Credit Hours		16
Spring		
CIS 2107	Computer Systems and Low-Level Programming	4
CIS 2166	Mathematical Concepts in Computing II	4
GenEd Breadth Course		3-4
GenEd Breadth Course		3
Elective		1-0
Credit Hours		15
Year 3		
Fall		
CIS 3207	Introduction to Systems Programming and Operating Systems	4
CS BA Laboratory Science A		4
Foreign Language 1001 - First Level		4
GenEd Breadth Course		3
Credit Hours		15
Spring		
CIS 3223	Data Structures and Algorithms	3
CS BA Laboratory Science B		4
Foreign Language 1002 - Second Level		4
GenEd Breadth Course		3
Elective		2
Credit Hours		16
Year 4		
Fall		
CIS 3296	Software Design	4
Upper-level CLA Course (numbered 2000 and above)		3
Elective		3
Elective		3
Elective		3
Credit Hours		16
Spring		
Select one of the following:		3
CIS 4397	Independent Research in Computer Science (Capstone course)	
CIS 4398	Projects in Computer Science	
Upper-level CLA Course (numbered 2000 and above)		3
Elective		3
Elective		3
Elective		3
Credit Hours		15
Total Credit Hours		123

Computer Science BS

Overview

Science and technology are the foundations of our future. The Department of Computer and Information Sciences (CIS) is focused on the understanding of fundamental scientific principles and the application of these principles to solving complex problems, using computing technology.

The **Bachelor of Science in Computer Science** provides an in-depth study of the science of computing, including mathematical/theoretical foundations as well as systems and application software development. Students take electives (4-5 courses) in topics such as artificial intelligence, machine learning, robotics, computer vision, graphics, game programming, bioinformatics, databases, big data, mobile and web application development, cloud computing, high performance computing, wireless and sensor networks, network and information security, and digital forensics. The program is for students with an interest in the fundamentals of computing, who want to be able to contribute to innovative research and product development. Our graduates have careers in software development, systems analysis, and consulting; they are also prepared for graduate study and research in Computer and Information Sciences.

Campus Location: Main

Program Code: ST-CSCI-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- have a minimum 3.50 major GPA and
- have a minimum 3.50 cumulative GPA.

Accelerated Programs

Accelerated programs provide a pathway for students to pursue both an undergraduate degree and an advanced degree in a shorter amount of time. Below is a list of available accelerated programs for students in the BS in Computer Science.

- BS in Computer Science / MS in Computer Science (p. 1437)
- BS in Computer Science / MS in Computational Data Science

Undergraduate Contact Information

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Learn more about the Bachelor of Science in Computer Science.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)
 - Students must complete all University requirements including those listed below.
 - All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
All students MUST take:		
CIS 3296	Software Design	4

Second writing-intensive course can be chosen from:

CIS 4397	Independent Research in Computer Science	3
CIS 4398	Projects in Computer Science	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (73-74 s.h.)

At least 9 courses required for the major must be completed at Temple. At least 7 CIS courses must be completed at Temple.

Code	Title	Credit Hours
Computer & Information Science courses		
CIS 1001	Introduction to Academics in Computer Science	1
CIS 1051	Introduction to Problem Solving and Programming in Python	4
or CIS 1057	Computer Programming in C	
CIS 1068	Program Design and Abstraction	4
or CIS 1968	Honors Program Design and Abstraction	
CIS 1166	Mathematical Concepts in Computing I	4
or CIS 1966	Honors Mathematical Concepts in Computing I	
CIS 2033	Computational Probability and Statistics	3
CIS 2107	Computer Systems and Low-Level Programming	4
CIS 2166	Mathematical Concepts in Computing II	4
CIS 2168	Data Structures	4
CIS 3207	Introduction to Systems Programming and Operating Systems	4
CIS 3223	Data Structures and Algorithms	3
CIS 3296	Software Design	4
CIS 4398	Projects in Computer Science ¹	3
or CIS 4397	Independent Research in Computer Science	
Computer Science Electives		
Select 15-16 credits from the following CS elective courses: ²		15-16
CIS 3100	Special Topics in CIS	
CIS 3203	Introduction to Artificial Intelligence	
CIS 3211	Automata, Computability, and Languages	
CIS 3217	Computer Architecture	
CIS 3219	Computer Graphics and Image Processing	
CIS 3242	Discrete Structures	
CIS 3308	Web Application Programming	
CIS 3319	Wireless Networks and Security	
CIS 3374	Quality Assurance & Testing	
CIS 3381	Cooperative Education Experience in Computer Science ³	
CIS 3441	Software Security	
CIS 3515	Introduction to Mobile Application Development	
CIS 3603	User Experience Design	
CIS 3605	Introduction to Digital Forensics	
CIS 3715	Principles of Data Science	
CIS 4282	Independent Study ³	

CIS 4305	Real Time Computer Systems (Not offered every year)	
CIS 4307	Introduction to Distributed Systems and Networks (Not offered every year)	
CIS 4308	Development of Multi-tier Client/Server Systems (Not offered every year)	
CIS 4319	Computer Networks and Communications	
CIS 4324	Compiler Design (Not offered every year)	
CIS 4331	Principles of Database Systems	
CIS 4345	Introduction to Cloud Computing	
CIS 4350	Seminar on Topics in Computer Science	
CIS 4360	Seminar on Topics in Computer Science	
CIS 4382	Independent Study ³	
CIS 4397 or CIS 4398	Independent Research in Computer Science (if not taken as capstone requirement) ¹ Projects in Computer Science	
CIS 4419	Securing the Internet of Things	
CIS 4515	Advanced Mobile Application Development	
CIS 4517	Data-Intensive and Cloud Computing	
CIS 4523	Knowledge Discovery and Data Mining	
CIS 4524	Analysis and Modeling of Social and Information Networks	
CIS 4526	Foundations of Machine Learning	
CIS 4615	Ethical Hacking and Intrusion Forensics	
Mathematics		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
Laboratory Science courses		
Two (2) laboratory science courses ⁴		8
Total Credit Hours		73-74

1

GPA and other requirements are needed to register for CIS 4397.

2

Students can count one of the following as a CS elective course: MATH 2101 Linear Algebra, MATH 2103 Linear Algebra with Computer Lab, MATH 2043 Calculus III.

3

A maximum of eight (8) credits may be taken from CIS 3381, CIS 4282 and/or CIS 4382 to fulfill Computer Science elective requirements. In addition, a maximum of four (4) credits may be taken from CIS 3381 to fulfill Computer Science elective requirements.

4

Must select one Lab Science Sequence from the options listed below. Lab Science A and Lab Science B must be taken from the same department.

Sequenced Computer Science BS Laboratory Science Requirements

Code	Title	Credit Hours
Biology Sequence		
Select one Biology Lab Science A:		
BIOL 1011	General Biology I	
BIOL 1111	Introduction to Organismal Biology	
BIOL 1911	Honors Introduction to Organismal Biology	
Select one Biology Lab Science B:		
BIOL 1012	General Biology II	
BIOL 1112	Introduction to Biomolecules, Cells and Genomes	
BIOL 1912	Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112	Introduction to Cellular and Molecular Biology	

BIOL 2912 Honors Introduction to Cellular and Molecular Biology

Chemistry Sequence ¹

Select one Chemistry Lab Science A:

CHEM 1021 Introduction to Chemistry I
& CHEM 1023 and Introduction to Chemistry Laboratory I

CHEM 1031 General Chemistry I
& CHEM 1033 and General Chemistry Laboratory I

CHEM 1951 Honors General Chemical Science I
& CHEM 1953 and Honors Chemical Science Laboratory I

Select one Chemistry Lab Science B:

CHEM 1022 Introduction to Chemistry II
& CHEM 1024 and Introduction to Chemistry Laboratory II

CHEM 1032 General Chemistry II
& CHEM 1034 and General Chemistry Laboratory II

CHEM 1952 Honors General Chemical Science II
& CHEM 1954 and Honors Chemical Science Laboratory II

Earth & Environmental Science Sequence ²

Select this Lab Science A:

EES 2001 Physical Geology

Select one Lab Science B:

EES 2011 Mineralogy I (with CHEM 1031 prerequisite)

EES 2021 Sedimentary Environments (no CHEM 1031 prerequisite)

EES 2061 Introduction to Geochemistry (with CHEM 1031 prerequisite)

Physics Sequence ³

Select one Physics Lab Science A:

PHYS 1021 Introduction to General Physics I

PHYS 1061 Elementary Classical Physics I

PHYS 1961 Honors Elementary Classical Physics I

PHYS 2021 General Physics I

PHYS 2921 Honors General Physics I

Select one Physics Lab Science B:

PHYS 1022 Introduction to General Physics II

PHYS 1062 Elementary Classical Physics II

PHYS 1962 Honors Elementary Classical Physics II

PHYS 2022 General Physics II

PHYS 2922 Honors General Physics II

1

Students can choose to mix-and-match the Chemistry Sequence A and B courses. However, they must take at least 1 course from Chemistry Sequence A and 1 from Chemistry Sequence B. Note: Chemistry courses consist of a three-credit lecture plus a one-credit lab.

2

For the EES Sequence, two of the three Lab Science B options require students to take CHEM 1031 as a prerequisite, but EES 2021 does not.

3

Students can choose to mix-and-match the Physics Sequence A and B courses. However, they must take at least 1 course from Physics Sequence A and 1 from Physics Sequence B.

Suggested Academic Plan

Bachelor of Science in Computer Science

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1

Fall		Credit Hours
CIS 1001	Introduction to Academics in Computer Science	1
Select one of the following:		4

CIS 1051	Introduction to Problem Solving and Programming in Python	
CIS 1057	Computer Programming in C	
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
SCTC 1001	CST First Year Seminar	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Elective		1
Credit Hours		15
Spring		
CIS 1166 or CIS 1966	Mathematical Concepts in Computing I or Honors Mathematical Concepts in Computing I	4
CIS 1068 or CIS 1968	Program Design and Abstraction or Honors Program Design and Abstraction	4
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		15
Year 2		
Fall		
CIS 2168	Data Structures	4
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Elective		3
Elective		3
Credit Hours		16
Spring		
CIS 2033	Computational Probability and Statistics	3
CIS 2107	Computer Systems and Low-Level Programming	4
GenEd Breadth Course		3
GenEd Breadth Course		3
Elective		3
Credit Hours		16
Year 3		
Fall		
CIS 2166	Mathematical Concepts in Computing II	4
CIS 3207	Introduction to Systems Programming and Operating Systems	4
CS BS Laboratory Science A		4
GenEd Breadth Course		3-4
Elective		1-0
Credit Hours		16
Spring		
CIS 3223	Data Structures and Algorithms	3
Computer Science Elective ¹		4
CS BS Laboratory Science B		4
GenEd Breadth Course		3
Elective		1
Credit Hours		15

Year 4		
Fall		
CIS 3296	Software Design	4
Computer Science Elective ¹		4
Computer Science Elective ¹		4
Elective		3
Credit Hours		15
Spring		
Select one of the following:		3
CIS 4397	Independent Research in Computer Science	
CIS 4398	Projects in Computer Science	
Computer Science Elective ¹		3-4
Elective		3
Elective		3
Elective		3-2
Credit Hours		15
Total Credit Hours		123

1

Select from the Computer Science Electives list under Requirements.

Computer Science Minor

Overview

Having a **Minor in Computer Science (CS)** can enhance your employment opportunities. Offered by the Department of Computer and Information Sciences, the CS minor's coursework consists of three programming courses, one introductory theory course and one CS elective course. Prior to starting the CS minor's courses, students must take (or place out of) precalculus and an introductory programming course. Many of our CS minors come from related fields, such as Engineering, Information Science and Technology, and Math. Students on both Main Campus and Temple University Japan Campus may declare this minor.

Campus Location: Main and Japan

Undergraduate Contact Information

Main Campus

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 Science, Education and Research Center, Room 304
 215-204-8450

Gene Kwatny, Vice Chair
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Sally Kyvernitis, Faculty Advisor
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 215-204-2030
 sallyk@temple.edu

Temple Japan Campus

Hani Karam, PhD, Computer Science Coordinator
 hkaram@tuj.temple.edu

Minor Requirements

Students desiring a minor in Computer Science are required to satisfy the following:¹

Code	Title	Credit Hours
Select one of the following: ²		4
CIS 1051 or CIS 1951	Introduction to Problem Solving and Programming in Python Honors Introduction to Problem Solving and Programming in Python	
CIS 1057	Computer Programming in C	
CIS 1068 or CIS 1968	Program Design and Abstraction Honors Program Design and Abstraction	4
CIS 1166 or CIS 1966	Mathematical Concepts in Computing I Honors Mathematical Concepts in Computing I	4
CIS 2107	Computer Systems and Low-Level Programming	4
CIS 2168	Data Structures	4
Select one of the following: ³		3-4
CIS 2033	Computational Probability and Statistics	
CIS 2082	Independent Research I	
CIS 2166	Mathematical Concepts in Computing II	
CIS 3203	Introduction to Artificial Intelligence	
CIS 3207	Introduction to Systems Programming and Operating Systems	
CIS 3211	Automata, Computability, and Languages	
CIS 3217	Computer Architecture	
CIS 3219	Computer Graphics and Image Processing	
CIS 3308	Web Application Programming	
CIS 3319	Wireless Networks and Security	
CIS 3441	Software Security	
CIS 3513	Introduction to iOS Application Development	
CIS 3515	Introduction to Mobile Application Development	
CIS 3603	User Experience Design	
CIS 3605	Introduction to Digital Forensics	
CIS 3715	Principles of Data Science	
CIS 4319	Computer Networks and Communications	
CIS 4331	Principles of Database Systems	
CIS 4350	Seminar on Topics in Computer Science	
CIS 4360	Seminar on Topics in Computer Science	
Total Credit Hours		23-24

1

All of the listed CIS courses have Math course prerequisites of MATH 1022 Precalculus or higher.

2

Students may earn placement credit for this introductory programming course requirement. Please see the Computer Science faculty advisor for more information.

3

Some of the listed electives have prerequisites in addition to the core requirements.

Although the Computer Science minor can be completed in three semesters, it is best to allocate at least four semesters.

Residency Requirements: At least 3 courses required for the minor must be completed at Temple.

Computer Security and Digital Forensics Certificate

Overview

The **Certificate in Computer Security and Digital Forensics**, offered by the Department of Computer and Information Sciences (CIS), is appropriate for CIS majors¹ or experienced industry professionals² who are interested in focusing in the security area. Students can add this to their existing Computer Science, Information Science and Technology, or Mathematics/Computer Science major. At least two of these courses CANNOT count

towards the electives for the major. In other words, you need to have two distinct courses for the certificate that are not counting towards any major elective courses; one of the electives can count for both.

1

Matriculated students are primarily CIS majors due to prerequisites.

2

Non-matriculated students must have 2+ years of experience in the IT sector working in systems and network administration and/or security domains. Requires instructor permission.

Campus Location: Main

Program Code: ST-CSDf-CERT

Undergraduate Contact Information

Jamie Payton, Chair

Science, Education and Research Center, Room 304

215-204-8450

Gene Kwatny, Vice Chair

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215-204-8450

Dominic Letarte, Faculty Advisor

Science, Education and Research Center, Room 372

215-204-6439

istadvsr@temple.edu

Learn more about the undergraduate certificate in Computer Security and Digital Forensics.

Certificate Requirements

Prerequisites

Students desiring a Certificate in Computer Security & Digital Forensics must have already completed the following or have equivalent industry experience:

Code	Title	Credit Hours
CIS 1068 or CIS 1968	Program Design and Abstraction Honors Program Design and Abstraction	4
CIS 1166 or CIS 1966	Mathematical Concepts in Computing I Honors Mathematical Concepts in Computing I	4
CIS 2229 or CIS 2107	Architecture, Operating Systems and Networking Computer Systems and Low-Level Programming	4
CIS 2168	Data Structures	4
Total Credit Hours		16

Required Courses

Students desiring a Certificate in Computer Security & Digital Forensics must complete the following courses:

Code	Title	Credit Hours
CIS 3605	Introduction to Digital Forensics	3
Select two of the following:		6-8
CJ 1001 or CJ 3007	Introduction to Criminal Justice Cybercrime	
CIS 3319	Wireless Networks and Security	
CIS 3441	Software Security	

Residency Requirements: At least 2 courses required for the certificate must be completed at Temple.

Data Science BS with Computation and Modeling Concentration

Overview

Science and technology are the foundations of our future. The Department of Computer and Information Sciences (CIS) is focused on the understanding of fundamental scientific principles and the application of these principles to solving complex problems, using computing technology.

Data Science is an interdisciplinary field of study about methods and systems to extract knowledge or insights from large quantities of data coming in various forms. The **Bachelor of Science in Data Science** is designed for students interested in developing expertise in data science.

Data Science students **must select one of the following concentrations:**

- Computation and Modeling
- Computational Analytics
- Genomics and Bioinformatics

The **Concentration in Computation and Modeling** provides the tools necessary to create accurate, robust and detailed models of real systems in a scientific or professional field. A strong core of mathematics, physics, computational methods and techniques, and data analysis will enable students to model any complex physical system. Elective courses will allow students to specialize in a specific area of interest.

Campus Location: Main

Program Code: ST-DTSC-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- have a minimum 3.50 major GPA and
- have a minimum 3.50 cumulative GPA.

Accelerated Programs

Accelerated programs provide a pathway for students to pursue both an undergraduate degree and an advanced degree in a shorter amount of time. Below is a list of available accelerated programs for students in the BS in Data Science.

- BS in Data Science / MS in Computational Data Science

Undergraduate Contact Information

Department of Computer and Information Sciences

Jamie Payton, Chair

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215-204-8450

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Bernd Surrow, Chair

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Science, Education and Research Center, Room 708

215-204-8479

Matthew Newby, Faculty Advisor
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 215-204-2642
 matthew.newby@temple.edu

Learn more about the Bachelor of Science in Data Science.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
PHYS 2796	Introduction to Modern Physics	4
CIS 4496	Projects in Data Science	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (79-83 s.h.)

At least 9 courses required for the major must be completed at Temple. At least 4 CIS courses must be completed at Temple.

Code	Title	Credit Hours
Introductory Science Requirements		
Select one of the following sets:		8
PHYS 1061 & PHYS 1062	Elementary Classical Physics I and Elementary Classical Physics II	
PHYS 1961 & PHYS 1962	Honors Elementary Classical Physics I and Honors Elementary Classical Physics II	
PHYS 2021 & PHYS 2022	General Physics I and General Physics II	
PHYS 2921 & PHYS 2922	Honors General Physics I and Honors General Physics II	
Calculus Requirements		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
Math Methods in Computing Requirements		
CIS 1166 or CIS 1966	Mathematical Concepts in Computing I Honors Mathematical Concepts in Computing I	4
CIS 2166	Mathematical Concepts in Computing II	4

Probability and Statistics Requirements

MATH 3031	Probability Theory I	3
MATH 3032	Mathematical Statistics	3

Programming Requirements

CIS 1068	Program Design and Abstraction	4
or CIS 1968	Honors Program Design and Abstraction	
CIS 2168	Data Structures	4

Common Specialty Course Requirements

CIS 3715	Principles of Data Science	4
CIS 4496	Projects in Data Science	3

Concentration Requirements

CIS 3223	Data Structures and Algorithms	3
MATH 2043	Calculus III	4
or MATH 2943	Honors Calculus III	

Select one of the following: 3-4

MATH 2045	Differential Equations with Linear Algebra	
MATH 2101	Linear Algebra	
MATH 2103	Linear Algebra with Computer Lab	
MATH 3043	Numerical Analysis I	4
PHYS 2511	Scientific Computing I	1.5
PHYS 3511	Scientific Computing II	1.5
PHYS 2502	Mathematical Physics	4
PHYS 2796	Introduction to Modern Physics	4

Computation and Modeling Elective Requirements

Select from the following list: 9-12

CEE 3048	Probability, Statistics & Stochastic Methods	
CIS 3219	Computer Graphics and Image Processing	
CIS 4523	Knowledge Discovery and Data Mining	
or CIS 5523	Knowledge Discovery and Data Mining	
CIS 4524	Analysis and Modeling of Social and Information Networks	
or CIS 5524	Analysis and Modeling of Social and Information Networks	
CIS 4526	Foundations of Machine Learning	
EES 3011	Remote Sensing and GIS	
MATH 2121	Mathematical Modeling and Simulation	
MATH 3044	Numerical Analysis II	
MATH 4033	Probability Theory II	
MATH 4041	Partial Differential Equations	
MATH 4043	Applied Mathematics	
MATH 5043	Introduction to Numerical Analysis	
PHYS 2101	Classical Mechanics	
PHYS 3101	Analytical Mechanics	
PHYS 3301	Electricity and Magnetism	
PHYS 3302	Classical Electromagnetism	
PHYS 3701	Introduction to Quantum Mechanics I	
PHYS 4101	Thermal Physics	
PHYS 4302	Optics	
PHYS 4701	Introduction to Solid State Physics	
PHYS 4702	Introduction to Quantum Mechanics II	
PHYS 4091	Undergraduate Research (max of 3 credits across all independent study)	
MATH 4082	Senior Individual Study (max of 3 credits across all independent study)	

Total Credit Hours

79-83

Suggested Academic Plan

Bachelor of Science in Data Science with Concentration in Computation and Modeling

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
CIS 1068 or CIS 1968	Program Design and Abstraction or Honors Program Design and Abstraction	4
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
SCTC 1001	CST First Year Seminar	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
Credit Hours		16
Spring		
CIS 1166 or CIS 1966	Mathematical Concepts in Computing I or Honors Mathematical Concepts in Computing I	4
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Credit Hours		14
Year 2		
Fall		
CIS 2166	Mathematical Concepts in Computing II	4
CIS 2168	Data Structures	4
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I	
Credit Hours		16
Spring		
CIS 3223	Data Structures and Algorithms	3
CIS 3715	Principles of Data Science (S)	4
Select one of the following; must be continuation of prior Physics course:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II	
PHYS 2511	Scientific Computing I	1.5
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		15.5
Year 3		
Fall		
MATH 3031	Probability Theory I	3
Select one of the following:		3-4

MATH 2045	Differential Equations with Linear Algebra	
MATH 2101	Linear Algebra	
MATH 2103	Linear Algebra with Computer Lab (F)	
PHYS 3511	Scientific Computing II	1.5
GenEd Breadth Course		3-4
GenEd Breadth Course		3
Elective		2-0
Credit Hours		15.5
Spring		
MATH 3032	Mathematical Statistics (S)	3
PHYS 2502	Mathematical Physics (S)	4
PHYS 2796	Introduction to Modern Physics (S)	4
GenEd Breadth Course		3
Elective		1
Credit Hours		15
Year 4		
Fall		
MATH 3043	Numerical Analysis I (F)	4
Data Science: Computation & Modeling Elective		3-4
Data Science: Computation & Modeling Elective		3-4
Elective		3
Elective		3-1
Credit Hours		16
Spring		
CIS 4496	Projects in Data Science	3
Data Science: Computation & Modeling Elective		3-4
Elective		3
Elective		3
Elective		3-2
Credit Hours		15
Total Credit Hours		123
Code	Title	Credit Hours

(F) - Fall only course

(S) - Spring only course

Data Science BS with Computational Analytics Concentration

Overview

Science and technology are the foundations of our future. The Department of Computer and Information Sciences (CIS) is focused on the understanding of fundamental scientific principles and the application of these principles to solving complex problems, using computing technology.

Data Science is an interdisciplinary field of study about methods and systems to extract knowledge or insights from large quantities of data coming in various forms. The **Bachelor of Science in Data Science** is designed for students interested in developing expertise in data science.

Data Science students **must select one of the following concentrations**:

- Computation and Modeling
- Computational Analytics
- Genomics and Bioinformatics

The **Concentration in Computational Analytics** provides a strong background in mathematics, algorithmic and computational thinking, computer systems, and data analysis, and will enable students to analyze large quantities of data to discover new knowledge and facilitate decision making.

Campus Location: Main

Program Code: ST-DTSC-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- have a minimum 3.50 major GPA and
- have a minimum 3.50 cumulative GPA.

Accelerated Programs

Accelerated programs provide a pathway for students to pursue both an undergraduate degree and an advanced degree in a shorter amount of time. Below is a list of available accelerated programs for students in the BS in Data Science.

- BS in Data Science / MS in Computational Data Science

Undergraduate Contact Information

Jamie Payton, Chair

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215-204-8450

Gene Kwatny, Vice Chair

Science, Education and Research Center, Room 304
215-204-8450

Andrew Rosen, Faculty Advisor

Science, Education and Research Center, Room 349
215-204-3193
andrew.rosen@temple.edu

Learn more about the Bachelor of Science in Data Science.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
CIS 3296 or ENG 2696	Software Design Technical Writing	3-4
CIS 4496	Projects in Data Science	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (81-86 s.h.)

At least 9 courses required for the major must be completed at Temple. At least 6 CIS courses must be completed at Temple.

Code	Title	Credit Hours
Introductory Science Requirements		
Must select either the Chemistry sequence or the Physics sequence		8
CHEM 1031 & CHEM 1032 & CHEM 1033 & CHEM 1034	General Chemistry I and General Chemistry II and General Chemistry Laboratory I and General Chemistry Laboratory II	
CHEM 1951 & CHEM 1952 & CHEM 1953 & CHEM 1954	Honors General Chemical Science I and Honors General Chemical Science II and Honors Chemical Science Laboratory I and Honors Chemical Science Laboratory II	
PHYS 1061 & PHYS 1062	Elementary Classical Physics I and Elementary Classical Physics II	
PHYS 1961 & PHYS 1962	Honors Elementary Classical Physics I and Honors Elementary Classical Physics II	
PHYS 2021 & PHYS 2022	General Physics I and General Physics II	
PHYS 2921 & PHYS 2922	Honors General Physics I and Honors General Physics II	
Calculus Requirements		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
Math Methods in Computing Requirements		
CIS 1166 or CIS 1966	Mathematical Concepts in Computing I Honors Mathematical Concepts in Computing I	4
CIS 2166	Mathematical Concepts in Computing II	4
Probability and Statistics Requirements		
MATH 3031	Probability Theory I	3
MATH 3032	Mathematical Statistics	3
Programming Requirements		
CIS 1068 or CIS 1968	Program Design and Abstraction Honors Program Design and Abstraction	4
CIS 2168	Data Structures	4
Common Specialty Course Requirements		
CIS 3715	Principles of Data Science	4
CIS 4496	Projects in Data Science	3
Concentration Requirements		
CIS 2107	Computer Systems and Low-Level Programming	4
CIS 3223	Data Structures and Algorithms	3
CIS 4331	Principles of Database Systems	4
CIS 4517	Data-Intensive and Cloud Computing	3
CIS 4526	Foundations of Machine Learning	3
Select one of the following:		3-4
CIS 3296	Software Design ¹	
ENG 2696	Technical Writing	
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
Select one of the following:		3-4
MATH 2045	Differential Equations with Linear Algebra	
MATH 2101	Linear Algebra	

MATH 2103 Linear Algebra with Computer Lab

Computational Analytics Elective Requirements

Select from the following list:

9-12

BIOE 3301	Biomedical Signals and Systems
CEE 3048	Probability, Statistics & Stochastic Methods
CEE 3711	Environmental Engineering
CEE 4221	Intelligent Transportation Systems
CEE 4531	Life Cycle Assessment and Carbon Footprinting
CIS 3203	Introduction to Artificial Intelligence
CIS 3207	Introduction to Systems Programming and Operating Systems
CIS 3219	Computer Graphics and Image Processing
CIS 3515	Introduction to Mobile Application Development
CIS 3605	Introduction to Digital Forensics
CIS 4523	Knowledge Discovery and Data Mining
or CIS 5523	Knowledge Discovery and Data Mining
CIS 4524	Analysis and Modeling of Social and Information Networks
EES 3011	Remote Sensing and GIS
HCM 3501	Introduction to Health Services Systems
MATH 3043	Numerical Analysis I
MATH 3044	Numerical Analysis II
MATH 4033	Probability Theory II
MATH 4043	Applied Mathematics
MKTG 3508	Digital Marketing (need permission to register)
MKTG 3509	Customer Data Analytics (need permission to register)
STAT 2522	Survey Design and Sampling
STAT 2523	Design of Experiments and Quality Control
STAT 3504	Time Series and Forecasting Models
STAT 3506	Nonparametric and Categorical Data Analysis

Total Credit Hours**81-86**

1

CIS 3296 has a prerequisite of CIS 3207.

Suggested Academic Plan**Bachelor of Science in Data Science with Concentration in Computational Analytics****Suggested Plan for New Students Starting in the 2023-2024 Academic Year**

Year 1		Credit Hours
Fall		
CIS 1068 or CIS 1968	Program Design and Abstraction or Honors Program Design and Abstraction	4
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
SCTC 1001	CST First Year Seminar	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
Credit Hours		16
Spring		
CIS 1166 or CIS 1966	Mathematical Concepts in Computing I or Honors Mathematical Concepts in Computing I	4

MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Credit Hours		14
Year 2		
Fall		
CIS 2166	Mathematical Concepts in Computing II	4
CIS 2168	Data Structures	4
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
Select one of the following Chemistry or Physics sequences:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I	
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I	
Credit Hours		16
Spring		
CIS 2107	Computer Systems and Low-Level Programming	4
CIS 3223	Data Structures and Algorithms	3
CIS 3715	Principles of Data Science (S)	4
Select one of the following. Note: Must be continuation of the Chemistry or Physics course taken in prior semester:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II	
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II	
Credit Hours		15
Year 3		
Fall		
CIS 4331	Principles of Database Systems	4
MATH 3031	Probability Theory I	3
Select one of the following:		3-4
MATH 2045	Differential Equations with Linear Algebra	
MATH 2101	Linear Algebra	
MATH 2103	Linear Algebra with Computer Lab (F)	
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Elective		3-2
Credit Hours		16
Spring		
CIS 4517	Data-Intensive and Cloud Computing (S)	3
MATH 3032	Mathematical Statistics (S)	3
GenEd Breadth Course		3-4
GenEd Breadth Course		3

Elective		3
Elective		1-0
Credit Hours		16
Year 4		
Fall		
CIS 4526	Foundations of Machine Learning (F)	3
Data Science: Computational Analytics Elective		3-4
Data Science: Computational Analytics Elective		3-4
GenEd Breadth Course		3
Elective		3-1
Credit Hours		15
Spring		
CIS 4496	Projects in Data Science	3
Select one of the following:		3-4
CIS 3296	Software Design ¹	
ENG 2696	Technical Writing	
Data Science: Computational Analytics Elective		3-4
Elective		3
Elective		3-1
Credit Hours		15
Total Credit Hours		123

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

1

CIS 3296 has a prerequisite of CIS 3207.

Data Science BS with Genomics and Bioinformatics Concentration

Overview

Science and technology are the foundations of our future. The Department of Computer and Information Sciences (CIS) is focused on the understanding of fundamental scientific principles and the application of these principles to solving complex problems, using computing technology.

Data Science is an interdisciplinary field of study about methods and systems to extract knowledge or insights from large quantities of data coming in various forms. The **Bachelor of Science in Data Science** is designed for students interested in developing expertise in data science.

Data Science students **must select one of the following concentrations**:

- Computation and Modeling
- Computational Analytics
- Genomics and Bioinformatics

The **Concentration in Genomics and Bioinformatics** provides a strong background in mathematics, computational thinking and biological data analysis, and will enable students to analyze large quantities of data to discover new knowledge and facilitate decision making. This specialization is intended for students interested in biology, ecology, evolution, human health and disease, and precision medicine. Over the past decade, the emergence of next-generation sequencing technologies has facilitated the rapid growth of genomic data; however, undergraduate training in big data management, big data processing and big data analysis has not kept up with this rapid growth in large-scale biological data generation.

Campus Location: Main

Program Code: ST-DTSC-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.5 cumulative GPA and
- achieve a minimum 3.5 major GPA.

Accelerated Programs

Accelerated programs provide a pathway for students to pursue both an undergraduate degree and an advanced degree in a shorter amount of time. Below is a list of available accelerated programs for students in the BS in Data Science.

- BS in Data Science / MS in Computational Data Science

Undergraduate Contact Information

Jamie Payton, Chair
Science, Education and Research Center, Room 304
215-204-8450

Gene Kwatny, Vice Chair
Science, Education and Research Center, Room 304
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Sudhir Kumar, Program Director
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Learn more about the Bachelor of Science in Data Science.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)
 - Students must complete all University requirements including those listed below.
 - All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing intensive course options for this major are:

Code	Title	Credit Hours
BIOL 2297	Research Techniques in Genetics (S) ¹	3
CIS 4496	Projects in Data Science	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
 - Students must satisfy general Temple University residency requirements (p. 1838).
2. College Requirements
 - A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
 - Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (82 s.h.)

At least 9 courses required for the major must be completed at Temple. At least 3 CIS courses must be completed at Temple.

Code	Title	Credit Hours
Introductory Science Requirements		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I	
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II	
Calculus Requirements		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
Math Methods in Computing Requirements		
CIS 1166 or CIS 1966	Mathematical Concepts in Computing I Honors Mathematical Concepts in Computing I	4
CIS 2166	Mathematical Concepts in Computing II	4
Probability and Statistics Requirements		
MATH 3031	Probability Theory I	3
MATH 3032	Mathematical Statistics	3
Programming Requirements		
CIS 1068 or CIS 1968	Program Design and Abstraction Honors Program Design and Abstraction	4
CIS 2168	Data Structures	4
Common Specialty Course Requirements		
CIS 3715	Principles of Data Science	4
CIS 4496	Projects in Data Science	3
Concentration Requirements		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology Honors Introduction to Organismal Biology	4
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology Honors Introduction to Cellular and Molecular Biology	4
BIOL 2207	Genetics (S)	3
BIOL 2297	Research Techniques in Genetics (WI, S) ¹	3
BIOL 3101	Evolution	3
BIOL 3111	Genomics in Medicine	3
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2211 & CHEM 2213	Organic Chemistry for Majors I and Organic Majors Laboratory I	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I	
Select one of the following:		4
CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II	

CHEM 2212 & CHEM 2214	Organic Chemistry for Majors II and Organic Majors Laboratory II	
CHEM 2922 & CHEM 2924	Organic Chemistry for Honors II and Organic Honors Laboratory II	
Genomics and Bioinformatics Elective Requirements		
Select from the following list:		9
BIOL 2227	Principles of Ecology	
BIOL 3112	Fundamentals of Genomic Evolutionary Medicine	
BIOL 3114	Evolutionary Ecology	
BIOL 3128	Genomics and Infectious Disease Dynamics	
BIOL 3201	Human Genetics	
BIOL 3211	Human Evolution	
BIOL 3225	Evolutionary Genetics	
BIOL 3241	Genomics and Evolutionary Biology of Parasites and Other Dependent Species	
BIOL 3321	Plant Community Ecology ²	
BIOL 3322	Biology of Plants	
BIOL 3324	Molecular Biology ³	
BIOL 3328	Virology ³	
BIOL 3368	Biology of Cancer ³	
BIOL 3379	Biotechnology ³	
BIOL 3403	Genomic Biology ³	
CEE 3048	Probability, Statistics & Stochastic Methods	
CIS 4523 or CIS 5523	Knowledge Discovery and Data Mining Knowledge Discovery and Data Mining	
Total Credit Hours		82

1

This course has a co-requisite of BIOL 2207.

2

This course requires an additional prerequisite of BIOL 2227.

3

This course requires an additional prerequisite of BIOL 3204.

Suggested Academic Plan

Bachelor of Science in Data Science with Concentration in Genomics and Bioinformatics

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
CIS 1068 or CIS 1968	Program Design and Abstraction or Honors Program Design and Abstraction	4
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
SCTC 1001	CST First Year Seminar	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Elective		2
Credit Hours		15
Spring		
CIS 1166 or CIS 1966	Mathematical Concepts in Computing I or Honors Mathematical Concepts in Computing I	4

MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Elective		4
Credit Hours		15
Year 2		
Fall		
CHEM 1031 or CHEM 1951	General Chemistry I or Honors General Chemical Science I	3
CHEM 1033 or CHEM 1953	General Chemistry Laboratory I or Honors Chemical Science Laboratory I	1
CIS 2166	Mathematical Concepts in Computing II	4
CIS 2168	Data Structures	4
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Elective		1
Credit Hours		16
Spring		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology or Honors Introduction to Organismal Biology	4
CHEM 1032 or CHEM 1952	General Chemistry II or Honors General Chemical Science II	3
CHEM 1034 or CHEM 1954	General Chemistry Laboratory II or Honors Chemical Science Laboratory II	1
CIS 3715	Principles of Data Science (S)	4
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology or Honors Introduction to Cellular and Molecular Biology	4
MATH 3031	Probability Theory I	3
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2211 & CHEM 2213	Organic Chemistry for Majors I and Organic Majors Laboratory I	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I	
GenEd Breadth Course		3
Elective		2
Credit Hours		16
Spring		
BIOL 2207	Genetics ((S))	3
BIOL 2297	Research Techniques in Genetics ((S))	3
MATH 3032	Mathematical Statistics (S)	3
Select one of the following:		4
CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II	
CHEM 2212 & CHEM 2214	Organic Chemistry for Majors II and Organic Majors Laboratory II	
CHEM 2922 & CHEM 2924	Organic Chemistry for Honors II and Organic Honors Laboratory II	

GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
BIOL 3101	Evolution (F)	3
BIOL 3111	Genomics in Medicine (F)	3
Data Science: Genomics & Bioinformatics Elective		3
Data Science: Genomics & Bioinformatics Elective		3
GenEd Breadth Course		3
Credit Hours		15
Spring		
CIS 4496	Projects in Data Science	3
Data Science: Genomics & Bioinformatics Elective		3
GenEd Breadth Course		3-4
Elective		6-5
Credit Hours		15
Total Credit Hours		123
Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

Data Science: Computational Analytics Certificate

Overview

Offered by the Department of Computer and Information Sciences, the **Certificate in Data Science: Computational Analytics** is designed to allow students with strong mathematical and programming backgrounds to develop expertise in big data analytics and machine learning. This certificate is available to all undergraduate students and professional non-degree-seeking students.

Campus Location: Main

Program Code: ST-DSCA-CERT

Undergraduate Contact Information

Jamie Payton, Chair
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215-204-8450

Gene Kwatny, Vice Chair
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Andrew Rosen, Faculty Advisor
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andrew.rosen@temple.edu

Learn more about the undergraduate certificate in Data Science: Computational Analytics.

Certificate Requirements

Prerequisites

Students desiring a Certificate in Data Science: Computational Analytics must have already completed the following or have equivalent industry experience:

Code	Title	Credit Hours
CIS 1068 or CIS 1968	Program Design and Abstraction Honors Program Design and Abstraction	4
CIS 1166 or CIS 1966	Mathematical Concepts in Computing I Honors Mathematical Concepts in Computing I	4
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
Total Credit Hours		20

Required Courses

Students desiring a Certificate in Data Science: Computational Analytics must complete the following courses:

Code	Title	Credit Hours
Select one of the following:		3-4
CIS 2033	Computational Probability and Statistics	
MATH 3031	Probability Theory I	
STAT 2103	Statistical Business Analytics	
BIOL 3312	Biostatistics (F)	
Select one of the following:		3-4
CIS 2166	Mathematical Concepts in Computing II	
MATH 2045	Differential Equations with Linear Algebra	
MATH 2101	Linear Algebra	
MATH 2103	Linear Algebra with Computer Lab (F)	
CIS 3715	Principles of Data Science (S)	4
CIS 4526	Foundations of Machine Learning	3
Total Credit Hours		13-15

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

Residency Requirements: At least 2 courses required for the certificate must be completed at Temple.

Data Science: Computational Analytics Minor

Overview

Data Science is an interdisciplinary field of study about methods and systems to extract knowledge or insights from large quantities of data coming in various forms. Offered by the Department of Computer and Information Sciences, the **Minor in Data Science: Computational Analytics** is designed for students interested in developing expertise in data science, with specialization in computational analytics.

Campus Location: Main

Undergraduate Contact Information

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 Science, Education and Research Center, Room 349
 215-204-3193
 andrew.rosen@temple.edu

Minor Requirements

Prerequisites

Students desiring a Minor in Data Science: Computational Analytics must have already completed the following or have equivalent industry experience:

Code	Title	Credit Hours
CIS 1068 or CIS 1968	Program Design and Abstraction Honors Program Design and Abstraction	4
CIS 1166 or CIS 1966	Mathematical Concepts in Computing I Honors Mathematical Concepts in Computing I	4
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
Total Credit Hours		20

Required Courses

Students desiring a Minor in Data Science: Computational Analytics must complete the following courses:

Code	Title	Credit Hours
Select one of the following:		3-4
CIS 2033	Computational Probability and Statistics	
MATH 3031	Probability Theory I	
STAT 2103	Statistical Business Analytics	
BIOL 3312	Biostatistics (F)	
Select one of the following:		3-4
CIS 2166	Mathematical Concepts in Computing II	
MATH 2045	Differential Equations with Linear Algebra	
MATH 2101	Linear Algebra	
MATH 2103	Linear Algebra with Computer Lab (F)	
CIS 2168	Data Structures	4
CIS 3715	Principles of Data Science (S)	4
CIS 4526	Foundations of Machine Learning (F)	3
CIS 4517	Data-Intensive and Cloud Computing (S)	3
Total Credit Hours		20-22

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

Residency Requirements: At least 3 courses required for the minor must be completed at Temple. At least 3 CIS courses must be completed at Temple.

Digital Media Technologies Minor (CST)

Overview

The **Minor in Digital Media Technologies** is an interdisciplinary minor offered through the Department of Media Studies and Production (MSP) within the Lew Klein College of Media and Communication and the Department of Computer and Information Sciences (CIS) within the College of Science and Technology. This minor is designed to expand students' knowledge of the information age and enable them to share communications over the internet using fast evolving, emerging technologies.

The minor is available to undergraduate students in Media Studies and Production, Computer and Information Science, as well as other departments and colleges. Upon completion of the minor, students should be able to demonstrate the following competencies:

- Use technology to integrate internet content with computers and mobile devices.
- Design and implement content for various digital media, utilizing database technologies.
- Critically analyze decisions made regarding the use of technology, specifically in the social and ethical domains.
- Understand the impact of current and emerging technologies on communications, both locally and globally.
- Create effective written communications make professional presentations.
- Analyze and solve problems efficiently.

Campus Location: Main

Note: Transfer credits are not accepted for credit for the minor.

Contact Information

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 sallyk@temple.edu

Hector Postigo, MSP Faculty Advisor
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 hector.postigo@temple.edu

Minor Requirements

- Students with a GPA of 2.00 or more may declare this minor by contacting either CST advising (215-204-2890) or Klein advising (215-204-5273). See additional Grade Requirements below.
- Three (3) of the Digital Media Technologies minor courses must be distinct from the student's major. Students should see their CST or Klein advisor for course substitutions.
- Students without a CIS background should begin their CIS courses in their Junior year or earlier.

Code	Title	Credit Hours
Two Required MSP Courses:		
Select one of the following:		3-4
MSP 1701	Introduction to Media Production	
MSP 2701	Intermediate Video Production ¹	
MSP 2751	Audio for Media ¹	
MSP 2741	Introduction to Internet Studies and Web Authoring ¹	3
Two Required CIS Courses:		
Select two courses from the following:		8
CIS 1052	Introduction to Web Technology and Programming	
CIS 1056	Advanced Web Technology and Programming	
CIS 2305	Mobile Computing Technologies ¹	
CIS 3308	Web Application Programming ¹	
CIS 3342	Server-Side Web Application Development ¹	
CIS 3344	Client-Side Scripting for the Web ¹	
CIS 3515	Introduction to Mobile Application Development ¹	

Two Electives:

One CIS elective and one MSP elective are required. However, MSP students may choose two CIS electives instead and CIS students may choose two MSP electives instead.

Select two courses from the following:

7-9

MSP Elective Options

MSP 4741	Emergent Media Production
MSP 4221	Information Technology Policy ¹
MSP 4252	Law and Ethics of Digital Media
MSP 4541	Mobile Media
MSP 4614	Creating a Media Business

CIS Elective Options

CIS 2305	Mobile Computing Technologies ^{1,2}
any other CIS 2000+ level course ¹	

Total Credit Hours**21-24**

1

This course requires additional prerequisites outside of the Digital Media Technology Minor coursework.

2

May satisfy a CIS Elective only if CIS 2305 was not taken as a Required CIS Course.

Elective Requirements

- All prerequisites must be completed to enroll in minor courses or permission from both the faculty advisor and instructor must be obtained prior to registration.

Grade Requirements

- Minor credit is not given for grades below C-.
- Students must maintain at least a 2.00 grade point average in the program to successfully complete this minor.

Residency Requirements

At least 4 courses required for the minor must be completed at Temple. At least 2 CIS courses and at least 2 MSP courses must be completed at Temple.

Earth and Space Science with Teaching BS**Overview**

The Department of Earth and Environmental Science provides students the opportunity to study the Earth with a variety of traditional and environmental geology course work. The faculty work closely with students to give a combination of field-based experience and current laboratory and computational techniques.

The **Bachelor of Science in Earth and Space Science with Teaching** is part of Temple's innovative "TUteach" secondary education teacher-training program. The BS in Earth and Space Science with Teaching provides broad training in earth and space science and prepares students for a career in secondary school teaching or an entry level position in environment science. The education courses in this major include supervised teaching in school district classrooms and emphasize inquiry-based approaches to learning. Students in the BS in Earth and Space Science with Teaching degree program become *eligible* for a Pennsylvania teacher certification when they complete all the requirements for the degree that include theoretical and practical courses in education specifically designed for science and mathematics majors. In order to be *recommended* for Pennsylvania teacher certification, students must graduate with:

1. a BS with Teaching degree and
2. meet GPA and testing requirements of the state of Pennsylvania.

Students will be scheduled once each semester to meet with the TUteach advisor to ensure that students have knowledge of academic programming, internships opportunities and testing options that include test preparation. The state of Pennsylvania has specific candidacy requirements. The TUteach advisor will also help the students complete and submit the candidacy documents. All students joining the program in their freshman year must complete the PAPA examination or acquire the PAPA waiver within their first 72 credits. Transfer students, from within Temple and those from other institutions, will build a tailored program with the academic and testing benchmarks structured for efficient degree completion with the TUteach advisor. Students are

encouraged to complete the appropriate PRAXIS II examination prior to student teaching. Students are encouraged to take internship courses to expand their teaching portfolio or select elective courses that will extend their knowledge of science and teaching practice.

Campus Location: Main

Program Code: ST-ESTC-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.5 major GPA;
- achieve a minimum 3.5 GPA in the content area courses required for the major; and
- achieve a minimum 3.9 GPA in the following courses:
 - SCES 2189 or SCTC 3485
 - SCES 4189 or SCTC 4485
 - EDUC 4802
 - EDUC 4388.

Undergraduate Contact Information

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Learn more about the Bachelor of Science in Earth and Space Science with Teaching.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (124 total s.h.)
 - Students must complete all University requirements including those listed below.
 - All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
EES 2096	Climate Change: Oceans To Atmosphere (S)	
EES 2097	Process Geomorphology (F)	
EES 4696	Vertebrate Paleontology and Taphonomy (Fall of odd years)	
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete TTeach majors receive a waiver for 1 Human Behavior (GB), 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
 - Students must satisfy general Temple University residency requirements (p. 1838).
2. College Requirements
- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
 - Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (88-89 s.h.)¹

At least 9 courses required for the major must be completed at Temple. At least 5 EES courses and 3 Education courses must be completed at Temple. Though not required, students are strongly encouraged to increase training and field work experience by enrolling in SCTC 1385, SCTC 2385, or SCTC 2389. Students will also benefit from directed laboratory projects offered through SCTC 3185. These courses are offered every semester.

Code	Title	Credit Hours
Chemistry		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Earth & Environmental Science		
EES 2001	Physical Geology	4
EES 2011	Mineralogy I (F)	4
EES 2096	Climate Change: Oceans To Atmosphere (S)	4
EES 3091	Research Methods (S)	3
5 Earth & Environmental Science electives numbered 2002 or above		20
Mathematics		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
Physics		
PHYS 1004	Introduction to Astronomy (F)	3
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
Science/Math Foundation courses		
Select two of the following:		7-8
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology Honors Introduction to Organismal Biology	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology Honors Introduction to Cellular and Molecular Biology	

CHEM 1032 & CHEM 1034 or CHEM 1952 & CHEM 1954	General Chemistry II and General Chemistry Laboratory II Honors General Chemical Science II and Honors Chemical Science Laboratory II
CHEM 2201 & CHEM 2203 or CHEM 2921 & CHEM 2923	Organic Chemistry I and Organic Chemistry Laboratory I Organic Chemistry for Honors I and Organic Honors Laboratory I
MATH 1044 or MATH 1042 or MATH 1942	Introduction to Probability and Statistics for the Life Sciences Calculus II Honors Calculus II
MATH 2031	Probability and Statistics
PHYS 1062 or PHYS 1962 or PHYS 2022 or PHYS 2922	Elementary Classical Physics II Honors Elementary Classical Physics II General Physics II Honors General Physics II

College of Science & Technology

SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
SCTC 1389	Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners	2
SCTC 3001	History of Science	3
SCTC 3312	Coding STEM Lessons ²	1

Education

EDUC 2179	Knowing and Learning in Mathematics and Science	3
EDUC 4388	TUteach Apprentice Teaching	4
EDUC 4802	TUteach Apprentice Teaching Seminar	3
MGSE 2189 or SCTC 3485	Classroom Interactions (S) Science and Mathematics in the Classroom	3
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3
MGSE 4189 or SCTC 4485	Project-Based Instruction (F) Integrating STEM Practice in Diverse Teaching Environments	3
SPED 2231	Introduction to Special Education	3

Total Credit Hours**88-89**

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

The certification requirements need to meet Pennsylvania Department of Education standards and are subject to change. All students are strongly recommended to check with the TUteach Advisor in the College of Science and Technology, to affirm the requirements that pertain to their specific major. In addition, students should check the *Undergraduate Bulletin* web site for the most current information about these programs, or the TUteach web site. It is also recommended that all students meet with an advisor before enrolling in classes specific to these majors and leading to certification as a teacher. This is to assure that a candidate's intended program of study will be compatible with the new requirements.

2

All students are required to complete a minimum of one credit.

Suggested Academic Plan

Bachelor of Science in Earth and Space Science with Teaching

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
EES 2001	Physical Geology	4
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
SCTC 1001	CST First Year Seminar	1
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
SCTC 1389	Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners	2
GenEd Breadth Course		3
Credit Hours		17
Spring		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
Elective		3
Credit Hours		14
Year 2		
Fall		
EES 2011	Mineralogy I (F)	4
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
EDUC 2179	Knowing and Learning in Mathematics and Science	3
SPED 2231	Introduction to Special Education	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		17
Spring		
EES 2096	Climate Change: Oceans To Atmosphere (S) ¹	4
Science Foundation Elective (see approved list)		3-4
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Elective		3-2
Credit Hours		16
Year 3		
Fall		
Earth & Environmental Science 2002+ Elective ²		4
PHYS 1004	Introduction to Astronomy (F)	3
Science Foundation Elective (see approved list)		4
SCTC 3001	History of Science	3

GenEd Breadth Course		3
Credit Hours		17
Spring		
Earth & Environmental Science 2002+ Elective ²		4
Earth & Environmental Science 2002+ Elective ²		4
EES 3091	Research Methods (S)	3
Select one of the following:		3
MGSE 2189	Classroom Interactions (S)	
SCTC 3485	Science and Mathematics in the Classroom	
Elective		3
Credit Hours		17
Year 4		
Fall		
Earth & Environmental Science 2002+ Elective ²		4
Earth & Environmental Science 2002+ Elective ²		4
Select one of the following:		3
MGSE 4189	Project-Based Instruction (F)	
SCTC 4485	Integrating STEM Practice in Diverse Teaching Environments	
SCTC 3312	Coding STEM Lessons ³	1
GenEd Breadth Course		3
Elective		1
Credit Hours		16
Spring		
EDUC 4388	TUteach Apprentice Teaching	4
EDUC 4802	TUteach Apprentice Teaching Seminar	3
Elective		3
Credit Hours		10
Total Credit Hours		124

1

This course is offered in even Spring terms.

2

Earth & Environmental Science electives must be numbered 2002 or above.

3

All students are required to complete a minimum of one credit.

Code	Title	Credit Hours
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(F) - Fall only course.

(S) - Spring only course.

Ecology, Evolution and Biodiversity BS

Overview

The Earth harbors an incredible diversity of life, linked through webs of intricate ecological relationships and connected by deep evolutionary histories spanning millions of years. Human societies depend upon this biodiversity, yet much of it remains poorly understood by science and faces unprecedented threats from global change. The **Bachelor of Science in Ecology, Evolution and Biodiversity (EEB)**, offered by the Department of Biology, trains the next generation of scientists to pioneer new insights into the natural world, clarify the processes that maintain and change it, and develop innovative approaches to its conservation. The EEB program prepares students to forge new understandings of the ecological interactions among species and their evolutionary adaptations to their environments. Graduating students can launch their career as a research scientist, a science policy advisor, an environmental analyst or a science communicator. In education, graduates can aim for university professor, K-12 science teacher or environmental program director. Out in the field, graduates can enter jobs as a restoration ecologist, park naturalist and conservation or natural resource manager.

Campus Location: Main

Program Code: ST-EEB-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.2 cumulative grade point average (GPA);
- achieve a minimum 3.2 major GPA;
- successfully complete BIOL 4391 Accelerated Research in Biology or BIOL 4291 Extradepartmental Research for a total of 6 credits over two semesters;
- write a final research paper; and
- present their research at a departmental research poster session.

Undergraduate Contact Information

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Learn more about the Bachelor of Science in Ecology, Evolution and Biodiversity.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
BIOL 2297	Research Techniques in Genetics (S)	3
BIOL 4396	Advanced Study in Biology	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
 - Students must satisfy general Temple University residency requirements (p. 1838).
- #### 2. College Requirements
- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
 - Complete a one-credit first-year or transfer seminar.

- SCTC 1001 CST First Year Seminar for every entering first-year CST student.
- SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (74-82 s.h.)

At least 9 courses required for the major must be completed at Temple. At least 6 Biology courses must be completed at Temple.

Code	Title	Credit Hours
Biology		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology Honors Introduction to Organismal Biology	4
Select one of the following:		4
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology Honors Introduction to Cellular and Molecular Biology	
BIOL 2207	Genetics (S)	3
BIOL 2227	Principles of Ecology	3
BIOL 2297	Research Techniques in Genetics (WI, S) ¹	3
BIOL 3101	Evolution (F)	3
BIOL 4396	Advanced Study in Biology (WI)	3
Chemistry		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I (F)	
Ecology, Evolution, and Biodiversity (EEB) Electives		
Select six of the following, with at least one in each category: ^{2, 3}		18-24
Ecology		
BIOL 3115	Disturbance Ecology	
BIOL 3244	Experimental Marine Biology (Summer)	
BIOL 3245	Marine Ecology (F)	
BIOL 3254	Animal Behavior (S)	
BIOL 3275	Ecology of Invasive Species (F)	
BIOL 3316	Tropical Marine Biology (F, odd years)	
BIOL 3321	Plant Community Ecology (F)	
BIOL 3335	Life at the Extremes - Polar Biology	
BIOL 3336	Freshwater Ecology (F, even years)	
BIOL 3389	Field Research in Community Ecology (Summer)	
BIOL 4327	Biological Impacts of Global Climate Change (F)	
Evolution		
BIOL 3114	Evolutionary Ecology (F)	
BIOL 3128	Genomics and Infectious Disease Dynamics (F)	
BIOL 3211	Human Evolution	
BIOL 3212	Introduction to Bioinformatics and Computational Biology	

BIOL 3214	Theoretical Population Genetics	
BIOL 3225	Evolutionary Genetics (S)	
BIOL 3232	Behavioral Genetics (F)	
BIOL 3241	Genomics and Evolutionary Biology of Parasites and Other Dependent Species (S)	
BIOL 3403	Genomic Biology	
BIOL 4365	Evolutionary Developmental Biology: Evo-Devo (S)	
Biodiversity		
BIOL 2241	Invertebrate Biology (S)	
BIOL 3243	Parasitology (Not every year)	
BIOL 3307	Conservation Biology (F)	
BIOL 3311	Herpetology (S)	
BIOL 3317	General Microbiology (S)	
BIOL 3322	Biology of Plants (F)	
Mathematics and Quantitative Methods		
MATH 1041	Calculus I	4
or MATH 1941	Honors Calculus I	
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
Select two of the following Quantitative Methods courses:		6-8
BIOL 3113	Genome Analytics	
BIOL 3312	Biostatistics (F)	
BIOL 3323	Global Change Science: Analytics with R	
EES 3011	Remote Sensing and GIS	
MATH 1042	Calculus II	
or MATH 1942	Honors Calculus II	
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
Physics		
Select one of the following:		4
PHYS 1021	Introduction to General Physics I	
PHYS 1061	Elementary Classical Physics I	
or PHYS 1961	Honors Elementary Classical Physics I	
PHYS 2021	General Physics I	
or PHYS 2921	Honors General Physics I	
Select one of the following:		4
PHYS 1022	Introduction to General Physics II	
PHYS 1062	Elementary Classical Physics II	
or PHYS 1962	Honors Elementary Classical Physics II	
PHYS 2022	General Physics II	
or PHYS 2922	Honors General Physics II	

Total Credit Hours **74-82**

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

This course has a co-requisite of BIOL 2207.

2

Additional course prerequisites may be required.

3

Students may fulfill one upper-level elective by completing a total of 6 credits of research. A maximum of 3 credits may come from the junior level research course BIOL 3082 and the remaining 3 credits must come from a senior level (**4000+**) research course. Students may also complete all 6 credits using two semesters of the senior research course if they prefer. **Research must be appropriate to fulfill one of the upper-level elective categories (Ecology, Evolution, or Biodiversity)** and may be used for a maximum of 4 credits toward the elective. Consult with the EEB program advisor to determine 1) which labs are participating, 2) if your research is appropriate for one of the category choices and 3) which research course you should register for. Not all research courses are appropriate for EEB credit. Once 6 hours of research are completed, students must seek approval from a CST advisor to obtain the waiver for credit towards one upper-level elective in the appropriate category.

Code	Title	Credit Hours
Other Suggested Courses		
These courses do not count for credits in the major but may be taken as free elective credits: ^{1, 2}		
ANTH 2001	Evolution and Human Environments	3
ANTH 2763	Anthropological Genetics	3
ANTH 2764	Primate Behavior	3
ANTH 3196	Methods in Environmental Archaeology	3
ANTH 3796	Methods in the Study of Evolution	3
BIOL 2234	Dinosaur Paleobiology	3
BIOL 3201	Human Genetics (F)	3
BIOL 3204	Cell Structure and Function (F)	4
BIOL 3265	Developmental Biology (F)	3
BIOL 3324	Molecular Biology (F)	3
BIOL 3325	Research Techniques in Molecular Biology (S)	3
BIOL 3333	Advanced Techniques in Microscopy (S)	4
BIOL 3334	Mammalian Physiology (S)	4
BIOL 3337	Comparative Biomechanics (F)	3
BIOL 3396	Scientific Writing for Biology: The Art of Communicating	3
BIOL 4375	General Biochemistry I	3
BOT 1111	General Botany	4
BOT 1112	Plant Ecology	3
BOT 3166	Plant Taxonomy	3
CHEM 0877	The Chemistry of Global Environmental Issues	3
ECON 1001	Introduction to the Economy	3
ECON 3506	Energy, Ecology, and Economy	3
EES 2001	Physical Geology	4
EES 2002	Energy and Environment	3
EES 2051	Introduction to Data Visualization and Analysis for Earth and Environmental Science	3
EES 2096	Climate Change: Oceans To Atmosphere	4
ENST 2001	Environment and Society	3
ENST 2025	Environmental Law and Regulation	3
ENST 2097	Research Design in Environmental Studies	3
ENST 2157	Environmental Ethics	3
ENST 3051	Environmental Policy Issues	3
ENST 3053	Climatology	3
ENST 3062	Fundamentals of Geographic Information Systems	3
ENST 3068	Environmental Impact Assessment	3
ENVH 2102	Environmental Health	3
ENVT 4761	Environmental Regulations	3
HIST 3214	North American Environmental History	3
HORT 2114	Soils	3
JRN 3253	Health and Environmental Writing	3

1

Additional course prerequisites may be required.

2

Courses in CST and CLA will count towards the College Requirements for overall and upper-level credits in CST, CLA, or ENG.

With the exception noted in footnote 3 above, the research and independent study courses shown below do not count as EEB electives. The research and independent study courses shown below do not count as Biology electives, but they may count as free elective credits toward graduation. Most research courses can only be taken ONCE for a letter grade. Check individual course descriptions for details and/or exceptions.

Code	Title	Credit Hours
BIOL 2082	Independent Research I	1 to 4
BIOL 3082	Independent Research II	1 to 4
BIOL 3181	Cooperative Research in Biochemistry	3
BIOL 3681	Cooperative Studies	2 to 4
BIOL 3685	Externship Studies	3
BIOL 4291	Extrdepartmental Research	1 to 4
BIOL 4391	Accelerated Research in Biology	1 to 4
BIOL 4483	Accelerated Research in Biochemistry	3
BIOL 4491	Research in Biochemistry	3
BIOL 4591	Research in Neuroscience	1 to 4

Note: Grades of C- or higher are required unless otherwise specified in all courses for the major, including course prerequisites. The College of Science and Technology requires that students have a GPA of at least 2.00 overall and at least 2.00 in the courses applicable to their major and/or minor GPA to graduate.

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Ecology, Evolution and Biodiversity

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology or Honors Introduction to Organismal Biology	4
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
SCTC 1001	CST First Year Seminar	1
GenEd Breadth Course		3
Credit Hours		16
Spring		
BIOL 2227	Principles of Ecology	3
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3

ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Elective		1

Credit Hours**15****Year 2****Fall**

Select one of the following: 4

BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes or Honors Introduction to Biomolecules, Cells and Genomes
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BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology or Honors Introduction to Cellular and Molecular Biology
---------------------------	--

Select one of the following: 4

CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I
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CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I (F)
--------------------------	---

Select one of the following: 4

PHYS 1021	Introduction to General Physics I
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PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I
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PHYS 2021 or PHYS 2921	General Physics I or Honors General Physics I
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IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
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Credit Hours**15****Spring**

BIOL 2207	Genetics (S)	3
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BIOL 2297	Research Techniques in Genetics (S)	3
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Select one of the following Quantitative Methods courses: 3-4

BIOL 3113	Genome Analytics
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BIOL 3312	Biostatistics
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BIOL 3323	Global Change Science: Analytics with R
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EES 3011	Remote Sensing and GIS
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MATH 1042 or MATH 1942	Calculus II or Honors Calculus II
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MATH 1044	Introduction to Probability and Statistics for the Life Sciences
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Select one of the following: 4

PHYS 1022	Introduction to General Physics II
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PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II
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PHYS 2022 or PHYS 2922	General Physics II or Honors General Physics II
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IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
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Elective		1-0
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Credit Hours**17****Year 3****Fall**

BIOL 3101	Evolution	3
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Select one of the following Quantitative Methods courses: 3-4

BIOL 3113	Genome Analytics
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BIOL 3312	Biostatistics
-----------	---------------

BIOL 3323	Global Change Science: Analytics with R
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EES 3011	Remote Sensing and GIS	
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
EEB Elective 1 ¹		3-4
GenEd Breadth Course		3-4
Elective		3-0
Credit Hours		15
Spring		
EEB Elective 2 ¹		3-4
EEB Elective 3 ¹		3-4
GenEd Breadth Course		3
GenEd Breadth Course		3
Elective		3-1
Credit Hours		15
Year 4		
Fall		
EEB Elective 4 ¹		3-4
Select one of the following: ²		3-4
BIOL 4396	Advanced Study in Biology	
EEB Elective 5 ¹		
GenEd Breadth Course		3
Elective		2
Elective		3-1
Credit Hours		14
Spring		
Select one of the following: ²		3-4
BIOL 4396	Advanced Study in Biology	
EEB Elective 5 ¹		
EEB Elective 6 ¹		3-4
Elective		3
Elective		3
Elective		4-2
Credit Hours		16
Total Credit Hours		123

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

See the Ecology, Evolution, and Biodiversity (EEB) Electives list under Requirements for course options. At least one course from each Elective category (Ecology, Evolution, and Biodiversity) must be selected.

2

Either BIOL 4396 or EEB elective 5 may be completed in the fall term. Whichever is not chosen in the fall, must then be completed in the spring term.

Environmental Professional Training Certificate

Overview

Offered by the Department of Earth and Environmental Science, the **Certificate in Environmental Professional Training** is designed to provide Geology and Environmental Science majors or continuing education students holding similar degrees with additional skills that will help them prepare for work in environmental consulting.

Campus Location: Main

Program Code: ST-EPT-CERT

Undergraduate Contact Information

Nicholas Davatzes, Chair
Beury Hall, Room 307
215-204-2319
davatzes@temple.edu

Allison Tumarkin-Deratzian, Vice Chair
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215-204-2321
altd@temple.edu

Laura Toran, Faculty Advisor
Beury Hall, Room 223
215-204-2352
ltoran@temple.edu

Learn more about the undergraduate certificate in Environmental Professional Training.

Certificate Requirements

Prerequisites

Students desiring a Certificate in Environmental Professional Training must have already completed the following or have equivalent industry experience:

Code	Title	Credit Hours
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
EES 2001	Physical Geology	4
EES 2021	Sedimentary Environments	4
Select one of the following: ¹		4
EES 3021	Groundwater Hydrology (S)	
EES 3025	Physical Hydrology (F)	
MATH 1022	Precalculus	4

Required Courses

Students desiring a Certificate in Environmental Professional Training must complete the following courses:

Code	Title	Credit Hours
EES 2031	Introduction to Field Methods in the Earth and Environmental Sciences	1
ENVS 3027	HAZWOPER Training and the Regulatory Environment	3
Select two of the following: ¹		6-8
EES 2061	Introduction to Geochemistry	
EES 2067	Introduction to Environmental Toxicology	
EES 3011	Remote Sensing and GIS	
EES 3021	Groundwater Hydrology	

EES 3025	Physical Hydrology
EES 3065	Nanoscience & the Environment
EES 4502	Ice and Global Climate
EES 5454	Introduction to Geophysics

Total Credit Hours**10-12**

1

Majors are required to take either EES 3021 Groundwater Hydrology or EES 3025 Physical Hydrology. For the certificate, only one such course will be counted for these majors (i.e., if the student takes both courses, only one will be counted toward the certificate). For non-majors, both courses can count.

Residency Requirements: At least 2 courses required for the certificate must be completed at Temple.

Environmental Science BS with Applied Ecology Concentration

Overview

The Department of Earth and Environmental Science provides students the opportunity to study the Earth with a variety of traditional and environmental geology course work. The faculty work closely with students to give a combination of field-based experience and current laboratory and computational techniques.

The department offers the **Bachelor of Science in Environmental Science**. Students **must select one of the following concentrations**:

- Applied Ecology
- Climate
- Environmental Geochemistry
- Hydrology

Students in the **Concentration in Applied Ecology** will be equipped with the scholarly background and intellectual skills to understand a wide range of pressing environmental issues, and they will come to appreciate the physical, economic, political, demographic and ethical factors that define those issues. Our graduates find employment with government environmental agencies, citizens' organizations, consulting firms and corporate environmental affairs departments.

Environmental problems are among the most urgent issues facing our civilization. The Environmental Science with concentration in Applied Ecology offers interdisciplinary coursework in biology, geology, chemistry and mathematics and combines this with classes from geography and economics to explore the relationships between living things and their environment.

Campus Location: Main

Program Code: ST-ENVS-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.5 major GPA
 - if the difficulty of courses chosen as electives is high, then a 3.3 GPA will suffice. This determination will be made by the appropriate faculty
- no grade below C in a major requirement

Undergraduate Contact Information

Sujith Ravi, Program Director
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215-204-7122
sravi@temple.edu

Steven Chemtob, Faculty Advisor, Environmental Science
Beury Hall, Room 325B
215-204-3958
chemtob@temple.edu

Learn more about the Bachelor of Science in Environmental Science.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
EES 2096	Climate Change: Oceans To Atmosphere	4
EES 2097	Process Geomorphology	4
ENVS 4198	Environmental Science Senior Seminar	3
ECON 3596	Energy, Ecology, and Economy	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (74-78 s.h.)

At least 10 courses required for the major must be completed at Temple.

Code	Title	Credit Hours
Biology		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology Honors Introduction to Organismal Biology	4
Select one of the following:		4
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology Honors Introduction to Cellular and Molecular Biology	
BIOL 2227	Principles of Ecology	3
Select one of the following: ¹		3
BIOL 3115	Disturbance Ecology	
BIOL 3275	Ecology of Invasive Species	
BIOL 3389	Field Research in Community Ecology	
Chemistry		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
Select one of the following:		4

CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I	
Earth & Environmental Science		
EES 2001	Physical Geology	4
EES 3011	Remote Sensing and GIS	4
Select one of the following: ²		4
EES 3021	Groundwater Hydrology (S)	
EES 3025	Physical Hydrology (F)	
Economics		
ECON 1102 or ECON 1902	Microeconomic Principles Honors Microeconomic Principles	3
Environmental Science		
ENVS 4198	Environmental Science Senior Seminar	3
Environmental Science Electives		
Select 5 Environmental Science Electives chosen from the categories below. At least one Elective must be a writing-intensive course: ³		
3-4 Science Electives, with at least two from Biology		9-16
1-2 Policy Electives		6-3
Mathematics and Quantitative Methods		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
Select one of the following:		4
MATH 1042	Calculus II	
MATH 1942	Honors Calculus II	
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
Physics		
Select one of the following:		4
PHYS 1061 or PHYS 1961	Elementary Classical Physics I Honors Elementary Classical Physics I	
PHYS 2021 or PHYS 2921	General Physics I Honors General Physics I	
Total Credit Hours		74-78

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

1

The Biology courses not selected can be used as Environmental Science Electives (Biology Electives).

2

The hydrology course not selected may be taken as an Environmental Science Elective (Water Elective).

3

See the table below for a listing of specific courses within each Elective category. At least one Elective must be a writing-intensive (WI) course.

Code	Title	Credit Hours
Science Electives: Biology, Climate, Geochemistry, Land, and Water		
Biology Electives - Select at least two		
BIOL 3114	Evolutionary Ecology (F)	3
BIOL 3115	Disturbance Ecology ¹	3
BIOL 3244	Experimental Marine Biology	4

BIOL 3245	Marine Ecology (F)	4
BIOL 3254	Animal Behavior (S)	3
BIOL 3275	Ecology of Invasive Species (F) ¹	3
BIOL 3307	Conservation Biology (F)	3
BIOL 3316	Tropical Marine Biology (F)	4
BIOL 3321	Plant Community Ecology (F)	3
BIOL 3323	Global Change Science: Analytics with R	3
BIOL 3336	Freshwater Ecology (F)	4
BIOL 3389	Field Research in Community Ecology ¹	3
Climate Electives		
EES 2002	Energy and Environment	3
EES 2096	Climate Change: Oceans To Atmosphere	4
EES 4502	Ice and Global Climate	3
RMI 2101	Introduction to Risk Management	3
Geochemistry Electives		
EES 2061	Introduction to Geochemistry	4
EES 2067	Introduction to Environmental Toxicology	3
EES 3065	Nanoscience & the Environment	4
ENVH 2102	Environmental Health ²	3
CHEM 3103	Techniques of Chemical Measurement I	3
Land Electives		
EES 2002	Energy and Environment	3
EES 2021	Sedimentary Environments	4
EES 2097	Process Geomorphology	4
EES 3042	Coastal Processes and Geomorphology	4
Policy Electives		
CDEV 2255	Environmental Justice in Communities	3
CTRP 2251	Sustainable Food Systems Planning	3
ECON 1101	Macroeconomic Principles	3
ECON 3596	Energy, Ecology, and Economy	3
ENST 2025	Environmental Law and Regulation	3
ENST 2051	The Urban Environment	3
ENST 3015	The Geographic Basis of Land Use Planning	3
ENST 3051	Environmental Policy Issues	3
ENST 3314	Food Studies: A Geographical Perspective	3
ENST/GUS 3058	Environment and Development	3
Water Electives ³		
EES 3021	Groundwater Hydrology (S)	4
EES 3025	Physical Hydrology (F)	4

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

This program requires one of the following: BIOL 3115, BIOL 3275, or BIOL 3389. The remaining courses not selected to fulfill the major requirement can be taken to satisfy an Environmental Science Elective.

2

HRPR 1001 is a prerequisite for this course.

3

One hydrology course is a required course. The course not selected may be taken as an Environmental Science Elective (Water Elective).

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Environmental Science with Concentration in Applied Ecology

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
SCTC 1001	CST First Year Seminar	1
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
GenEd Breadth Course		3
Credit Hours		15
Spring		
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II	
EES 2001	Physical Geology	4
Select one of the following:		4
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		16
Year 2		
Fall		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology or Honors Introduction to Organismal Biology	4
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3-4
Elective		1-0
Credit Hours		15
Spring		
BIOL 2227	Principles of Ecology	3
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I	
PHYS 2021	General Physics I	

PHYS 2921	Honors General Physics I	
Environmental Science Elective 1 - Science ^{1,2}		3-4
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Elective		3-2
Credit Hours		16
Year 3		
Fall		
Select one of the following:		4
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes or Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology or Honors Introduction to Cellular and Molecular Biology	
Select one of the following: ³		4
EES 3021	Groundwater Hydrology (S)	
EES 3025	Physical Hydrology (F)	
Environmental Science Elective 2 - Science ^{1,2}		3-4
GenEd Breadth Course		3
Elective		2-1
Credit Hours		16
Spring		
Select one of the following:		3
BIOL 3115	Disturbance Ecology	
BIOL 3275	Ecology of Invasive Species	
BIOL 3389	Field Research in Community Ecology	
EES 3011	Remote Sensing and GIS	4
ECON 1102 or ECON 1902	Microeconomic Principles or Honors Microeconomic Principles	3
GenEd Breadth Course		3
Elective		2
Credit Hours		15
Year 4		
Fall		
Environmental Science Elective 3 - Science ^{1,2}		3-4
Environmental Science Elective 4 - Policy ¹		3
GenEd Breadth Course		3
Elective		3
Elective		3-2
Credit Hours		15
Spring		
ENVS 4198	Environmental Science Senior Seminar	3
Environmental Science Elective 5 - Science or Policy ^{1,2}		3-4
Elective		3-2
Elective		3
Elective		3
Credit Hours		15
Total Credit Hours		123
Code	Title	Credit Hours

(F) - Fall only course

(S) - Spring only course

1

Select from the Environmental Science Electives lists under Requirements. At least one of the Electives must be a writing-intensive (WI) course.

2

For the Science Electives, at least two from Biology must be selected.

3

Either hydrology course EES 3021 or EES 3025 can be taken. One will be offered in the Fall and one in the Spring. The course not selected may be taken as an Environmental Science Elective (Water Elective).

Environmental Science BS with Climate Concentration

Overview

The Department of Earth and Environmental Science provides students the opportunity to study the Earth with a variety of traditional and environmental geology course work. The faculty work closely with students to give a combination of field-based experience and current laboratory and computational techniques.

The department offers the **Bachelor of Science in Environmental Science**. Students **must select one of the following concentrations**:

- Applied Ecology
- Climate
- Environmental Geochemistry
- Hydrology

Students in the **Concentration in Climate** will be equipped with the scholarly background and intellectual skills to understand a wide range of pressing environmental issues, and they will come to appreciate the physical, economic, political, demographic and ethical factors that define those issues. Our graduates find employment with government environmental agencies, citizens' organizations, consulting firms and corporate environmental affairs departments.

Global climate change is a major challenge of this century. The Environmental Science with concentration in Climate establishes the science and tools used to assess our changing climate and opportunities to mitigate its impacts on human societies and environmental systems. Students completing this concentration will understand the essential attributes of resilient environments, infrastructure, and sustainable resource management.

Campus Location: Main

Program Code: ST-ENVS-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.5 major GPA
 - if the difficulty of courses chosen as electives is high, then a 3.3 GPA will suffice. This determination will be made by the appropriate faculty
- no grade below C in a major requirement

Undergraduate Contact Information

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Learn more about the Bachelor of Science in Environmental Science.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
EES 2096	Climate Change: Oceans To Atmosphere	4
ENVS 4198	Environmental Science Senior Seminar	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
 - Students must satisfy general Temple University residency requirements (p. 1838).
- #### 2. College Requirements
- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
 - Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (74-77 s.h.)

At least 10 courses required for the major must be completed at Temple.

Code	Title	Credit Hours
Biology		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology Honors Introduction to Organismal Biology	4
Chemistry		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Earth & Environmental Science		
EES 2001	Physical Geology	4
EES 2061	Introduction to Geochemistry	4
EES 2096	Climate Change: Oceans To Atmosphere	4
EES 3011	Remote Sensing and GIS (S)	4
Select one of the following:		4
EES 3021	Groundwater Hydrology (S)	
EES 3025	Physical Hydrology (F)	
EES 4502	Ice and Global Climate	3
Economics		
ECON 1102 or ECON 1902	Microeconomic Principles Honors Microeconomic Principles	3
Environmental Science		
ENVS 4198	Environmental Science Senior Seminar	3
Environmental Science Electives		
Select 7 Environmental Science Electives chosen from the categories below: ¹		
2 Land Electives		7-8
2 Hazard Electives		6
2 Mixed Electives		6-8

1 Policy Elective	3
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Mathematics and Quantitative Methods

MATH 1041	Calculus I	4
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or MATH 1941	Honors Calculus I	
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SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
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Select one of the following:	4
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MATH 1042	Calculus II	
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MATH 1942	Honors Calculus II	
-----------	--------------------	--

MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
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Physics

Select one of the following:	4
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PHYS 1061	Elementary Classical Physics I	
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or PHYS 1961	Honors Elementary Classical Physics I	
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PHYS 2021	General Physics I	
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or PHYS 2921	Honors General Physics I	
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Total Credit Hours	74-77
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Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

See the Table below for a listing of specific courses within each Elective category.

Code	Title	Credit Hours
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Hazard Electives

CTRP 2251	Sustainable Food Systems Planning	3
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RMI 2101	Introduction to Risk Management ¹	3
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RMI 3502	Managing Property Liability Risk I ²	3
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RMI 3504	Managing Property Liability Risk II ³	3
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RMI 3567	Managing International Risk ⁴	3
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Land Electives

EES 2002	Energy and Environment	3
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EES 2021	Sedimentary Environments	4
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EES 2097	Process Geomorphology (F)	4
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EES 3042	Coastal Processes and Geomorphology (S)	4
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Mixed Electives

Hazard or Land Elective	3-4
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Hazard or Land Elective	3-4
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EES 2067	Introduction to Environmental Toxicology	3
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EES 3065	Nanoscience & the Environment (F)	4
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EES 4896	Planetary Geology	4
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BIOL 2227	Principles of Ecology	3
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Policy Electives

CDEV 2255	Environmental Justice in Communities	3
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ENST 2025	Environmental Law and Regulation	3
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ENST 2157	Environmental Ethics	3
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ENST 3051	Environmental Policy Issues	3
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Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		
1		
	ECON 1101 is a prerequisite for this course.	
2		
	RMI 2101 is a prerequisite for this course.	
3		
	RMI 3502 is a prerequisite for this course. If self-registration is not possible for RMI 3504, please seek an override for the RMI 3501 prerequisite from your CST advisor.	
4		
	RMI 2101 and RMI 3502 are prerequisites for this course. If self-registration is not possible for RMI 3567, please seek an override for the RMI 3501 prerequisite from your CST advisor.	

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Environmental Science with Concentration in Climate

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
SCTC 1001	CST First Year Seminar	1
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
GenEd Breadth Course		3
Credit Hours		15
Spring		
EES 2001	Physical Geology	4
Select one of the following:		4
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
Credit Hours		15
Year 2		
Fall		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology or Honors Introduction to Organismal Biology	4
EES 2061	Introduction to Geochemistry	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3-4

Elective		1-0
Credit Hours		15
Spring		
EES 2096	Climate Change: Oceans To Atmosphere	4
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I	
Environmental Science Elective 1 - Land ¹		3-4
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Elective		1-0
Credit Hours		15
Year 3		
Fall		
Select one of the following: ²		4
EES 3021	Groundwater Hydrology (S)	
EES 3025	Physical Hydrology (F)	
Environmental Science Elective 2 - Mixed ¹		3-4
Environmental Science Elective 3 - Land ¹		4
GenEd Breadth Course		3
Elective		2-1
Credit Hours		16
Spring		
EES 3011	Remote Sensing and GIS (S)	4
ECON 1102 or ECON 1902	Microeconomic Principles or Honors Microeconomic Principles	3
Environmental Science Elective 4 - Policy ¹		3
GenEd Breadth Course		3
Elective		3
Credit Hours		16
Year 4		
Fall		
EES 4502	Ice and Global Climate (Ice and Global Climate)	3
Environmental Science Elective 5 - Mixed ¹		3-4
Environmental Science Elective 6 - Hazard ¹		3
Elective		3
Elective		3-2
Credit Hours		15
Spring		
ENVS 4198	Environmental Science Senior Seminar	3
Environmental Science Elective 7 - Hazard ¹		3
Elective		4
Elective		3
Elective		3
Credit Hours		16
Total Credit Hours		123

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

Select from the Environmental Science Electives lists under Requirements.

2

Either EES 3021 or EES 3025 can be taken. One will be offered in the Fall and one in the Spring.

Environmental Science BS with Environmental Geochemistry Concentration

Overview

The Department of Earth and Environmental Science provides students the opportunity to study the Earth with a variety of traditional and environmental geology course work. The faculty work closely with students to give a combination of field-based experience and current laboratory and computational techniques.

The department offers the **Bachelor of Science in Environmental Science**. Students **must select one of the following concentrations**:

- Applied Ecology
- Climate
- Environmental Geochemistry
- Hydrology

Students in the **Concentration in Environmental Geochemistry** will be equipped with the scholarly background and intellectual skills to understand a wide range of pressing environmental issues, and they will come to appreciate the physical, economic, political, demographic and ethical factors that define those issues. Our graduates find employment with government environmental agencies, citizens' organizations, consulting firms and corporate environmental affairs departments.

Anthropogenic activities have disrupted natural geochemical cycles and introduced contaminants that may affect the environment and human health. Students completing the Environmental Geochemistry concentration will understand fundamental principles that control the composition and reactions of water and materials in the environment; learn and practice methods for collection and interpretation of geochemical datasets; and integrate such datasets into broader pictures of environmental change.

Campus Location: Main

Program Code: ST-ENVS-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.5 major GPA
 - if the difficulty of courses chosen as electives is high, then a 3.3 GPA will suffice. This determination will be made by the appropriate faculty
- no grade below C in a major requirement

Undergraduate Contact Information

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Learn more about the Bachelor of Science in Environmental Science.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
EES 2096	Climate Change: Oceans To Atmosphere	4
EES 2097	Process Geomorphology	4
ENVS 4198	Environmental Science Senior Seminar	3
ECON 3596	Energy, Ecology, and Economy	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (74-78 s.h.)

At least 10 courses required for the major must be completed at Temple.

Code	Title	Credit Hours
Chemistry		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I	
Earth & Environmental Science		
EES 2001	Physical Geology	4
EES 2061	Introduction to Geochemistry	4
EES 2067	Introduction to Environmental Toxicology	3
EES 2096	Climate Change: Oceans To Atmosphere	4
Select one of the following: ¹		4
EES 3021	Groundwater Hydrology (S)	
EES 3025	Physical Hydrology (F)	

EES 3065	Nanoscience & the Environment	4
Environmental Health		
HRPR 1001	Public Health: The Way We Live, Work and Play	3
ENVH 2102	Environmental Health	3
Environmental Science		
ENVS 4198	Environmental Science Senior Seminar	3
Environmental Science Electives		
Select 5 Environmental Science Electives chosen from the categories below: ²		
3-4 Science Electives		9-16
1-2 Policy Electives		6-3
Mathematics and Quantitative Methods		
MATH 1041	Calculus I	4
or MATH 1941	Honors Calculus I	
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
Select one of the following:		
MATH 1042	Calculus II	4
MATH 1942	Honors Calculus II	
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
Physics		
Select one of the following:		
PHYS 1061	Elementary Classical Physics I	4
or PHYS 1961	Honors Elementary Classical Physics I	
PHYS 2021	General Physics I	
or PHYS 2921	Honors General Physics I	

Total Credit Hours **74-78**

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

1

The hydrology course not selected may be taken as an Environmental Science Elective (Water Elective).

2

See the table below for a listing of specific courses within each Elective category.

Code	Title	Credit Hours
Science Electives: Biology and Chemistry, Land, and Water		
Biology and Chemistry Electives - Select up to two ¹		
BIOL 2227	Principles of Ecology	3
BIOL 3114	Evolutionary Ecology (F)	3
BIOL 3244	Experimental Marine Biology	4
BIOL 3245	Marine Ecology (F)	4
BIOL 3254	Animal Behavior (S)	3
BIOL 3275	Ecology of Invasive Species (F)	3
BIOL 3307	Conservation Biology (F)	3
BIOL 3316	Tropical Marine Biology (F)	4
BIOL 3321	Plant Community Ecology (F)	3
BIOL 3323	Global Change Science: Analytics with R	3
BIOL 3336	Freshwater Ecology (F)	4
BIOL 3389	Field Research in Community Ecology	3
CHEM 3103	Techniques of Chemical Measurement I	3
Land Electives - Select up to three		

EES 2002	Energy and Environment	3
EES 2021	Sedimentary Environments	4
EES 2097	Process Geomorphology	4
EES 3011	Remote Sensing and GIS	4
EES 3042	Coastal Processes and Geomorphology	4
Water Electives - Select up to one ²		
EES 3025	Physical Hydrology (F)	4
EES 3021	Groundwater Hydrology (S)	4
Policy Electives		
CDEV 2255	Environmental Justice in Communities	3
CTRP 2251	Sustainable Food Systems Planning	3
ECON 1101	Macroeconomic Principles	3
ECON 3596	Energy, Ecology, and Economy	3
ENST 2025	Environmental Law and Regulation	3
ENST 2051	The Urban Environment	3
ENST 3015	The Geographic Basis of Land Use Planning	3
ENST 3051	Environmental Policy Issues	3
ENST 3058	Environment and Development	3
ENST 3314	Food Studies: A Geographical Perspective	3

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

All of the 3000-level Biology elective courses require BIOL 2227 as a prerequisite.

2

One hydrology course is a required course. The course not selected may be taken as an Environmental Science Elective (Water Elective).

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Environmental Science with Concentration in Environmental Geochemistry

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
SCTC 1001	CST First Year Seminar	1
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
GenEd Breadth Course		3
Credit Hours		15
Spring		
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	

CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II	
EES 2001	Physical Geology	4
Select one of the following:		4
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		16
Year 2		
Fall		
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I	
EES 2061	Introduction to Geochemistry	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3-4
Elective		2-1
Credit Hours		16
Spring		
EES 2096	Climate Change: Oceans To Atmosphere	4
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I	
Environmental Science Elective 1 - Science ¹		3-4
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Elective		1-0
Credit Hours		15
Year 3		
Fall		
Select one of the following: ²		4
EES 3021	Groundwater Hydrology (S)	
EES 3025	Physical Hydrology (F)	
EES 3065	Nanoscience & the Environment (F)	4
HRPR 1001	Public Health: The Way We Live, Work and Play	3
Environmental Science Elective 2 - Science ¹		3-4
Elective		2-1
Credit Hours		16
Spring		
ENVH 2102	Environmental Health	3
EES 2067	Introduction to Environmental Toxicology	3
Environmental Science Elective 3 - Policy ¹		3
GenEd Breadth Course		3
Elective		3
Credit Hours		15

Year 4**Fall**

Environmental Science Elective 4 - Science ¹	3-4
Environmental Science Elective 5 - Science or Policy ¹	3-4
GenEd Breadth Course	3
Elective	3
Elective	3-1

Credit Hours	15
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Spring

ENVS 4198	Environmental Science Senior Seminar	3
GenEd Breadth Course		3
Elective		3
Elective		3
Elective		3

Credit Hours	15
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Total Credit Hours	123
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Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

Select from the Environmental Science Electives lists under Requirements.

2

Either hydrology course EES 3021 or EES 3025 can be taken. One will be offered in the Fall and one in the Spring. The course not selected may be taken as an Environmental Science Elective (Water Elective).

Environmental Science BS with Hydrology Concentration

Overview

The Department of Earth and Environmental Science provides students the opportunity to study the Earth with a variety of traditional and environmental geology course work. The faculty work closely with students to give a combination of field-based experience and current laboratory and computational techniques.

The department offers the **Bachelor of Science in Environmental Science**. Students **must select one of the following concentrations**:

- Applied Ecology
- Climate
- Environmental Geochemistry
- Hydrology

Students in the **Concentration in Hydrology** will be equipped with the scholarly background and intellectual skills to understand a wide range of pressing environmental issues, and they will come to appreciate the physical, economic, political, demographic and ethical factors that define those issues. Our graduates find employment with government environmental agencies, citizens' organizations, consulting firms and corporate environmental affairs departments.

Water is fundamental to life, but humans are altering the water cycles in ways never before measured. The Environmental Science with concentration in Hydrology offers coursework in geosciences, biology, chemistry, plus hydrology to train students in environmental monitoring approaches for tackling environmental problems.

Campus Location: Main

Program Code: ST-ENVS-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.5 major GPA
 - if the difficulty of courses chosen as electives is high, then a 3.3 GPA will suffice. This determination will be made by the appropriate faculty
- no grade below C in a major requirement

Undergraduate Contact Information

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Learn more about the Bachelor of Science in Environmental Science.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
EES 2096	Climate Change: Oceans To Atmosphere	4
EES 2097	Process Geomorphology	4
ENVS 4198	Environmental Science Senior Seminar	3
ECON 3596	Energy, Ecology, and Economy	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (75-79 s.h.)

At least 10 courses required for the major must be completed at Temple.

Code	Title	Credit Hours
Biology		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology Honors Introduction to Organismal Biology	4
BIOL 2227	Principles of Ecology	3
Chemistry		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	

CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I	
Earth & Environmental Science		
EES 2001	Physical Geology	4
Select one of the following: ^{1, 2}		4
EES 2021	Sedimentary Environments	
EES 2097	Process Geomorphology	
EES 3011	Remote Sensing and GIS	4
EES 3021	Groundwater Hydrology (S)	4
EES 3025	Physical Hydrology (F)	4
Economics		
ECON 1102 or ECON 1902	Microeconomic Principles Honors Microeconomic Principles	3
Environmental Science		
ENVS 4198	Environmental Science Senior Seminar	3
Environmental Science Electives		
Select 5 Environmental Science Electives chosen from the categories below. At least one Elective must be a writing-intensive course: ²		
3-4 Science Electives, with at least one each from Climate and Geochemistry		9-16
1-2 Policy Electives		6-3
Mathematics and Quantitative Methods		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
Select one of the following:		4
MATH 1042	Calculus II	
MATH 1942	Honors Calculus II	
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
Physics		
Select one of the following:		4
PHYS 1061 or PHYS 1961	Elementary Classical Physics I Honors Elementary Classical Physics I	
PHYS 2021 or PHYS 2921	General Physics I Honors General Physics I	
Total Credit Hours		75-79
Code	Title	Credit Hours

(F) - Fall only course

(S) - Spring only course

1

The course not selected may be taken as an Environmental Science Elective (Land Elective).

2

See the table below for a listing of specific courses within each Elective category. One Elective must be a writing-intensive (WI) course if EES 2021 is taken instead of EES 2097 as one of the Earth & Environmental Science requirements above.

Code	Title	Credit Hours
Science Electives: Biology, Climate, Geochemistry, and Land		
Biology Electives		
BIOL 3114	Evolutionary Ecology (F)	3
BIOL 3244	Experimental Marine Biology	4
BIOL 3245	Marine Ecology (F)	4
BIOL 3254	Animal Behavior (S)	3
BIOL 3275	Ecology of Invasive Species (F)	3
BIOL 3307	Conservation Biology (F)	3
BIOL 3316	Tropical Marine Biology (F)	4
BIOL 3321	Plant Community Ecology (F)	3
BIOL 3323	Global Change Science: Analytics with R	3
BIOL 3336	Freshwater Ecology (F)	4
BIOL 3389	Field Research in Community Ecology	3
Climate Electives - Select at least one		
EES 2002	Energy and Environment	3
EES 2096	Climate Change: Oceans To Atmosphere	4
EES 4502	Ice and Global Climate	3
RMI 2101	Introduction to Risk Management	3
Geochemistry Electives - Select at least one		
EES 2061	Introduction to Geochemistry	4
EES 2067	Introduction to Environmental Toxicology	3
EES 3065	Nanoscience & the Environment	4
ENVH 2102	Environmental Health ¹	3
CHEM 3103	Techniques of Chemical Measurement I	3
Land Electives		
EES 2002	Energy and Environment	3
EES 2021	Sedimentary Environments	4
EES 2097	Process Geomorphology	4
EES 3042	Coastal Processes and Geomorphology	4
Policy Electives		
CDEV 2255	Environmental Justice in Communities	3
CTRP 2251	Sustainable Food Systems Planning	3
ECON 1101	Macroeconomic Principles	3
ECON 3596	Energy, Ecology, and Economy	3
ENST 2025	Environmental Law and Regulation	3
ENST 2051	The Urban Environment	3
ENST 3015	The Geographic Basis of Land Use Planning	3
ENST 3051	Environmental Policy Issues	3
ENST 3058	Environment and Development	3
ENST 3314	Food Studies: A Geographical Perspective	3
Code	Title	Credit Hours

(F) - Fall only course

(S) - Spring only course

1

HRPR 1001 is a prerequisite for this course.

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Environmental Science with Concentration in Hydrology

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
SCTC 1001	CST First Year Seminar	1
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
GenEd Breadth Course		3
Credit Hours		15
Spring		
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II	
EES 2001	Physical Geology	4
Select one of the following:		4
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		16
Year 2		
Fall		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology or Honors Introduction to Organismal Biology	4
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3-4
Elective		1-0
Credit Hours		15
Spring		
BIOL 2227	Principles of Ecology	3
Select one of the following:		4

PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I	
Environmental Science Elective 1 - Science ^{1,2}		3-4
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Elective		3-2
Credit Hours		16
Year 3		
Fall		
EES 3025	Physical Hydrology (F)	4
Select one of the following: ³		4
EES 2021	Sedimentary Environments	
EES 2097	Process Geomorphology (F)	
Environmental Science Elective 2 - Science ^{1,2}		3-4
GenEd Breadth Course		3
Elective		2-1
Credit Hours		16
Spring		
EES 3011	Remote Sensing and GIS	4
EES 3021	Groundwater Hydrology	4
ECON 1102 or ECON 1902	Microeconomic Principles or Honors Microeconomic Principles	3
GenEd Breadth Course		3
Elective		1
Credit Hours		15
Year 4		
Fall		
Environmental Science Elective 3 - Science ^{1,2}		3-4
Environmental Science Elective 4 - Policy ¹		3
GenEd Breadth Course		3
Elective		3
Elective		3-2
Credit Hours		15
Spring		
ENVS 4198	Environmental Science Senior Seminar	3
Environmental Science Elective 5 - Science or Policy ^{1,2}		3-4
Elective		3
Elective		3
Elective		3-2
Credit Hours		15
Total Credit Hours		123
Code	Title	Credit Hours

(F) - Fall only course

(S) - Spring only course

1

Select from the Environmental Science Electives lists under Requirements. One Elective must be a writing-intensive (WI) course if EES 2021 is taken instead of EES 2097 as one of the Earth & Environmental Science requirements.

2

For the Science Electives, at least one each from Climate and Geochemistry must be selected.

3

The course not selected may be taken as an Environmental Science Elective (Land Elective).

Fundamentals of Physics Certificate

Overview

Offered by the Department of Physics, the **Certificate in Fundamentals of Physics** provides students the opportunity to build quantitative and modeling skills by learning to analyze physical systems, including data and error analysis as well as dimensional analysis. Students will study physical models using mathematical methods, including coordinate systems, single and multivariate calculus, and vector algebra, and will begin to understand the fundamental principles of physics.

This certificate is open to all students.

Campus Location: Main

Program Code: ST-FPHY-CERT

Undergraduate Contact Information

Peter Riseborough, Chair
Science, Education and Research Center, Room 444
215-204-5655

Zbigniew Dziembowski, Faculty Advisor
Science, Education and Research Center, Room 412
215-204-7639
zbig.dziembowski@temple.edu

Certificate Requirements

All courses listed below have prerequisites. For more information, please check the course descriptions or ask an advisor.

Students desiring a certificate in the Fundamentals of Physics are required to satisfy the following:

Code	Title	Credit Hours
Select one of the following: ¹		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I	
Select one of the following: ¹		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II	
PHYS 2796	Introduction to Modern Physics ²	4
Total Credit Hours		12

1

An upper level Physics course may be substituted for this requirement with approval of the faculty advisor.

2

PHYS 2796 has a concurrent prerequisite of MATH 2043 or MATH 2943.

Fundamentals of Programming Certificate

Overview

Offered by the Department of Computer and Information Sciences, the **Certificate in Fundamentals of Programming** is appropriate for anyone interested in adding technology to their existing studies. Computer Science, Information Science and Technology, Math and Computer Science, or Math and Computer Science with Teaching majors cannot get this certificate. The certificate provides knowledge and skills in two programming languages as well as database knowledge.

Campus Location: Main

Program Code: ST-FPRG-CERT

Undergraduate Contact Information

Main Campus

Jamie Payton, Chair
Science, Education and Research Center, Room 304
215-204-8450

Gene Kwatny, Vice Chair
Science, Education and Research Center, Room 304
215-204-8450

Dominic Letarte, Faculty Advisor
Science, Education and Research Center, Room 372
215-204-6439
istadvsr@temple.edu

Temple Japan Campus

Hani Karam, PhD, Computer Science Coordinator
hkaram@tuj.temple.edu

Learn more about the undergraduate certificate in Fundamentals of Programming.

Certificate Requirements

This certificate program is not open to Computer Science, Information Science and Technology, Math and Computer Science, or Math and Computer Science with Teaching majors. Students desiring a certificate in Fundamentals of Programming are required to satisfy the following:

Code	Title	Credit Hours
CIS 1051 or CIS 1057	Introduction to Problem Solving and Programming in Python Computer Programming in C	4
CIS 1068 or CIS 1968	Program Design and Abstraction Honors Program Design and Abstraction	4
CIS 2109	Database Management Systems	4
Total Credit Hours		12

- If a student has taken CIS 1068 and CIS 2168, CIS 2168 should be substituted for CIS 1051/CIS 1057 to prevent backtracking.
- Additional courses needed to complete a CS minor are CIS 1166, CIS 2107, CIS 2168, and one CS elective.
- Additional courses needed to complete an IS&T minor are any two of CIS 1166, CIS 2168, CIS 2229 or a CIS 3xxx class approved by the IS&T Advisor.

Residency Requirements: At least 2 courses required for the certificate must be completed at Temple. At least 2 CIS courses must be completed at Temple.

General Science and Technology with Teaching BS

Overview

NOTE: Pending the approval of the Department of Education, this program may be available to students sometime during the 2023-2024 academic year. Students should see an advisor to verify that approval has been received prior to attempting to select this program.

The **Bachelor of Science in General Science and Technology with Teaching** is part of Temple's innovative "TUteach" secondary education teacher-training program. The BS in General Science and Technology with Teaching provides broad training in general science and prepares students for a career in secondary school teaching or an entry level laboratory position. The education courses in this major include supervised teaching in school district classrooms and emphasize inquiry-based approaches to learning. Students in the BS in General Science and Technology with Teaching degree program become *eligible* for a Pennsylvania teacher certification when they complete all the requirements for the degree that include theoretical and practical courses in education specifically designed for science and mathematics majors. In order to be *recommended* for Pennsylvania teacher certification, students must graduate with:

1. a BS with Teaching degree and
2. meet GPA and testing requirements of the state of Pennsylvania.

Students will be scheduled once each semester to meet with the TUteach advisor to ensure that students have knowledge of academic programming, internships opportunities and testing options that include test preparation. The state of Pennsylvania has specific candidacy requirements. The TUteach advisor will also help the students complete and submit the candidacy documents. All students joining the program in their freshman year must complete the PAPA examination or acquire the PAPA waiver within their first 72 credits. Transfer students, from within Temple and those from other institutions, will build a tailored program with the academic and testing benchmarks structured for efficient degree completion with the TUteach advisor. Students are encouraged to complete the appropriate PRAXIS II examination prior to student teaching. Students are encouraged to take internship courses to expand their teaching portfolio or select elective courses that will extend their knowledge of science and teaching practice.

Campus Location: Main

Program Code: ST-GSTT-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.5 major GPA;
- achieve a minimum 3.33 GPA in the content area courses required for the major;
- complete at least one internship or laboratory project based course;
- achieve a minimum 3.9 GPA in the following courses:
 - SCES 2189 or SCTC 3485
 - SCES 4189 or SCTC 4485
 - EDUC 4802
 - EDUC 4388.

Undergraduate Contact Information

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 215-204-6390 or 215-204-4073
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Learn more about the Bachelor of Science in General Science and Technology with Teaching.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (124 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
SCTC 2396	Writing for Science and Technology	3
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3

Alternative disciplinary writing-intensive course substitutions for SCTC 2396 may be approved by both the TTeach Program Director and CST faculty advisors in Biology, Chemistry, Earth and Environmental Science, or Physics. Following is a list of these alternative writing-intensive courses:

Code	Title	Credit Hours
BIOL 2297	Research Techniques in Genetics (S) ¹	3
BIOL 3396	Scientific Writing for Biology: The Art of Communicating	3
BIOL 4396	Advanced Study in Biology	3
CHEM 4196	Techniques of Chemical Measurement II	5
CHEM 3398	Physical Chemistry Laboratory II	2
PHYS 2796	Introduction to Modern Physics (S)	4
PHYS 4796	Experimental Physics (S)	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete TTeach majors receive a waiver for 1 Human Behavior (GB), 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
 - Students must satisfy general Temple University residency requirements (p. 1838).
- #### 2. College Requirements
- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
 - Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (92-96 s.h.)²

At least 9 courses required for the major must be completed at Temple. At least 6 courses in CST and 3 courses in Education must be completed at Temple. In addition, 2 of the 4 concentration area courses must be completed at Temple. Though not required, students are strongly encouraged to increase training and field work experience by enrolling in SCTC 1385, SCTC 2385, or SCTC 2389. Students will also benefit from directed laboratory projects offered through SCTC 3185. These courses are offered every semester.

Code	Title	Credit Hours
Biology		
BIOL 1011	General Biology I (F)	4
BIOL 1012	General Biology II (S)	4
Chemistry		
Select one of the following:		
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	4
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	4

Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
Earth & Environmental Science		
EES 1001 or EES 2001	Introductory Geology Physical Geology	4
Mathematics		
Select one of the following:		4-8
MATH 1031	Differential and Integral Calculus	
MATH 1041 & MATH 1042	Calculus I and Calculus II ³	
MATH 1041 & MATH 1044	Calculus I and Introduction to Probability and Statistics for the Life Sciences ³	
MATH 1941 & MATH 1942	Honors Calculus I and Honors Calculus II ³	
Physics		
PHYS 1004	Introduction to Astronomy (F)	3
PHYS 1021	Introduction to General Physics I	4
PHYS 1022	Introduction to General Physics II	4
Technology Concentration Courses		
Choose one of the following:		4
CIS 1051 or CIS 1951	Introduction to Problem Solving and Programming in Python Honors Introduction to Problem Solving and Programming in Python	
CIS 1057	Computer Programming in C	
CIS 1068 or CIS 1968	Program Design and Abstraction Honors Program Design and Abstraction	4
CIS 1166 or CIS 1966	Mathematical Concepts in Computing I Honors Mathematical Concepts in Computing I	4
CIS 2109	Database Management Systems	4
CIS 2168	Data Structures	4
College of Science and Technology		
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
SCTC 1389	Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners	2
SCTC 2396	Writing for Science and Technology	3
SCTC 3001	History of Science	3
SCTC 3312	Coding STEM Lessons ⁴	1
Education		
EDUC 2179	Knowing and Learning in Mathematics and Science	3
EDUC 4388	TUteach Apprentice Teaching	4
EDUC 4802	TUteach Apprentice Teaching Seminar	3
MGSE 2189 or SCTC 3485	Classroom Interactions (S) Science and Mathematics in the Classroom	3
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3
MGSE 4189 or SCTC 4485	Project-Based Instruction (F) Integrating STEM Practice in Diverse Teaching Environments	3
SPED 2231	Introduction to Special Education	3
Research Methods		
Select one of the following: ⁵		3
BIOL/CHEM/EES/PHYS 3091	Research Methods (S)	

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		
1		
	This course has a co-requisite of BIOL 2207.	
2		
	The certification requirements need to meet Pennsylvania Department of Education standards and are subject to change. All students are strongly recommended to check with the TUTEACH Advisor in the College of Science and Technology, to affirm the requirements that pertain to their specific major. In addition, students should check the <i>Undergraduate Bulletin</i> web site for the most current information about these programs, or the TUTEACH web site. It is also recommended that all students meet with an advisor before enrolling in classes specific to these majors and leading to certification as a teacher. This is to assure that a candidate's intended program of study will be compatible with the new requirements.	
3		
	These courses are not required if MATH 1031 is completed.	
4		
	All students are required to take a minimum of one credit.	
5		
	This course may be selected from one of four Research Methods courses in Biology, Chemistry, EES or Physics numbered 3091.	

Suggested Academic Plan

Bachelor of Science in General Science and Technology with Teaching

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following: ¹		4
MATH 1031	Differential and Integral Calculus	
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	
SCTC 1001	CST First Year Seminar	1
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
SCTC 1389	Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners	2
GenEd Breadth Course		3
Credit Hours		17
Spring		
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
Select one of the following:		4
CIS 1051 or CIS 1951	Introduction to Problem Solving and Programming in Python or Honors Introduction to Problem Solving and Programming in Python	
CIS 1057	Computer Programming in C	
Select one of the following:		0-4
MATH 1042 or MATH 1942	Calculus II ² or Honors Calculus II	
MATH 1044	Introduction to Probability and Statistics for the Life Sciences ²	

ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Elective		3-0
Credit Hours		15-16
Year 2		
Fall		
BIOL 1011	General Biology I (F)	4
SPED 2231	Introduction to Special Education	3
EDUC 2179	Knowing and Learning in Mathematics and Science	3
Select one of the following:		4
EES 1001	Introductory Geology	
EES 2001	Physical Geology	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		17
Spring		
BIOL 1012	General Biology II (S)	4
Technology Concentration Course		4
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Credit Hours		17
Year 3		
Fall		
PHYS 1021	Introduction to General Physics I	4
Technology Concentration Course		4
SCTC 3001	History of Science	3
SCTC 3312	Coding STEM Lessons ³	1
GenEd Breadth Course		3
Credit Hours		15
Spring		
PHYS 1022	Introduction to General Physics II	4
Select one of the following (S): ²		3
BIOL 3091	Research Methods (S)	
CHEM 3091	Research Methods (S)	
PHYS 3091	Research Methods (S)	
EES 3091	Research Methods (S)	
Select one of the following:		3
MGSE 2189	Classroom Interactions (S)	
SCTC 3485	Science and Mathematics in the Classroom	
SCTC 2396	Writing for Science and Technology	3
GenEd Breadth Course		3
Credit Hours		16
Year 4		
Fall		
PHYS 1004	Introduction to Astronomy (F)	3
Technology Concentration Course		4
Technology Concentration Course		4
Select one of the following:		3
MGSE 4189	Project-Based Instruction (F)	
SCTC 4485	Integrating STEM Practice in Diverse Teaching Environments	

Elective		3-2
	Credit Hours	17-16
Spring		
EDUC 4388	TUteach Apprentice Teaching	4
EDUC 4802	TUteach Apprentice Teaching Seminar	3
Elective		3
	Credit Hours	10
	Total Credit Hours	124

1

General Science and Technology with Teaching majors are required to have completed MATH 1022. They can then elect to take MATH 1031, MATH 1041 or MATH 1941. Note: Students who elect to take MATH 1031 will not need to take the second course in the MATH 1041 or MATH 1941 sequence.

2

Not required if MATH 1031 is completed.

3

All students are required to take a minimum of one credit.

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

General Science with Teaching BS

Overview

The **Bachelor of Science in General Science with Teaching** is part of Temple's innovative "TUteach" secondary education teacher-training program. The BS in General Science with Teaching provides broad training in general science and prepares students for a career in secondary school teaching or an entry level laboratory position. The education courses in this major include supervised teaching in school district classrooms and emphasize inquiry-based approaches to learning. Students in the BS in General Science with Teaching degree program become *eligible* for a Pennsylvania teacher certification when they complete all the requirements for the degree that include theoretical and practical courses in education specifically designed for science and mathematics majors. In order to be *recommended* for Pennsylvania teacher certification, students must graduate with:

1. a BS with Teaching degree and
2. meet GPA and testing requirements of the state of Pennsylvania.

Students will be scheduled once each semester to meet with the TUteach advisor to ensure that students have knowledge of academic programming, internships opportunities and testing options that include test preparation. The state of Pennsylvania has specific candidacy requirements. The TUteach advisor will also help the students complete and submit the candidacy documents. All students joining the program in their freshman year must complete the PAPA examination or acquire the PAPA waiver within their first 72 credits. Transfer students, from within Temple and those from other institutions, will build a tailored program with the academic and testing benchmarks structured for efficient degree completion with the TUteach advisor. Students are encouraged to complete the appropriate PRAXIS II examination prior to student teaching. Students are encouraged to take internship courses to expand their teaching portfolio or select elective courses that will extend their knowledge of science and teaching practice.

Campus Location: Main

Program Code: ST-GSTC-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.50 major GPA;
- achieve a minimum 3.33 GPA in all the content area courses in the major;
- successful completion of at least one internship or laboratory project based course; and
- achieve a minimum 3.90 GPA in the following courses:
 - SCES 2189 or SCTC 3485
 - SCES 4189 or SCTC 4485

- EDUC 4802
- EDUC 4388.

Undergraduate Contact Information

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 College of Science and Technology
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Learn more about the Bachelor of Science in General Science with Teaching.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (124 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
SCTC 2396	Writing for Science and Technology	3
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3

Alternative disciplinary writing-intensive course substitutions for SCTC 2396 may be approved by both the TUTEACH Program Director and CST faculty advisors in Biology, Chemistry, Earth and Environmental Science, or Physics. Following is a list of these alternative writing-intensive courses:

Code	Title	Credit Hours
BIOL 2297	Research Techniques in Genetics (S) ¹	3
BIOL 3396	Scientific Writing for Biology: The Art of Communicating	3
BIOL 4396	Advanced Study in Biology	3
CHEM 4196	Techniques of Chemical Measurement II	5
PHYS 2796	Introduction to Modern Physics (S)	4
PHYS 4796	Experimental Physics (S)	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete TUTEACH majors receive a waiver for 1 Human Behavior (GB), 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).

- A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
 - Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.
3. Major Requirements for Bachelor of Science (84-92 s.h.)²

At least 9 courses required for the major must be completed at Temple. At least 6 courses in CST and 3 courses in Education must be completed at Temple. In addition, 2 of the 4 concentration area courses must be completed at Temple. Though not required, students are strongly encouraged to increase training and field work experience by enrolling in SCTC 1385, SCTC 2385, or SCTC 2389. Students will also benefit from directed laboratory projects offered through SCTC 3185. These courses are offered every semester.

Code	Title	Credit Hours
Biology		
BIOL 1011	General Biology I (F)	4
BIOL 1012	General Biology II (S)	4
Chemistry		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
Earth & Environmental Science		
EES 1001 or EES 2001	Introductory Geology Physical Geology	4
Mathematics		
Select one of the following:		4-8
MATH 1031	Differential and Integral Calculus	
MATH 1041 & MATH 1042	Calculus I and Calculus II	
MATH 1041 & MATH 1044	Calculus I and Introduction to Probability and Statistics for the Life Sciences	
MATH 1941 & MATH 1942	Honors Calculus I and Honors Calculus II	
Physics		
PHYS 1004	Introduction to Astronomy (F)	3
PHYS 1021	Introduction to General Physics I	4
PHYS 1022	Introduction to General Physics II	4
Upper-Level Electives		
Four Upper-Level (2000+) elective science courses ³		12-16
College of Science and Technology		
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
SCTC 1389	Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners	2
SCTC 2396	Writing for Science and Technology	3
SCTC 3001	History of Science	3
SCTC 3312	Coding STEM Lessons ⁴	1
Education		
EDUC 2179	Knowing and Learning in Mathematics and Science	3
EDUC 4388	TUteach Apprentice Teaching	4
EDUC 4802	TUteach Apprentice Teaching Seminar	3
MGSE 2189	Classroom Interactions (S)	3

or SCTC 3485	Science and Mathematics in the Classroom	
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3
MGSE 4189	Project-Based Instruction (F)	3
or SCTC 4485	Integrating STEM Practice in Diverse Teaching Environments	
SPED 2231	Introduction to Special Education	3
Research Methods		
Select one of the following: ⁵		3
BIOL/CHEM/EES/PHYS 3091	Research Methods (S)	
Total Credit Hours		84-92

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

This course has a co-requisite of BIOL 2207.

2

The certification requirements need to meet Pennsylvania Department of Education standards and are subject to change. All students are strongly recommended to check with the TUTEACH Advisor in the College of Science and Technology, to affirm the requirements that pertain to their specific major. In addition, students should check the *Undergraduate Bulletin* web site for the most current information about these programs, or the TUTEACH web site. It is also recommended that all students meet with an advisor before enrolling in classes specific to these majors and leading to certification as a teacher. This is to assure that a candidate's intended program of study will be compatible with the new requirements.

3

The four science electives chosen to satisfy the science concentration must be taken from the same department. The departments from which you can choose electives are: Biology, Chemistry, Earth & Environmental Science or Physics. In the circumstance where a laboratory course is the complement of a lecture course, both must be completed to fulfill the requirement for ONE science elective.

4

All students are required to take a minimum of one credit.

5

The course must be selected from the same department as the four science electives.

Suggested Academic Plan

Bachelor of Science in General Science with Teaching

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
MATH 1031	Differential and Integral Calculus	
MATH 1041	Calculus I	
MATH 1941	Honors Calculus I	
SCTC 1001	CST First Year Seminar	1
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
SCTC 1389	Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners	2
Elective		2
Credit Hours		16
Spring		
Select one of the following:		4

CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
Select one of the following: ¹		0-4
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
MATH 1042	Calculus II	
MATH 1942	Honors Calculus II	
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
Elective		4-0
Credit Hours		15
Year 2		
Fall		
BIOL 1011	General Biology I (F)	4
SPED 2231	Introduction to Special Education	3
EDUC 2179	Knowing and Learning in Mathematics and Science	3
Select one of the following:		4
EES 1001	Introductory Geology	
EES 2001	Physical Geology	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		17
Spring		
BIOL 1012	General Biology II (S)	4
Science 2000+ Elective ²		3-4
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		4-3
Credit Hours		17
Year 3		
Fall		
PHYS 1021	Introduction to General Physics I	4
Science 2000+ Elective ²		3-4
SCTC 3001	History of Science	3
SCTC 3312	Coding STEM Lessons ³	1
GenEd Breadth Course		3
Elective		2-1
Credit Hours		16
Spring		
PHYS 1022	Introduction to General Physics II	4
Select one of the following (S): ²		3
BIOL 3091	Research Methods (S)	
CHEM 3091	Research Methods (S)	
PHYS 3091	Research Methods (S)	
EES 3091	Research Methods (S)	
Select one of the following:		3
MGSE 2189	Classroom Interactions (S)	
SCTC 3485	Science and Mathematics in the Classroom	
SCTC 2396	Writing for Science and Technology	3

Elective		3
	Credit Hours	16
Year 4		
Fall		
PHYS 1004	Introduction to Astronomy (F)	3
Science 2000+ Elective ²		3-4
Science 2000+ Elective ²		3-4
Select one of the following:		3
MGSE 4189	Project-Based Instruction (F)	
SCTC 4485	Integrating STEM Practice in Diverse Teaching Environments	
GenEd Breadth Course		3
Elective		2-0
	Credit Hours	17
Spring		
EDUC 4388	TUteach Apprentice Teaching	4
EDUC 4802	TUteach Apprentice Teaching Seminar	3
Elective		3
	Credit Hours	10
	Total Credit Hours	124

1

Not required if MATH 1031 is completed.

2

The four science electives chosen to satisfy the science concentration must be taken from the same department. The departments from which you can choose electives are: Biology, Chemistry, Earth & Environmental Science or Physics. The Research Methods course must also be selected from the same department as the four electives. In the circumstance where a laboratory course is the complement of a lecture course, both must be completed to fulfill the requirement for ONE science elective.

3

All students are required to take a minimum of one credit.

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

Genomic Medicine BS

Overview

Develop a deep understanding of the role of the genomes of humans and pathogens in the development, prevention, and treatment of disease with the **Bachelor of Science in Genomic Medicine**, offered by the Department of Biology. Scientific innovations and technologies allow us to collect genetic information at unprecedented size and scale. At the center of this advancement is the study of the genome. Information from thousands—and soon to be millions—of genomes is revealing the root causes of our genetic and infectious diseases. Due to the growing clinical emphasis on genomic medicine in medical colleges, students in the Genomic Medicine program will acquire a valuable basis for understanding and working with modern biological data. Graduates also gain a foundation in the life sciences that emphasizes the medical relevance of genomics, evolutionary biology, and informatics. This degree will prepare students for growing trends in research and medical careers focused on genomic medicine that use the power of changes in genes, proteins, and next generation technologies to make clinical diagnoses, treat patients, and understand diseases. Additionally, graduates are positioned for careers across multiple research areas, including disease, evolution, genomics, and informatics.

Students may select an **optional** concentration in **Pre-Medicine**.

Campus Location: Main

Program Code: ST-GCMD-BS

Distinction in Major

To graduate with distinction in this major, a student must achieve a minimum 3.33 GPA in all the Biology and Chemistry courses required for the major.

Undergraduate Contact Information

Robert Sanders, Chair
Biology-Life Sciences Building, Room 255
215-204-8851

Erik Cordes, Vice Chair
Biology-Life Sciences Building, Room 315A
215-204-8876

Caryn Babaian, Faculty Advisor for Genomic Medicine Majors
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Learn more about the Bachelor of Science in Genomic Medicine.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
BIOL 2297	Research Techniques in Genetics (S)	3
BIOL 3396	Scientific Writing for Biology: The Art of Communicating	3
BIOL 4396	Advanced Study in Biology	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (80-85 s.h.)

At least 9 courses required for the major must be completed at Temple. At least 6 Biology courses must be completed at Temple.

Code	Title	Credit Hours
Biology		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology Honors Introduction to Organismal Biology	4
Select one of the following:		4
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112	Introduction to Cellular and Molecular Biology	

or BIOL 2912	Honors Introduction to Cellular and Molecular Biology	
BIOL 2207	Genetics (S)	3
BIOL 2297	Research Techniques in Genetics (WI, S) ¹	3
BIOL 2512	Genomic Foundations of Medicine (S)	3
BIOL 3101	Evolution (F)	3
BIOL 3112	Fundamentals of Genomic Evolutionary Medicine (S)	3
Select one of the following:		3
BIOL 3396	Scientific Writing for Biology: The Art of Communicating (WI)	
BIOL 4396	Advanced Study in Biology (WI)	
BIOL 3511	Pathophysiology of Genomic Medicine (F)	3
Chemistry		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I (F)	
Select one of the following:		4
CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II	
CHEM 2922 & CHEM 2924	Organic Chemistry for Honors II and Organic Honors Laboratory II (S)	
Computer & Information Sciences		
Select one of the following:		4
CIS 1051 or CIS 1951	Introduction to Problem Solving and Programming in Python Honors Introduction to Problem Solving and Programming in Python	
CIS 1057	Computer Programming in C	
CIS 1068 or CIS 1968	Program Design and Abstraction Honors Program Design and Abstraction	
Genomic Medicine Electives		
Select five of the following: ^{2, 3}		15-20
BIOL 2233	Mammalian Anatomy (F)	
BIOL 3111	Genomics in Medicine (F)	
BIOL 3128	Genomics and Infectious Disease Dynamics (F)	
BIOL 3201	Human Genetics (F)	
BIOL 3204	Cell Structure and Function (F)	
BIOL 3211	Human Evolution	
BIOL 3212	Introduction to Bioinformatics and Computational Biology	
BIOL 3225	Evolutionary Genetics (S)	
BIOL 3232	Behavioral Genetics (F)	
BIOL 3241	Genomics and Evolutionary Biology of Parasites and Other Dependent Species (S)	
BIOL 3243	Parasitology	
BIOL 3265	Developmental Biology (F)	
BIOL 3301	Advanced Cell Biology (F)	

BIOL 3312	Biostatistics (F)
BIOL 3317	General Microbiology (S)
BIOL 3324	Molecular Biology (F)
BIOL 3325	Research Techniques in Molecular Biology (S)
BIOL 3327	Immunology (S)
BIOL 3328	Virology (F)
BIOL 3329	Developmental Genetics
BIOL 3334	Mammalian Physiology (S)
BIOL 3352	Systems Neuroscience
BIOL 3356	Organization and Development of the Nervous System (S)
BIOL 3358	Cellular and Molecular Neuroscience (S)
BIOL 3361	Molecular Neuropharmacology
BIOL 3363	Mammalian Development
BIOL 3367	Endocrinology (F)
BIOL 3368	Biology of Cancer (S)
BIOL 3371	Cell Proliferation (S)
BIOL 3373	Cell Signaling (S)
BIOL 3374	Physical Biochemistry (S)
BIOL 3380	Contemporary Biology
BIOL 3403	Genomic Biology
BIOL 4338	Epigenetics
BIOL 4344	Research Techniques in Biochemistry (S)
BIOL 4364	Biochemistry of Embryogenesis (F)
BIOL 4365	Evolutionary Developmental Biology: Evo-Devo (S)
BIOL 4366	Stem Cell Biology (F)
BIOL 4375	General Biochemistry I (F)
BIOL 4376	General Biochemistry II (F)
CHEM 3401	Applications of Biochemistry
CIS 2168	Data Structures
CIS 2109	Database Management Systems
CIS 3715	Principles of Data Science (S)
CIS 4523	Knowledge Discovery and Data Mining
MATH 3031	Probability Theory I
MATH 3032	Mathematical Statistics (S)
MATH 4033	Probability Theory II (F)

Mathematics

Select one of the following: 4

MATH 1041	Calculus I
MATH 1941	Honors Calculus I

Select one of the following: 4

MATH 1042	Calculus II
MATH 1942	Honors Calculus II
MATH 1044	Introduction to Probability and Statistics for the Life Sciences

Physics

Select one of the following: 4

PHYS 1021	Introduction to General Physics I
PHYS 1061	Elementary Classical Physics I
or PHYS 1961	Honors Elementary Classical Physics I
PHYS 2021	General Physics I
or PHYS 2921	Honors General Physics I

Select one of the following: 4

PHYS 1022	Introduction to General Physics II
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PHYS 1062	Elementary Classical Physics II
or PHYS 1962	Honors Elementary Classical Physics II
PHYS 2022	General Physics II
or PHYS 2922	Honors General Physics II

Total Credit Hours **80-85**

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

This course has a co-requisite of BIOL 2207.

2

Additional course prerequisites may be required.

3

Students may fulfill one upper-level elective by completing a total of 6 credits of research. A maximum of 3 credits may come from the junior level research course BIOL 3082 and the remaining 3 credits must come from a senior level (**4000+**) research course. Students may also complete all 6 credits using a two semesters of the senior research course if they prefer. Consult with your departmental advisor to determine which course(s) are appropriate. Once completed, students must seek approval from a CST advisor to obtain the waiver for credit towards one upper-level elective.

With the exception noted in footnote 3 above, the research and independent study courses shown below do not count as Genomic Medicine electives, but they may count as free elective credits toward graduation. Most research courses can only be taken ONCE for a letter grade. Check individual course descriptions for details and/or exceptions.

Code	Title	Credit Hours
BIOL 2082	Independent Research I	1 to 4
BIOL 3082	Independent Research II	1 to 4
BIOL 3181	Cooperative Research in Biochemistry	3
BIOL 3681	Cooperative Studies	2 to 4
BIOL 3685	Externship Studies	3
BIOL 4291	Extrdepartmental Research	1 to 4
BIOL 4391	Accelerated Research in Biology	1 to 4
BIOL 4483	Accelerated Research in Biochemistry	3
BIOL 4491	Research in Biochemistry	3
BIOL 4591	Research in Neuroscience	1 to 4

Note: Grades of C- or higher are required unless otherwise specified in all courses for the major, including course prerequisites. The College of Science and Technology requires that students have a GPA of at least 2.00 overall and at least 2.00 in the courses applicable to their major and/or minor GPA to graduate.

Suggested Academic Plan

Bachelor of Science in Genomic Medicine

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
BIOL 1111	Introduction to Organismal Biology	4
or BIOL 1911	or Honors Introduction to Organismal Biology	
MATH 1041	Calculus I	4
or MATH 1941	or Honors Calculus I	
SCTC 1001	CST First Year Seminar	1
Select one of the following:		4
CIS 1051	Introduction to Problem Solving and Programming in Python	
or CIS 1951	or Honors Introduction to Problem Solving and Programming in Python	

CIS 1057	Computer Programming in C	
CIS 1068 or CIS 1968	Program Design and Abstraction or Honors Program Design and Abstraction	
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		17
Spring		
Select one of the following:		4
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes or Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology or Honors Introduction to Cellular and Molecular Biology	
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I	
Select one of the following:		4
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		15
Year 2		
Fall		
BIOL 3101	Evolution ((F))	3
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II	
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Elective		3
Elective		3
Credit Hours		16
Spring		
BIOL 2207	Genetics (S)	3
BIOL 2297	Research Techniques in Genetics ((S))	3
BIOL 2512	Genomic Foundations of Medicine (S)	3
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I	
Elective		2
Credit Hours		15
Year 3		
Fall		
BIOL 3511	Pathophysiology of Genomic Medicine (F)	3
Select one of the following:		4

CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II	
CHEM 2922 & CHEM 2924	Organic Chemistry for Honors II and Organic Honors Laboratory II	
Select one of the following:		4
PHYS 1021	Introduction to General Physics I	
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	
PHYS 2021 or PHYS 2921	General Physics I or Honors General Physics I	
Elective		3
Credit Hours		14
Spring		
BIOL 3112	Fundamentals of Genomic Evolutionary Medicine (S)	3
Genomic Medicine Elective ¹		3-4
Select one of the following:		4
PHYS 1022	Introduction to General Physics II	
PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	
PHYS 2022 or PHYS 2922	General Physics II or Honors General Physics II	
GenEd Breadth Course		3
Elective		3-2
Credit Hours		16
Year 4		
Fall		
Genomic Medicine Elective ¹		3-4
Genomic Medicine Elective ¹		3-4
Genomic Medicine Elective ¹		3-4
GenEd Breadth Course		3
Elective		3-0
Credit Hours		15
Spring		
Genomic Medicine Elective ¹		3-4
Select one of the following:		3
BIOL 3396	Scientific Writing for Biology: The Art of Communicating	
BIOL 4396	Advanced Study in Biology	
GenEd Breadth Course		3
GenEd Breadth Course		3-4
Elective		3-1
Credit Hours		15
Total Credit Hours		123
Code	Title	Credit Hours

(F) - Fall only course

(S) - Spring only course

1

See the Genome Medicine Electives list under Requirements for course options.

Genomic Medicine BS with Pre-Medicine Concentration

Overview

Develop a deep understanding of the role of the genomes of humans and pathogens in the development, prevention, and treatment of disease with the **Bachelor of Science in Genomic Medicine**, offered by the Department of Biology. Scientific innovations and technologies allow us to collect genetic information at unprecedented size and scale. At the center of this advancement is the study of the genome. Information from thousands—and soon to be millions—of genomes is revealing the root causes of our genetic and infectious diseases. Due to the growing clinical emphasis on genomic medicine in medical colleges, students in the Genomic Medicine program will acquire a valuable basis for understanding and working with modern biological data. Graduates also gain a foundation in the life sciences that emphasizes the medical relevance of genomics, evolutionary biology, and informatics. This degree will prepare students for growing trends in research and medical careers focused on genomic medicine that use the power of changes in genes, proteins, and next generation technologies to make clinical diagnoses, treat patients, and understand diseases.

Blending psychology and sociology courses with an increased focus on coursework required by most medical schools—biochemistry, cell structure, and function, and bioinformatics or biostatistics—the **optional Pre-Medicine Concentration** prepares graduates for entry into medical school and STEM research careers in medicine.

Campus Location: Main

Program Code: ST-GCMD-BS

Distinction in Major

To graduate with distinction in this major, a student must achieve a minimum 3.33 GPA in all the Biology and Chemistry courses required for the major.

Undergraduate Contact Information

Robert Sanders, Chair
Biology-Life Sciences Building, Room 255
215-204-8851

Erik Cordes, Vice Chair
Biology-Life Sciences Building, Room 315A
215-204-8876

Caryn Babaian, Faculty Advisor for Genomic Medicine Majors
Science, Education and Research Center, Room 602
215-204-1814
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Sudhir Kumar, Program Director
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Learn more about the Bachelor of Science in Genomic Medicine: Pre-Medicine Concentration.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

- University Requirements (123 total s.h.)
 - Students must complete all University requirements including those listed below.
 - All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
BIOL 2297	Research Techniques in Genetics (S)	3
BIOL 3396	Scientific Writing for Biology: The Art of Communicating	3
BIOL 4396	Advanced Study in Biology	3

- Students must complete the General Education (GenEd) requirements.

- See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
 - Students must satisfy general Temple University residency requirements (p. 1838).
2. College Requirements
- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
 - Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.
3. Major Requirements for Bachelor of Science (87-89 s.h.)

At least 9 courses required for the major must be completed at Temple. At least 6 Biology courses must be completed at Temple.

Code	Title	Credit Hours
Biology		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology Honors Introduction to Organismal Biology	4
Select one of the following:		4
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology Honors Introduction to Cellular and Molecular Biology	
BIOL 2207	Genetics (S)	3
BIOL 2297	Research Techniques in Genetics (WI, S) ¹	3
BIOL 2512	Genomic Foundations of Medicine (S)	3
BIOL 3101	Evolution (F)	3
BIOL 3112	Fundamentals of Genomic Evolutionary Medicine (S)	3
BIOL 3204	Cell Structure and Function (F)	4
BIOL 3511	Pathophysiology of Genomic Medicine (F)	3
Select one of the following: ²		3
BIOL 3212	Introduction to Bioinformatics and Computational Biology	
BIOL 3312	Biostatistics (F)	
Select one of the following:		3
BIOL 3396	Scientific Writing for Biology: The Art of Communicating (WI, S)	
BIOL 4396	Advanced Study in Biology (WI)	
Chemistry		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I (F)	
Select one of the following:		4
CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II	

CHEM 2922 & CHEM 2924	Organic Chemistry for Honors II and Organic Honors Laboratory II (S)	
CHEM 3401	Applications of Biochemistry	3
Computer & Information Sciences		
Select one of the following:		4
CIS 1051 or CIS 1951	Introduction to Problem Solving and Programming in Python Honors Introduction to Problem Solving and Programming in Python	
CIS 1057	Computer Programming in C	
CIS 1068 or CIS 1968	Program Design and Abstraction Honors Program Design and Abstraction	
Genome Medicine Electives		
Select two of the following: ^{3, 4}		6-8
BIOL 2233	Mammalian Anatomy (F)	
BIOL 3111	Genomics in Medicine (F)	
BIOL 3128	Genomics and Infectious Disease Dynamics (F)	
BIOL 3201	Human Genetics (F)	
BIOL 3211	Human Evolution	
BIOL 3212	Introduction to Bioinformatics and Computational Biology ²	
BIOL 3225	Evolutionary Genetics (S)	
BIOL 3232	Behavioral Genetics (F)	
BIOL 3241	Genomics and Evolutionary Biology of Parasites and Other Dependent Species (S)	
BIOL 3243	Parasitology	
BIOL 3265	Developmental Biology (F)	
BIOL 3301	Advanced Cell Biology (F)	
BIOL 3312	Biostatistics ²	
BIOL 3317	General Microbiology (S)	
BIOL 3324	Molecular Biology (F)	
BIOL 3325	Research Techniques in Molecular Biology (S)	
BIOL 3327	Immunology (S)	
BIOL 3328	Virology (F)	
BIOL 3329	Developmental Genetics	
BIOL 3334	Mammalian Physiology (S)	
BIOL 3352	Systems Neuroscience	
BIOL 3356	Organization and Development of the Nervous System (S)	
BIOL 3358	Cellular and Molecular Neuroscience (S)	
BIOL 3361	Molecular Neuropharmacology	
BIOL 3363	Mammalian Development	
BIOL 3367	Endocrinology (F)	
BIOL 3368	Biology of Cancer (S)	
BIOL 3371	Cell Proliferation (S)	
BIOL 3373	Cell Signaling (S)	
BIOL 3374	Physical Biochemistry (S)	
BIOL 3380	Contemporary Biology	
BIOL 3403	Genomic Biology	
BIOL 4338	Epigenetics	
BIOL 4344	Research Techniques in Biochemistry (S)	
BIOL 4364	Biochemistry of Embryogenesis (F)	
BIOL 4365	Evolutionary Developmental Biology: Evo-Devo (S)	
BIOL 4366	Stem Cell Biology (F)	
BIOL 4375	General Biochemistry I (F)	
BIOL 4376	General Biochemistry II (F)	
CIS 2109	Database Management Systems	

CIS 2168	Data Structures	
CIS 3715	Principles of Data Science (S)	
CIS 4523	Knowledge Discovery and Data Mining	
MATH 3031	Probability Theory I	
MATH 3032	Mathematical Statistics (S)	
MATH 4033	Probability Theory II (F)	
Mathematics		
MATH 1041	Calculus I	4
or MATH 1941	Honors Calculus I	
Select one of the following:		4
MATH 1042	Calculus II	
or MATH 1942	Honors Calculus II	
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
Physics		
Select one of the following:		4
PHYS 1021	Introduction to General Physics I	
PHYS 1061	Elementary Classical Physics I	
or PHYS 1961	Honors Elementary Classical Physics I	
PHYS 2021	General Physics I	
or PHYS 2921	Honors General Physics I	
Select one of the following:		4
PHYS 1022	Introduction to General Physics II	
PHYS 1062	Elementary Classical Physics II	
or PHYS 1962	Honors Elementary Classical Physics II	
PHYS 2022	General Physics II	
or PHYS 2922	Honors General Physics II	
Social Sciences		
PSY 1001	Introduction to Psychology	3
or PSY 1901	Honors: Introduction to Psychology	
Select one of the following:		3
SOC 1176	Introduction to Sociology	
or SOC 1976	Honors Introduction to Sociology	
SOC 1576	Introduction to Sociology for Health Professions	
Total Credit Hours		87-89

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

This course has a co-requisite of BIOL 2207.

2

Either BIOL 3212 or BIOL 3312 must be taken to satisfy degree requirements. The course not selected may be chosen as a Genomic Medicine Elective.

3

Additional course prerequisites may be required.

4

Students may fulfill one upper-level elective by completing a total of 6 credits of research. A maximum of 3 credits may come from the junior level research course BIOL 3082 and the remaining 3 credits must come from a senior level (**4000+**) research course. Students may also complete all 6 credits using two semesters of the senior research course if they prefer. Consult with your departmental advisor to determine which course(s) are appropriate. Once completed, students must seek approval from a CST advisor to obtain the waiver for credit towards one upper-level elective.

With the exception noted in footnote 4 above, the research and independent study courses shown below do not count as Genomic Medicine electives, but they may count as free elective credits toward graduation. Most research courses can only be taken ONCE for a letter grade. Check individual course descriptions for details and/or exceptions.

Code	Title	Credit Hours
BIOL 2082	Independent Research I	1 to 4
BIOL 3082	Independent Research II	1 to 4
BIOL 3181	Cooperative Research in Biochemistry	3
BIOL 3681	Cooperative Studies	2 to 4
BIOL 3685	Externship Studies	3
BIOL 4291	Extrdepartmental Research	1 to 4
BIOL 4391	Accelerated Research in Biology	1 to 4
BIOL 4483	Accelerated Research in Biochemistry	3
BIOL 4491	Research in Biochemistry	3
BIOL 4591	Research in Neuroscience	1 to 4

Note: Grades of C- or higher are required unless otherwise specified in all course for the major, including prerequisites. The College of Science and Technology requires that students have a GPA of at least 2.00 overall and at least 2.00 in the courses applicable to their major and/or minor GPA to graduate.

Suggested Academic Plan

Bachelor of Science in Genomic Medicine with Pre-Medicine Concentration

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology or Honors Introduction to Organismal Biology	4
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
SCTC 1001	CST First Year Seminar	1
Select one of the following:		4
CIS 1051 or CIS 1951	Introduction to Problem Solving and Programming in Python or Honors Introduction to Problem Solving and Programming in Python	
CIS 1057	Computer Programming in C	
CIS 1068 or CIS 1968	Program Design and Abstraction or Honors Program Design and Abstraction	
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		17
Spring		
Select one of the following:		4
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes or Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology or Honors Introduction to Cellular and Molecular Biology	
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I	
Select one of the following:		4
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	

MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		15
Year 2		
Fall		
BIOL 3101	Evolution (F)	3
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II	
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Select one of the following:		3
SOC 1176 or SOC 1976	Introduction to Sociology or Honors Introduction to Sociology	
SOC 1576	Introduction to Sociology for Health Professions	
Elective		2
Credit Hours		15
Spring		
BIOL 2207	Genetics (S)	3
BIOL 2297	Research Techniques in Genetics (S)	3
BIOL 2512	Genomic Foundations of Medicine (S)	3
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I	
PSY 1001 or PSY 1901	Introduction to Psychology or Honors: Introduction to Psychology	3
Credit Hours		16
Year 3		
Fall		
BIOL 3511	Pathophysiology of Genomic Medicine (F)	3
Select one of the following:		4
CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II	
CHEM 2922 & CHEM 2924	Organic Chemistry for Honors II and Organic Honors Laboratory II	
Select one of the following:		4
PHYS 1021	Introduction to General Physics I	
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	
PHYS 2021 or PHYS 2921	General Physics I or Honors General Physics I	
GenEd Breadth Course		3
Credit Hours		14
Spring		
BIOL 3112	Fundamentals of Genomic Evolutionary Medicine (S)	3
CHEM 3401	Applications of Biochemistry	3
Select one of the following:		4
PHYS 1022	Introduction to General Physics II	

PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	
PHYS 2022 or PHYS 2922	General Physics II or Honors General Physics II	
Genomic Medicine Elective ¹		3-4
Elective		3-2
Credit Hours		16
Year 4		
Fall		
BIOL 3204	Cell Structure and Function (F)	4
Select one of the following:		3
BIOL 3212	Introduction to Bioinformatics and Computational Biology	
BIOL 3312	Biostatistics (F)	
GenEd Breadth Course		3-4
GenEd Breadth Course		3
Elective		2-1
Credit Hours		15
Spring		
Select one of the following:		3
BIOL 3396	Scientific Writing for Biology: The Art of Communicating (S)	
BIOL 4396	Advanced Study in Biology	
Genomic Medicine Elective ¹		3-4
GenEd Breadth Course		3
GenEd Breadth Course		3
Elective		3-2
Credit Hours		15
Total Credit Hours		123

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

See the Genome Medicine Electives list under Requirements for course options.

Genomic Medicine Certificate

Overview

Offered by the Department of Biology, the **Certificate in Genomic Medicine** program is designed with maximum flexibility to accommodate students with different backgrounds and interests, including medicine, science, technology, and public health. Two core classes and 6 to 8 credits of related elective courses are required. This certificate is available to all undergraduate students and professional non-degree-seeking students.

Campus Location: Main

Program Code: ST-GCMD-CERT

Undergraduate Contact Information

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Erik Cordes, Vice Chair
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Sudhir Kumar, Program Director
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Learn more about the undergraduate certificate in Genomic Medicine.

Certificate Requirements

Prerequisites

Students desiring a Certificate in Genomic Medicine must have already completed the following or have equivalent industry experience:

Code	Title	Credit Hours
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology Honors Introduction to Organismal Biology	4
Select one of the following:		4
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology Honors Introduction to Cellular and Molecular Biology	
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2211 & CHEM 2213	Organic Chemistry for Majors I and Organic Majors Laboratory I (F)	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I (F)	
MATH 1022	Precalculus	4
Total Credit Hours		24

Required Courses

Students desiring a Certificate in Genomic Medicine must complete the following courses:

Code	Title	Credit Hours
Biology		
BIOL 3111	Genomics in Medicine (F)	3
BIOL 3112	Fundamentals of Genomic Evolutionary Medicine (S)	3
Genomic Medicine Electives		
Select two from the following: ¹		6-8
ANTH 3743	Human Biology of Modern Populations	
ANTH 3746	Human Reproduction: Evolutionary Perspectives	

ANTH 3772	Evolutionary Medicine
ANTH 3796	Methods in the Study of Evolution
ANTH 4796	Biocultural Adaptations in Human Populations
ANTH 4798	Seminar in Human and Primate Evolution
BIOL 2207	Genetics (S) ²
BIOL 2297	Research Techniques in Genetics (S) ²
BIOL 2512	Genomic Foundations of Medicine (S)
BIOL 3101	Evolution (F)
BIOL 3113	Genome Analytics
BIOL 3128	Genomics and Infectious Disease Dynamics (F)
BIOL 3201	Human Genetics (F)
BIOL 3211	Human Evolution
BIOL 3212	Introduction to Bioinformatics and Computational Biology
BIOL 3225	Evolutionary Genetics (S)
BIOL 3241	Genomics and Evolutionary Biology of Parasites and Other Dependent Species (S)
BIOL 3352	Systems Neuroscience
BIOL 3368	Biology of Cancer (S)
BIOL 3379	Biotechnology
BIOL 3403	Genomic Biology
BIOL 3511	Pathophysiology of Genomic Medicine (F)
CHEM 3401	Applications of Biochemistry
CHEM 3405	Physical Chemistry of Biomolecules (S)
CHEM 4401	Biochemistry I
CIS 1051	Introduction to Problem Solving and Programming in Python
or CIS 1951	Honors Introduction to Problem Solving and Programming in Python
CIS 1057	Computer Programming in C
CIS 1068	Program Design and Abstraction
or CIS 1968	Honors Program Design and Abstraction
CIS 2033	Computational Probability and Statistics
CIS 3223	Data Structures and Algorithms
CIS 3308	Web Application Programming
CIS 3715	Principles of Data Science (S)
CIS 4330	Current Topics in Information Science & Technology
CIS 4331	Principles of Database Systems (F)
CIS 4517	Data-Intensive and Cloud Computing (S)
CIS 4523	Knowledge Discovery and Data Mining
CIS 4526	Foundations of Machine Learning (F)
ECE 3522	Stochastic Processes in Signals and Systems
ECE 3822	Engineering Computation II
ECE 4532	Data and Computer Communication
EES 4696	Vertebrate Paleontology and Taphonomy (F)
EPBI 3101	Introduction to Epidemiology
EPBI 3102	Introduction to Research Methods
HIM 3101	Health Record Documentation
HIM 3106	Pathophysiology
HIM 3111	Statistics and Research in Health Care
HIM 3113	Healthcare Database Design and Development
HIM 3203	Electronic Health Record Systems
HIM 3208	International Classification of Diseases
HIM 4101	Health Informatics: Infrastructure and Standards
HIM 4121	Healthcare Data Analytics
MATH 3031	Probability Theory I

MATH 3032	Mathematical Statistics (S)
MATH 3043	Numerical Analysis I (F)
MATH 3046	Differential Equations with Computer Lab (S)
MATH 4033	Probability Theory II (F)
MATH 4043	Applied Mathematics (F)
PSY 3003	Advanced Undergraduate Statistics
SOC 3201	Statistical Methods in Sociology
SOC 3525	Urban Health
SOC 3559	Health and Reproduction
SOC 4002	Data Analysis
STAT 3501	Statistics for Engineers
STAT 3502	Regression and Predictive Analytics
STAT 3503	Applied Statistics and Data Science
STAT 3504	Time Series and Forecasting Models
STAT 3506	Nonparametric and Categorical Data Analysis

Total Credit Hours **12-14**

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

Many of these courses require additional prerequisites and/or possible co-requisites.

2

BIOL 2207 has a co-requisite of BIOL 2297.

Residency Requirements: At least 2 courses required for the certificate must be completed at Temple.

Geology BA

Overview

The Department of Earth and Environmental Science provides students the opportunity to study the Earth with a variety of traditional and environmental geology course work. The faculty work closely with students to give a combination of field-based experience and current laboratory and computational techniques.

Students in the **Bachelor of Arts in Geology** acquire a solid foundation in the Earth and Environmental Sciences.

Delve into the physical, chemical and biological processes of Earth, from the remote past to the distant future. Learn how humans are impacted by and are impacting our planet. Explore climate change, energy resources and natural planetary forces.

The BA offers the opportunity to complete a second major or to prepare for post-graduate degrees in law, medicine or education. The BA program is not intended for prospective geologists, but for pre-med or pre-law students, or for those planning to teach earth science in secondary school.

Campus Location: Main

Program Code: ST-GEOL-BA

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a 3.5 GPA in EES and Upper-Level Science Electives for the major, and
- no grade below C in the remaining courses required for the major.

Senior Research Project

Students whose cumulative GPA is at least 3.25 at the end of the first semester of their junior year are eligible to undertake a senior research project. In the second semester of their junior year, students must select a faculty research advisor and, with the advisor, prepare a written research proposal. After the research advisor and the undergraduate Earth and Environmental Science advisor approve the proposal, the student may register for up to four

(4) hours of EES 4082 Individual Study Program II for a grade. Additional credits may be offered in subsequent semesters, but only for Credit/No-Credit (CR/NC), to carry out the research project. Normally, the project will involve field or laboratory work in the summer between the junior and senior years and lead to presentation of the results at a departmental seminar.

Accelerated Programs

Accelerated programs provide a pathway for students to pursue both an undergraduate degree and an advanced degree in a shorter amount of time. Below is a list of available accelerated programs for students in the BA in Geology.

- BA in Geology / MEd in Middle Grades Education with a Concentration in Science
- BA in Geology / MEd in Middle Grades Education with a Concentration in Science and Language Arts

Undergraduate Contact Information

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Steven Chemtob, Faculty Advisor for Environmental Science
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Learn more about the Bachelor of Arts in Geology.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Arts Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
EES 2096	Climate Change: Oceans To Atmosphere	4
EES 2097	Process Geomorphology	4
EES 4696	Vertebrate Paleontology and Taphonomy	3
EES 4796	Soils and Paleosols	4
EES 4896	Planetary Geology	4

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).

- A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
- A minimum of 6 of these credits must be upper-level (courses numbered 2000 and above) CLA credits.
- Successful completion or waiver from the second level of a foreign language.
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Arts (51-56 s.h.)

At least 7 courses required for the major must be completed at Temple. At least 4 EES courses must be completed at Temple.

Code	Title	Credit Hours
Chemistry		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Mathematics		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
Select one of the following:		4
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
MATH 1042	Calculus II	
MATH 1942	Honors Calculus II	
Physics		
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
Earth & Environmental Science		
EES 2001	Physical Geology	4
EES 2011	Mineralogy I (F)	4
Select one EES course between 3020-3025:		4
EES 3021	Groundwater Hydrology (S)	
EES 3025	Physical Hydrology (F)	
Earth & Environmental Science Electives ¹		
Five EES electives 2002 or above		15-20
Science Foundation Electives		
Select two of the following:		8
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology Honors Introduction to Organismal Biology	
BIOL 1112 or BIOL 1912 or BIOL 2112 or BIOL 2912	Introduction to Biomolecules, Cells and Genomes Honors Introduction to Biomolecules, Cells and Genomes Introduction to Cellular and Molecular Biology Honors Introduction to Cellular and Molecular Biology	
CHEM 1032 & CHEM 1034 or CHEM 1952 & CHEM 1954	General Chemistry II and General Chemistry Laboratory II Honors General Chemical Science II and Honors Chemical Science Laboratory II	
CHEM 2201 & CHEM 2203 or CHEM 2921 & CHEM 2923	Organic Chemistry I and Organic Chemistry Laboratory I Organic Chemistry for Honors I and Organic Honors Laboratory I	
PHYS 1062	Elementary Classical Physics II	

or PHYS 1962	Honors Elementary Classical Physics II
or PHYS 2022	General Physics II
or PHYS 2922	Honors General Physics II

Total Credit Hours **51-56**

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

Earth & Environmental Science electives must be 3 or 4 credit courses above 2001, and at least two of the Earth & Environmental Science electives must be writing-intensive courses. One of the five EES elective courses can be outside of the department with faculty advisor approval.

Suggested Academic Plan

Bachelor of Arts in Geology

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
EES 2001	Physical Geology	4
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
SCTC 1001	CST First Year Seminar	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Elective		2
Credit Hours		15
Spring		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
MATH 1042	Calculus II	
MATH 1942	Honors Calculus II	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Elective		3
Elective		2
Credit Hours		16
Year 2		
Fall		
EES 2011	Mineralogy I (F)	4
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3

Elective		4
Credit Hours		15
Spring		
Earth & Environmental Science Elective (see Requirements page)		4
GenEd Breadth Course		3
Elective		3
Elective		3
Elective		3
Credit Hours		16
Year 3		
Fall		
Select one EES course between 3020-3025:		4
EES 3021	Groundwater Hydrology (S)	
EES 3025	Physical Hydrology (F)	
Science Foundation Elective (see Requirements page)		4
Foreign Language 1001 - First Level		4
GenEd Breadth Course		3
Credit Hours		15
Spring		
Earth & Environmental Science Elective ^{WI} (see Requirements page)		4
Science Foundation Elective (see Requirements page)		4
Foreign Language 1002 - Second Level		4
GenEd Breadth Course		3
Credit Hours		15
Year 4		
Fall		
Earth & Environmental Science Elective (see Requirements page)		4
Upper-level CLA Course (numbered 2000 and above)		3
GenEd Breadth Course		3
Elective		3
Elective		3
Credit Hours		16
Spring		
Earth & Environmental Science Elective ^{WI} (see Requirements page)		4
Earth & Environmental Science Elective (see Requirements page)		4
Upper-level CLA Course (numbered 2000 and above)		3
GenEd Breadth Course		3-4
Elective		1-0
Credit Hours		15
Total Credit Hours		123

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

Geology BS

Overview

The Department of Earth and Environmental Science provides students the opportunity to study the Earth with a variety of traditional and environmental geology course work. The faculty work closely with students to give a combination of field-based experience and current laboratory and computational techniques.

Students in the **Bachelor of Science in Geology** acquire a solid foundation in the Earth and Environmental Sciences.

Delve into the physical, chemical and biological processes of Earth, from the remote past to the distant future. Learn how humans are impacted by and are impacting our planet. Explore climate change, energy resources and natural planetary forces.

Career opportunities for geologists span industry and government including environmental planning, mitigation of natural hazards, resource assessment, monitoring and management of water resources. The BS prepares students for graduate study and careers in research, teaching, industry or government and thoroughly prepares students for professional licensure examinations.

The BS program includes 5-6 credits of Field Geology coursework, which may be fulfilled through a combination of several specialized Temple courses, or through an external intensive 4–6 week field course taken in the summer following the junior or senior year.

Campus Location: Main

Program Code: ST-GEOL-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a 3.5 GPA in EES and Upper-Level Science Electives for the major, and
- no grade below C in the remaining courses required for the major.

Senior Research Project

Students whose cumulative GPA is at least 3.25 at the end of the first semester of their junior year are eligible to undertake a senior research project. In the second semester of their junior year, students must select a faculty research advisor and, with the advisor, prepare a written research proposal. After the research advisor and the undergraduate Earth and Environmental Science advisor approve the proposal, the student may register for up to four (4) hours of EES 4082 Individual Study Program II for a grade. Additional credits may be offered in subsequent semesters, but only for Credit/No-Credit (CR/NC), to carry out the research project. Normally, the project will involve field or laboratory work in the summer between the junior and senior years and lead to presentation of the results at a departmental seminar.

Accelerated Programs

Accelerated programs provide a pathway for students to pursue both an undergraduate degree and an advanced degree in a shorter amount of time. Below is a list of available accelerated programs for students in the BS in Geology.

- BS in Geology / MEd in Middle Grades Education with a Concentration in Science
- BS in Geology / MEd in Middle Grades Education with a Concentration in Mathematics and Science

Undergraduate Contact Information

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Learn more about the Bachelor of Science in Geology.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
EES 2096	Climate Change: Oceans To Atmosphere	4
EES 2097	Process Geomorphology	4
EES 4696	Vertebrate Paleontology and Taphonomy	3
EES 4796	Soils and Paleosols	4
EES 4896	Planetary Geology	4

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (69-74 s.h.)

At least 9 courses required for the major must be completed at Temple. At least 6 courses from EES 2002+, BIOL 2112/2912, CHEM 2201 & 2203 / CHEM 2211 & 2213 / CHEM 2921 & 2923, MATH 2043/2943 must be completed at Temple.

Code	Title	Credit Hours
Chemistry		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Mathematics		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
Select one of the following:		4
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
MATH 1042	Calculus II	
MATH 1942	Honors Calculus II	
Physics		
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
Science Foundation Electives (SFE) ¹		
Select two of the following:		8
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology Honors Introduction to Organismal Biology	
BIOL 1112	Introduction to Biomolecules, Cells and Genomes	

or BIOL 1912	Honors Introduction to Biomolecules, Cells and Genomes	
or BIOL 2112	Introduction to Cellular and Molecular Biology	
or BIOL 2912	Honors Introduction to Cellular and Molecular Biology	
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
or CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II	
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
or CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I	
PHYS 1062	Elementary Classical Physics II	
or PHYS 1962	Honors Elementary Classical Physics II	
or PHYS 2022	General Physics II	
or PHYS 2922	Honors General Physics II	
Earth and Environmental Science		
EES 2001	Physical Geology	4
EES 2011	Mineralogy I (F)	4
EES 2021	Sedimentary Environments	4
EES 2022	Paleontology and Stratigraphy (S)	4
EES 3001	Igneous and Metamorphic Petrology (F)	4
Select one of the following:		4
EES 3021	Groundwater Hydrology (S)	
EES 3025	Physical Hydrology (F)	
EES 4101	Structural Geology (S)	4
EES Field electives chosen from the following: ²		5-6
EES 2031	Introduction to Field Methods in the Earth and Environmental Sciences (F)	
EES 2032	Environmental Sensors (SS)	
EES 3015	Drone Shortcourse (S)	
EES 3031	Coastal Plain Sedimentology and Paleontology of the Cretaceous-Paleogene Transition (F)	
EES 3032	Field and Laboratory Methods in Environmental Geochemistry (S)	
EES 4031	Appalachian Tectonics (SS)	
EES 4589	Field Geology	
Two Upper-Level (2002+) Writing-Intensive EES electives ³		6-8
Science Upper Level Electives (SUE) ^{1,3}		
Select two of the following:		6-8
EES 2002 or higher (excluding required courses)		
EES 2002 or higher (excluding required courses)		
BIOL 2112	Introduction to Cellular and Molecular Biology (or higher)	
or BIOL 2912	Honors Introduction to Cellular and Molecular Biology	
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I (or higher)	
or CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I	
MATH 2043	Calculus III (or higher)	
or MATH 2943	Honors Calculus III	

Total Credit Hours**69-74**

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

(SS) - Summer Session

1

Science Foundation Electives (SFE) and Science Upper-Level Electives (SUE) courses cannot be double-counted. Students may also select the honors versions of the courses listed.

2

Students may elect to take some or all of their Field Elective credits through other institutions and transfer credits in as EES 4589. The Earth and Environmental Science faculty advisor must approve the choice(s) of external field course(s). Note that a typical 5-6 credit field course ranges from 4-6 weeks in length with tuition typically ranging from \$2,000 to \$4,000. The Department of Earth and Environmental Science holds fundraisers throughout the year to help defray the costs. Students may also apply for research scholarships at CST and at the university.

3

Elective courses must be 3 or 4 credits. At most, one of the EES electives or SUEs may be a graduate-level course with permission of the faculty advisor.

Suggested Academic Plan

Bachelor of Science in Geology

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
SCTC 1001	CST First Year Seminar	1
EES 2001	Physical Geology	4
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
Credit Hours		16
Spring		
EES 2021	Sedimentary Environments	4
Select one of the following:		4
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
Select one of the following: ¹		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
GenEd Breadth Course		3
Credit Hours		15
Year 2		
Fall		
EES 2011	Mineralogy I (F)	4
Science Foundation Elective ²		4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Credit Hours		14
Spring		
EES 2022	Paleontology and Stratigraphy (S)	4
2002+ EES Elective or Science Upper-Level Elective ³		3-4
Select one of the following: ¹		4
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	

PHYS 2021 or PHYS 2921	General Physics I or Honors General Physics I	
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		14-15
Year 3		
Fall		
EES 3001	Igneous and Metamorphic Petrology (F)	4
EES Field Elective ⁴		0-1
Science Foundation Elective ²		4
GenEd Breadth Course		3-4
Elective		3-2
Credit Hours		14-15
Spring		
Select one of the following: ⁵		3-4
EES 3021	Groundwater Hydrology (S)	
2002+ EES Elective or Science Upper-Level Elective ³		
EES 4101	Structural Geology (S)	4
EES Field Elective ⁴		0-2
GenEd Breadth Course		3
Elective		3
Elective		2-0
Credit Hours		15-16
Summer		
EES Field Elective ⁴		6-0
Credit Hours		6-0
Year 4		
Fall		
Select one of the following: ⁵		3-4
EES 3025	Physical Hydrology (F)	
2002+ EES Elective or Science Upper-Level Elective ³		
2002+ Writing-Intensive EES Elective ^{WI 3}		3-4
EES Field Elective ⁴		0-1
Elective		3
Elective		3-2
Elective		3-2
Credit Hours		15-16
Spring		
2002+ Writing-Intensive EES Elective ^{WI 3}		3-4
EES Field Elective ⁴		0-2
Elective		3
Elective		3
Elective		3
Elective		2-1
Credit Hours		14-16
Total Credit Hours		123

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

(SS) - Summer Session

1

The Honors versions of these courses are Fall-only courses. If the Honors versions are desired, it is recommended to switch positions with the Science Foundations Electives in the following Spring semesters.

2

Select from the Science Foundation Electives list under Requirements.

3

Select from the Earth and Environmental Science or Science Upper-Level Electives lists under Requirements.

4

Select from the EES Field Electives list under Requirements.

5

Majors must take either EES 3025 or EES 3021. If both courses are taken, one may count as an elective.

Geology Minor

Overview

Offered by the Department of Earth and Environmental Science, the **Minor in Geology** is designed for students who are interested in acquiring basic knowledge in geology but not wishing to major in the subject.

Campus Location: Main

Undergraduate Contact Information

Nicholas Davatzes, Chair
Beury Hall, Room 307
215-204-2319
davatzes@temple.edu

Allison Tumarkin-Deratzian, Vice Chair and Faculty Advisor
Beury Hall, Room 308
215-204-2321
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Ilya Buynevich, Faculty Advisor for Geology
Beury Hall, Room 313
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coast@temple.edu

Steven Chemtob, Faculty Advisor for Environmental Science
Beury Hall, Room 325B
215-204-3958
chemtob@temple.edu (grand@temple.edu)

Minor Requirements

Students interested in acquiring a basic knowledge of Geology but not wishing to major in Geology may pursue a minor in Geology by successfully completing the following courses:

Code	Title	Credit Hours
EES 2001	Physical Geology	4
Select one of the following:		4
CHEM 1021 & CHEM 1023	Introduction to Chemistry I and Introduction to Chemistry Laboratory I (F)	
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
PHYS 1021	Introduction to General Physics I	
PHYS 1061	Elementary Classical Physics I	

PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
Select one of the following:		4
MATH 1022	Precalculus	
MATH 1041	Calculus I (or higher)	
MATH 1941	Honors Calculus I (F)	
Four 3 to 4 credit Earth & Environmental Science electives numbered above 2001, with a minimum of 14 credits, chosen with the approval of the undergraduate Earth & Environmental Science advisor.		14
Total Credit Hours		26

Code	Title	Credit Hours
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(F) - Fall only course

Residency Requirements: At least 4 courses required for the minor must be completed at Temple. At least 3 Earth & Environmental Science courses must be completed at Temple.

Information Science and Technology BA

Overview

Science and technology are the foundations of our future. The Department of Computer and Information Sciences (CIS) is focused on the understanding of fundamental scientific principles and the application of these principles to solving complex problems, using computing technology.

Students in the **Bachelor of Arts in Information Science and Technology** (IS&T) develop the skills and the knowledge necessary to analyze information problems and to apply current technology to their solution. The emphasis is to develop problem-solving and communication skills.

The technologies and methods include databases, web and mobile application development, client-server computing, network security, project management, software engineering principles, and quality assurance methodologies. A two-semester capstone project course is required. This course is designed to help students integrate what they have learned in other courses and apply this knowledge in the design and implementation of a software application.

The program is targeted for students who have a strong interest in applying computing technologies to solving problems in business, education, science and government agencies. Our IS&T graduates are also involved in innovative product developments. They hold jobs as consultants, network engineers, business and systems analysts, database administrators, and web and application developers.

Campus Location: Main

Program Code: ST-IST-BA

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- have a minimum 3.50 major GPA and
- have a minimum 3.50 cumulative GPA.

Undergraduate Contact Information

Jamie Payton, Chair
Science, Education and Research Center, Room 304
215-204-8450

Gene Kwatny, Vice Chair
Science, Education and Research Center, Room 304
215-204-8450

Dominic Letarte, Faculty Advisor
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215-204-6439
istadvr@temple.edu

Learn more about the Bachelor of Arts in Information Science and Technology.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Arts Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
CIS 4296	Information Systems Analysis and Design	4
CIS 4396	Information Systems Implementation	4

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
 - Students must satisfy general Temple University residency requirements (p. 1838).
- #### 2. College Requirements
- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
 - A minimum of 6 of these credits must be upper-level (courses numbered 2000 and above) CLA credits.
 - Successful completion or waiver from the second level of a foreign language.
 - Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Arts (64 s.h.)

At least 7 courses required for the major must be completed at Temple. At least 6 CIS courses must be completed at Temple.

Code	Title	Credit Hours
Computer & Information Science		
CIS 1001	Introduction to Academics in Computer Science	1
CIS 1051	Introduction to Problem Solving and Programming in Python	4
or CIS 1057	Computer Programming in C	
CIS 1068	Program Design and Abstraction	4
or CIS 1968	Honors Program Design and Abstraction	
CIS 1166	Mathematical Concepts in Computing I	4
or CIS 1966	Honors Mathematical Concepts in Computing I	
CIS 2109	Database Management Systems	4
CIS 2168	Data Structures	4
CIS 2229	Architecture, Operating Systems and Networking	4
CIS 3309	Component-Based Software Design	4
CIS 3329	Network Architectures	4
CIS 3342	Server-Side Web Application Development	4
CIS 3344	Client-Side Scripting for the Web	4
CIS 4296	Information Systems Analysis and Design	4
CIS 4396	Information Systems Implementation	4
Mathematics		
MATH 2031	Probability and Statistics	3
Select one of the following: ¹		4
MATH 1031	Differential and Integral Calculus	
MATH 1041	Calculus I	

MATH 1941	Honors Calculus I	
Laboratory Science courses		
Two (2) laboratory science courses ²		8
Total Credit Hours		64

1

IS&T majors are required to have completed MATH 1022. They can then choose either MATH 1031, MATH 1041 or MATH 1941.

2

Must select within a Sequence for Laboratory Science A and Laboratory Science B. See the Sequenced Laboratory Science list below for the science options.

Sequenced Information Science and Technology Laboratory Science Requirements

Code	Title	Credit Hours
Biology Sequence		
Select one Biology Lab Science A:		
BIOL 1011	General Biology I	
BIOL 1111	Introduction to Organismal Biology	
BIOL 1911	Honors Introduction to Organismal Biology (S)	
Select one Biology Lab Science B:		
BIOL 1012	General Biology II	
BIOL 1112	Introduction to Biomolecules, Cells and Genomes	
BIOL 1912	Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112	Introduction to Cellular and Molecular Biology	
BIOL 2912	Honors Introduction to Cellular and Molecular Biology (F)	
Chemistry Sequence ¹		
Select one Chemistry Lab Science A:		
CHEM 1021 & CHEM 1023	Introduction to Chemistry I and Introduction to Chemistry Laboratory I	
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I	
Select one Chemistry Lab Science B:		
CHEM 1022 & CHEM 1024	Introduction to Chemistry II and Introduction to Chemistry Laboratory II	
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II	
Earth & Environmental Science Sequence ²		
Select this Lab Science A:		
EES 2001	Physical Geology	
Select one Lab Science B:		
EES 2011	Mineralogy I (with CHEM 1031 prerequisite)	
EES 2021	Sedimentary Environments (no CHEM 1031 prerequisite)	
EES 2061	Introduction to Geochemistry (with CHEM 1031 prerequisite)	
Physics Sequence ³		
Select one Physics Lab Science A:		
PHYS 1021	Introduction to General Physics I	
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	

PHYS 2921	Honors General Physics I (F)
Select one Physics Lab Science B:	
PHYS 1022	Introduction to General Physics II
PHYS 1062	Elementary Classical Physics II
PHYS 1962	Honors Elementary Classical Physics II (S)
PHYS 2022	General Physics II
PHYS 2922	Honors General Physics II (S)

1

Students can choose to mix-and-match the Chemistry Sequence A and B courses. However, they must take at least 1 course from Chemistry Sequence A and 1 from Chemistry Sequence B. Note: Chemistry courses consist of a three-credit lecture plus a one-credit lab.

2

For the EES Sequence, two of the three Lab Science B options require students to take CHEM 1031 as a prerequisite, but EES 2021 does not.

3

Students can choose to mix-and-match the Physics Sequence A and B courses. However, they must take at least 1 course from Physics Sequence A and 1 from Physics Sequence B.

Suggested Academic Plan

Bachelor of Arts in Information Science and Technology

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
CIS 1001	Introduction to Academics in Computer Science	1
Select one of the following:		4
CIS 1051	Introduction to Problem Solving and Programming in Python	
CIS 1057	Computer Programming in C	
Select one of the following: ¹		4
MATH 1031	Differential and Integral Calculus	
MATH 1041	Calculus I	
MATH 1941	Honors Calculus I	
SCTC 1001	CST First Year Seminar	1
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Spring		
CIS 1068	Program Design and Abstraction	4
or CIS 1968	or Honors Program Design and Abstraction	
CIS 1166	Mathematical Concepts in Computing I	4
or CIS 1966	or Honors Mathematical Concepts in Computing I	
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Breadth Course		3
Credit Hours		15
Year 2		
Fall		
MATH 2031	Probability and Statistics	3
CIS 2168	Data Structures	4
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
GenEd Breadth Course		3
Elective		3
Credit Hours		16

Spring		
CIS 2109	Database Management Systems	4
CIS 2229	Architecture, Operating Systems and Networking	4
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3-4
Elective		1-0
Credit Hours		15
Year 3		
Fall		
CIS 3309	Component-Based Software Design	4
CIS 3344	Client-Side Scripting for the Web	4
IST Laboratory Science A		4
Foreign Language 1001 - First Level		4
Credit Hours		16
Spring		
CIS 3329	Network Architectures	4
CIS 3342	Server-Side Web Application Development	4
IST Laboratory Science B		4
Foreign Language 1002 - Second Level		4
Credit Hours		16
Year 4		
Fall		
CIS 4296	Information Systems Analysis and Design	4
Upper-level CLA Course (numbered 2000 and above)		3
Elective		3
Elective		3
Elective		3
Credit Hours		16
Spring		
CIS 4396	Information Systems Implementation	4
Upper-level CLA Course (numbered 2000 and above)		3
Elective		3
Elective		3
Credit Hours		13
Total Credit Hours		123

1

IS&T majors are required to have completed MATH 1022. They can then choose either MATH 1031, MATH 1041 or MATH 1941.

Information Science and Technology BS

Overview

Science and technology are the foundations of our future. The Department of Computer and Information Sciences (CIS) is focused on the understanding of fundamental scientific principles and the application of these principles to solving complex problems, using computing technology.

Students in the **Bachelor of Science in Information Science and Technology** (IS&T) develop the skills and the knowledge necessary to analyze information problems and to apply current technology to their solution. The emphasis is to develop problem-solving and communication skills.

The technologies and methods include databases, web and mobile application development, client-server computing, network security, project management, software engineering principles, and quality assurance methodologies. A two-semester capstone project course is required. This course is designed to help students integrate what they have learned in other courses and apply this knowledge in the design and implementation of a software application. The BS program gives students the further opportunity to explore their interests in the variety of electives available to them.

The program is targeted for students who have a strong interest in applying computing technologies to solving problems in business, education, science and government agencies. Our IS&T graduates are also involved in innovative product developments. They hold jobs as consultants, network engineers, business and systems analysts, database administrators, and web and application developers.

Campus Location: Main

Program Code: ST-IST-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- have a minimum 3.50 major GPA and
- have a minimum 3.50 cumulative GPA.

Undergraduate Contact Information

Jamie Payton, Chair

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215-204-8450

Gene Kwatny, Vice Chair

Science, Education and Research Center, Room 304
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Learn more about the Bachelor of Science in Information Science and Technology.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
CIS 4296	Information Systems Analysis and Design	4
CIS 4396	Information Systems Implementation	4

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (76 s.h.)

At least 9 courses required for the major must be completed at Temple. At least 8 CIS courses must be completed at Temple.

Code	Title	Credit Hours
Computer & Information Science		
CIS 1001	Introduction to Academics in Computer Science	1
CIS 1051	Introduction to Problem Solving and Programming in Python	4
or CIS 1057	Computer Programming in C	
CIS 1068	Program Design and Abstraction	4
or CIS 1968	Honors Program Design and Abstraction	
CIS 1166	Mathematical Concepts in Computing I	4
or CIS 1966	Honors Mathematical Concepts in Computing I	
CIS 2109	Database Management Systems	4
CIS 2168	Data Structures	4
CIS 2229	Architecture, Operating Systems and Networking	4
CIS 3309	Component-Based Software Design	4
CIS 3329	Network Architectures	4
CIS 3342	Server-Side Web Application Development	4
CIS 3344	Client-Side Scripting for the Web	4
CIS 4296	Information Systems Analysis and Design	4
CIS 4396	Information Systems Implementation	4
Mathematics		
MATH 2031	Probability and Statistics	3
Select one of the following: ¹		4
MATH 1031	Differential and Integral Calculus	
MATH 1041	Calculus I	
MATH 1941	Honors Calculus I	
Information Science & Technology Related Electives		
Select 12 credits from the following IS&T elective courses:		12
CIS 3100	Special Topics in CIS	
CIS 3281	Cooperative Education Experience in Information Science & Technology ²	
CIS 3374	Quality Assurance & Testing (F)	
CIS 3376	Enterprise Resource Planning (ERP) Design and Implementation	
CIS 3441	Software Security	
CIS 3515	Introduction to Mobile Application Development	
CIS 3603	User Experience Design	
CIS 3605	Introduction to Digital Forensics	
CIS 3715	Principles of Data Science	
CIS 3775	Information Technology Project Management	
CIS 4105	Information Technology Process Management (F)	
CIS 4106	System Development Process	
CIS 4108	Emerging Technologies and Tools for Enterprise Management (S)	
CIS 4282	Independent Study ²	
CIS 4330	Current Topics in Information Science & Technology	
CIS 4340	Seminar in Information Science & Technology (S)	
CIS 4344	Advanced Web Application Design & Scripting	
CIS 4350	Seminar on Topics in Computer Science (F)	
CIS 4362	Application System Development Using Relational Technology (Not offered every year)	
CIS 4376	E-Commerce System Development	
CIS 4378	Computer and Network Security	
CIS 4419	Securing the Internet of Things	
CIS 4515	Advanced Mobile Application Development	
CIS 4615	Ethical Hacking and Intrusion Forensics	
CIS 4625	Audit and Compliance for Security and Digital Forensics	

Other courses communicated to the students from the IS&T Faculty Advisor.

Laboratory Science courses

Two (2) laboratory science courses ³ 8

Total Credit Hours 76

Code	Title	Credit Hours
------	-------	--------------

(F) - Fall only course

(S) - Spring only course

1

IS&T majors are required to have completed MATH 1022. They can then choose either MATH 1031, MATH 1041 or MATH 1941.

2

A maximum of two sections may be taken from CIS 3281 and CIS 4282. CIS 3281 may be taken once within this two-section sequence.

3

Must select within a Sequence for Laboratory Science A and Laboratory Science B. See the Sequenced Laboratory Science list below for the science options.

- Students may also select other 3000-level or higher Computer & Information Science courses for which they meet the prerequisites as long as that course is not already used for the IS&T degree.
- No more than two courses that do not have formal classes and a text, such as Independent Study, Directed Study, and co-op may be used to satisfy the elective requirement. In addition, the co-op course may only be taken once.
- Students with senior standing and a minimum overall 3.25 GPA may also request permission from both the IS&T advisor and course instructor to use graduate courses (5xxx level) as electives.

Sequenced Information Science and Technology Laboratory Science Requirements

Code	Title	Credit Hours
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Biology Sequence**Select one Biology Lab Science A:**

BIOL 1011	General Biology I
BIOL 1111	Introduction to Organismal Biology
BIOL 1911	Honors Introduction to Organismal Biology (S)

Select one Biology Lab Science B:

BIOL 1012	General Biology II
BIOL 1112	Introduction to Biomolecules, Cells and Genomes
BIOL 1912	Honors Introduction to Biomolecules, Cells and Genomes
BIOL 2112	Introduction to Cellular and Molecular Biology
BIOL 2912	Honors Introduction to Cellular and Molecular Biology (F)

Chemistry Sequence ¹**Select one Chemistry Lab Science A:**

CHEM 1021 & CHEM 1023	Introduction to Chemistry I and Introduction to Chemistry Laboratory I
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I

Select one Chemistry Lab Science B:

CHEM 1022 & CHEM 1024	Introduction to Chemistry II and Introduction to Chemistry Laboratory II
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II

Earth & Environmental Science Sequence ²

Select this Lab Science A:

EES 2001 Physical Geology

Select one Lab Science B:

EES 2011 Mineralogy I (with CHEM 1031 prerequisite)

EES 2021 Sedimentary Environments (no CHEM 1031 prerequisite)

EES 2061 Introduction to Geochemistry (with CHEM 1031 prerequisite)

Physics Sequence³**Select one Physics Lab Science A:**

PHYS 1021 Introduction to General Physics I

PHYS 1061 Elementary Classical Physics I

PHYS 1961 Honors Elementary Classical Physics I (F)

PHYS 2021 General Physics I

PHYS 2921 Honors General Physics I (F)

Select one Physics Lab Science B:

PHYS 1022 Introduction to General Physics II

PHYS 1062 Elementary Classical Physics II

PHYS 1962 Honors Elementary Classical Physics II (S)

PHYS 2022 General Physics II

PHYS 2922 Honors General Physics II (S)

1

Students can choose to mix-and-match the Chemistry Sequence A and B courses. However, they must take at least 1 course from Chemistry Sequence A and 1 from Chemistry Sequence B. Note: Chemistry courses consist of a three-credit lecture plus a one-credit lab.

2

For the EES Sequence, two of the three Lab Science B options require students to take CHEM 1031 as a prerequisite, but EES 2021 does not.

3

Students can choose to mix-and-match the Physics Sequence A and B courses. However, they must take at least 1 course from Physics Sequence A and 1 from Physics Sequence B.

Suggested Academic Plan

Bachelor of Science in Information Science and Technology

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
CIS 1001	Introduction to Academics in Computer Science	1
Select one of the following:		4
CIS 1051	Introduction to Problem Solving and Programming in Python	
CIS 1057	Computer Programming in C	
Select one of the following: ¹		4
MATH 1031	Differential and Integral Calculus	
MATH 1041	Calculus I	
MATH 1941	Honors Calculus I	
SCTC 1001	CST First Year Seminar	1
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Spring		
CIS 1068	Program Design and Abstraction	4
or CIS 1968	or Honors Program Design and Abstraction	
CIS 1166	Mathematical Concepts in Computing I	4
or CIS 1966	or Honors Mathematical Concepts in Computing I	

ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
Credit Hours		15
Year 2		
Fall		
MATH 2031	Probability and Statistics	3
CIS 2168	Data Structures	4
IST Laboratory Science A		4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Elective		1
Credit Hours		15
Spring		
CIS 2109	Database Management Systems	4
CIS 2229	Architecture, Operating Systems and Networking	4
IST Laboratory Science B		4
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		15
Year 3		
Fall		
CIS 3309	Component-Based Software Design	4
CIS 3344	Client-Side Scripting for the Web	4
Information Science & Technology Elective ²		3-4
GenEd Breadth Course		3-4
Elective		2-0
Credit Hours		16
Spring		
CIS 3329	Network Architectures	4
Information Science & Technology Elective ²		3-4
GenEd Breadth Course		3
Elective		3
Elective		2-1
Credit Hours		15
Year 4		
Fall		
CIS 4296	Information Systems Analysis and Design	4
CIS 3342	Server-Side Web Application Development	4
Information Science & Technology Elective ²		3-4
Elective		3
Elective		2-1
Credit Hours		16
Spring		
CIS 4396	Information Systems Implementation	4
Information Science & Technology Elective ²		3-4
Elective		3
Elective		3
Elective		2-1
Credit Hours		15
Total Credit Hours		123

1

IS&T majors are required to have completed MATH 1022. They can then choose either MATH 1031, MATH 1041 or MATH 1941.

2

Select from the Information Science & Technology Related Electives list under Requirements.

Information Science and Technology Minor

Overview

Offered by the Department of Computer and Information Sciences, the **Minor in Information Science and Technology** provides students with a choice of 5 courses that focus on programming, operating systems and database technologies that can be applicable for a technological foundation to complement any major. Students on both Main Campus and Temple University Japan Campus may declare this minor.

Campus Location: Main and Japan

Undergraduate Contact Information

Main Campus

Jamie Payton, Chair
Science, Education and Research Center, Room 304
215-204-8450

Gene Kwatny, Vice Chair
Science, Education and Research Center, Room 304
215-204-8450

Dominic Letarte, Faculty Advisor
Science, Education and Research Center, Room 372
215-204-6439
istadvsr@temple.edu

Temple Japan Campus

Hani Karam, PhD, Computer Science Coordinator
hkaram@tuj.temple.edu

Minor Requirements

Students desiring a minor in Information Science and Technology are required to satisfy the following:

Code	Title	Credit Hours
CIS 1051 or CIS 1951 or CIS 1057	Introduction to Problem Solving and Programming in Python Honors Introduction to Problem Solving and Programming in Python Computer Programming in C	4
CIS 1068 or CIS 1968	Program Design and Abstraction Honors Program Design and Abstraction	4
Select 3 of the following: ¹		11-12
CIS 1166 or CIS 1966	Mathematical Concepts in Computing I Honors Mathematical Concepts in Computing I	
CIS 2004	Sci+Tech Scholars Seminar ²	
CIS 2109	Database Management Systems	
CIS 2168	Data Structures	
CIS 2229	Architecture, Operating Systems and Networking	
Total Credit Hours		19-20

1

A 3000-level CIS course may replace one of the courses above with faculty advisor approval. CS majors who want an IS&T minor must take CIS 2109, CIS 3309 and a 3000-level IS&T course distinct from the CS courses (selected with IS&T faculty advisor). If a student has taken CIS 4331, that student may not take CIS 2109 and will need to see the faculty advisor for a replacement course.

Only students in the Sci+Tech Scholars program may take the 1-credit CIS 2004 course each semester for three semesters and substitute the 3 combined credits for one of the required electives. Sci+Tech Scholars students would then need to choose two additional electives from the list to complete the three electives requirement.

Residency Requirements: At least 3 courses required for the minor must be completed at Temple. At least 3 CIS courses must be completed at Temple. Sci+Tech Scholars students should note that taking 3 CIS 2004 seminars constitutes 1 course for the residency requirement.

Materials Science BS

Overview

The **Bachelor of Science in Materials Science**, offered by the Department of Physics, provides both a strong preparation for those wishing to attend graduate school in materials science or related disciplines and for those who intend to enter the scientific workforce upon completion of a bachelor's degree. Students who wish to transfer into this program should consult first with the Physics faculty advisor.

The Bachelor of Science in Materials Science stands at the interface between physics, chemistry, computer and information science, and applied mathematics, with innovation and technology applications bridging to applied sciences. Its foundational structure is embedded in multiple College of Science and Technology (CST) disciplines. Indeed, the frontiers of the subject now demand participation of artificial intelligence/machine learning methodologies. Materials science is important as a research and education driver that reaches students in almost every discipline of science and technology. Graduates proficient in this area are more and more in demand. Indeed, the national initiative in Quantum Information Science makes it clear that Quantum Materials will be a focus for industry and academia. Temple's Bachelor of Science in Materials Science focuses on the science behind materials science, and is not an engineering program.

As a discipline, materials science represents the confluence of quantum theory, computational design, synthesis and characterization, in a feedback loop to produce advanced materials for technology applications and subsequent processing by industry. Importantly, the theory and computational design component now harnesses artificial intelligence and machine learning to create heretofore unknown "designer" materials. These ideas are prominent in Department of Energy (DOE) and National Science Foundation "big ideas" such as the "Quantum Leap" that establish an understanding of complex matter-energy relationships, leading to next-generation quantum materials and technologies for sensing and computing, modeling, and communicating, from the micro- or nano-structure of materials to their physical, mechanical and chemical properties.

Materials Science evolved historically from the metallurgy of naturally occurring elements and their alloys (and glass) to embrace not only an enormous variety of "hard" elemental (metallic and semiconducting) alloys and oxide-based materials (superconductors, catalysts, etc.) that underpin technology applications, but also a vast array of "soft" materials including synthetic and natural polymers, as well as more recently the two-dimensional graphene-like constructs, which will be needed for future advanced/strategic technologies.

Campus Location: Main

Program Code: ST-MSCI-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.5 major GPA and
- carry out an independent study or undergraduate thesis project.

Consult the undergraduate physics faculty advisor for more details.

Undergraduate Contact Information

Peter Riseborough, Chair
Science, Education and Research Center, Room 444
215-204-5655

Zbigniew Dziembowski, Faculty Advisor
Science, Education and Research Center, Room 412
215-204-7639
zbig.dziembowski@temple.edu

Learn more about the Bachelor of Science in Materials Science.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
PHYS 2796	Introduction to Modern Physics	4
SCTC 2396	Writing for Science and Technology	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (76-80 s.h.)

A least 9 courses required for the major must be completed at Temple. At least 8 Physics courses must be completed at Temple.

Code	Title	Credit Hours
Chemistry		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I	
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II	
Mathematics and Quantitative Methods		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
Select one of the following		3-4
MATH 2041	Differential Equations I	
MATH 2045	Differential Equations with Linear Algebra	
MATH 2941	Honors Differential Equations I	
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
Physics		
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	

PHYS 2921	Honors General Physics I (F)	
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	
Select two of the following: ¹		3
PHYS 2511	Scientific Computing I	
PHYS 3511	Scientific Computing II	
PHYS 4511	Scientific Computing III	
PHYS 2796	Introduction to Modern Physics (S)	4
PHYS 3702	Optical and Electronic Properties of Materials, Including Thin Films and Nanomaterials (F)	4
PHYS 3703	Quantum Materials: Properties, Characterization and Application (S)	4
Select one of the following: ²		3
PHYS 4501	Computational Design of Novel and Quantum Materials (F)	
PHYS 4502	Theoretical/Computational Materials Science (S)	
Materials Science Electives		
Select five of the following:		15-18
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I	
CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II	
CHEM 2922 & CHEM 2924	Organic Chemistry for Honors II and Organic Honors Laboratory II	
CHEM 3001	Inorganic Chemistry	
CHEM 3301	Physical Chemistry Lecture I	
CHEM 4004	Crystallography and Diffraction ³	
CHEM 4503	Introduction to Polymer Chemistry ⁴	
PHYS 3701	Introduction to Quantum Mechanics I ⁵	
PHYS 4501	Computational Design of Novel and Quantum Materials	
PHYS 4502	Theoretical/Computational Materials Science	
PHYS 4101	Thermal Physics (F)	
PHYS 4302	Optics ⁶	
PHYS 4701	Introduction to Solid State Physics (S, even years) ⁷	
ENGR 2331	Engineering Statics	
ENGR 2333	Mechanics of Solids	
ENGR 3201	Material Science for Engineers	
ENGR 4201	Micro- to Nano-sized Machines	
MEE 4212	Tribology and Surface Engineering	
MEE 5205	Microscopy and Microanalysis of Materials	
Senior Capstone and Research		
3 credits of research in each semester of senior year		
Fall semester of senior year, select one of the following:		3
CHEM 4891	Undergraduate Research	
PHYS 4091	Undergraduate Research	
Spring semester of senior year, select one of the following:		3
CHEM 4891	Undergraduate Research	
PHYS 4091	Undergraduate Research	
Writing Intensive		

SCTC 2396	Writing for Science and Technology	3
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Total Credit Hours		76-80
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Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

- 1
Students with prior programming experience may be prepared to begin in PHYS 3511. Please see a Physics Faculty Advisor for more information.
- 2
One of these courses is required. The course not selected may be taken as a Materials Science Elective.
- 3
CHEM 3001 is a prerequisite for this course.
- 4
CHEM 2202 and CHEM 3301 are prerequisites for this course.
- 5
PHYS 2502 is a prerequisite for this course.
- 6
CHEM 3301 is a prerequisite for this course.
- 7
PHYS 3701 is a prerequisite for this course.

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Materials Science

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
SCTC 1001	CST First Year Seminar	1
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		16
Spring		
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	
Select one of the following: ¹		1.5

PHYS 2511	Scientific Computing I	
PHYS 3511	Scientific Computing II	
PHYS 4511	Scientific Computing III	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Credit Hours		15.5
Year 2		
Fall		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I	
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
Select one of the following:		3-4
MATH 2041	Differential Equations I	
MATH 2045	Differential Equations with Linear Algebra	
MATH 2941	Honors Differential Equations I	
Select one of the following:		1.5
PHYS 2511	Scientific Computing I	
PHYS 3511	Scientific Computing II	
PHYS 4511	Scientific Computing III	
Elective		3-2
Credit Hours		15.5
Spring		
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II	
PHYS 2796	Introduction to Modern Physics (S)	4
GenEd Breadth Course		3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Elective		2
Credit Hours		16
Year 3		
Fall		
PHYS 3702	Optical and Electronic Properties of Materials, Including Thin Films and Nanomaterials	4
PHYS 3703	Quantum Materials: Properties, Characterization and Application	4
GenEd Breadth Course		3-4
GenEd Breadth Course		3
Elective		1-0
Credit Hours		15
Spring		
SCTC 2396	Writing for Science and Technology	3
Materials Science Elective 1 ²		3-4
Materials Science Elective 2 ²		3-4
GenEd Breadth Course		3
Elective		3-1
Credit Hours		15

Year 4		
Fall		
Select one of the following:	³	3
PHYS 4501	Computational Design of Novel and Quantum Materials	
PHYS 4502	Theoretical/Computational Materials Science	
Select one of the following:		3
CHEM 4891	Undergraduate Research	
PHYS 4091	Undergraduate Research	
Materials Science Elective 3	²	3-4
Elective		3
Elective		3-2
Credit Hours		15
Spring		
Select one of the following:		3
CHEM 4891	Undergraduate Research	
PHYS 4091	Undergraduate Research	
Materials Science Elective 4	²	3
Materials Science Elective 5	²	3
Elective		3
Elective		3
Credit Hours		15
Total Credit Hours		123

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

Students with prior programming experience may be prepared to begin in PHYS 3511. Please see a Physics faculty advisor for more information.

2

Select from the Materials Science Electives list under Requirements.

3

One of these courses is required. The course not selected may be taken as a Materials Science Elective.

Mathematical Economics BA (CST)

Overview

The College of Liberal Arts' Department of Economics and the College of Science and Technology's Department of Mathematics jointly offer the **Bachelor of Arts in Mathematical Economics** as a platform for systematic concentration in the mathematical approach to economics. Economics has progressed in the last several decades by making extensive use of mathematical techniques. As a result, students who wish to pursue graduate study in economics, finance, accounting and other disciplines that make an extensive use of economics need a thorough grounding in both economics and mathematics. The Mathematical Economics curriculum provides this grounding with a broad selection of courses that cover all important areas of economics and the mathematical tools required for a critical, deep mastery of these areas.

Campus Location: Main

Program Code: ST-MECN-BA

Undergraduate Contact Information

Brian Rider, Mathematics Department Chair
 Wachman Hall, Room 638
 215-204-7841
 mathematics@temple.edu

Maria Lorenz, Mathematics Department Vice Chair

Wachman Hall, Room 610
215-204-7852
mathadvising@temple.edu

Boris Datskovsky, Mathematics Director of Undergraduate Studies
Wachman Hall, Room 632
215-204-7847
mathadvising@temple.edu

Michael Bognanno, Economics Department Chair
Ritter Annex, Room 877
215-204-1680
bognanno@temple.edu

Dimitrios Diamantaras, Economics Advisor
Ritter Annex, Room 883
215-204-8169
dimitrios.diamantaras@temple.edu

Learn more about the Bachelor of Arts in Mathematical Economics.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Arts Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
ECON 3596	Energy, Ecology, and Economy	3
ECON 3597	Health Economics	3
ECON 3598	Economics Writing Seminar	3
ECON 3696	Behavioral Economics	3
ECON 3697	The Economics of Sports	3
ECON 3698	Economic Inequality	3
MATH 3096 or MATH 3098	Introduction to Modern Algebra Modern Algebra	3
MATH 4096	Senior Problem Solving	3

- Students must complete the General Education (GenEd (p. 83)) requirements. Students who complete this major typically receive a waiver for 1 Quantitative Literacy (GQ) GenEd course.

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
 - A minimum of 6 of these credits must be upper-level (courses numbered 2000 and above) CLA credits.
- Successful completion or waiver from the second level of a foreign language.
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Arts (60-62 s.h.)

Code	Title	Credit Hours
Computer & Information Science		
Select one of the following:		3-4

CIS 1051 or CIS 1951	Introduction to Problem Solving and Programming in Python Honors Introduction to Problem Solving and Programming in Python	
CIS 1057	Computer Programming in C	
CIS 1068 or CIS 1968	Program Design and Abstraction Honors Program Design and Abstraction	
MATH 1033 & MATH 1034	Computing in MATLAB and Applications in MATLAB	
Mathematics		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
MATH 2101	Linear Algebra	3
MATH 2111	Basic Concepts of Math	3
MATH 3031	Probability Theory I	3
MATH 3032	Mathematical Statistics (S)	3
Select one of the following sequences:		6-7
MATH 3043 & MATH 3044	Numerical Analysis I and Numerical Analysis II	
MATH 3137 & MATH 3138	Real & Complex Analysis I and Real & Complex Analysis II	
MATH 3141 & MATH 3142	Advanced Calculus I and Advanced Calculus II	
One Mathematics elective at the 3000 level or above ^{1,2}		3
Economics		
ECON 1102 or ECON 1902	Microeconomic Principles Honors Microeconomic Principles	3
ECON 3501 or ECON 3701	Intermediate Microeconomic Analysis Intermediate Microeconomic Analysis with Calculus	3
ECON 3502 or ECON 3702	Intermediate Macroeconomic Analysis Intermediate Macroeconomic Analysis with Calculus	3
ECON 3503 or ECON 3703	Introduction to Econometrics Econometric Theory	3
ECON 3504	Mathematical Economics	3
ECON 3598	Economics Writing Seminar	3
Two Economics electives at the 3000 level or above, with permission from faculty advisor ²		6
Total Credit Hours		60-62

Code	Title	Credit Hours
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(F) - Fall only course.

(S) - Spring only course.

1

MATH 2041, MATH 2941, MATH 2045, or MATH 2121 may be used to fulfill the Mathematics elective at the 3000 level or above.

2

One of the Mathematics or Economics electives must be a writing-intensive course in order to satisfy the University requirement that each student must fulfill two writing-intensive courses within the major.

Suggested Academic Plan

Bachelor of Arts in Mathematical Economics

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
Select one of the following:		3-4
CIS 1051 or CIS 1951	Introduction to Problem Solving and Programming in Python or Honors Introduction to Problem Solving and Programming in Python	
CIS 1057	Computer Programming in C	
CIS 1068 or CIS 1968	Program Design and Abstraction or Honors Program Design and Abstraction	
MATH 1033 & MATH 1034	Computing in MATLAB and Applications in MATLAB	
SCTC 1001	CST First Year Seminar	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Elective		3-2
Credit Hours		15
Spring		
ECON 1102 or ECON 1902	Microeconomic Principles or Honors Microeconomic Principles	3
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Elective		3
Credit Hours		16
Year 2		
Fall		
ECON 3501 or ECON 3701	Intermediate Microeconomic Analysis or Intermediate Microeconomic Analysis with Calculus	3
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Elective		3
Credit Hours		16
Spring		
ECON 3502 or ECON 3702	Intermediate Macroeconomic Analysis or Intermediate Macroeconomic Analysis with Calculus	3
MATH 2111	Basic Concepts of Math	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Elective		3
Credit Hours		15
Year 3		
Fall		
3000+ Economics Elective, with permission from faculty advisor ¹		3

MATH 2101	Linear Algebra	3
MATH 3031	Probability Theory I	3
Foreign Language 1001 - First Level		4
Elective		2
Credit Hours		15
Spring		
ECON 3504	Mathematical Economics	3
MATH 3032	Mathematical Statistics (S)	3
3000+ Mathematics Elective ^{1,2}		3
Foreign Language 1002 - Second Level		4
Elective		3-2
Credit Hours		16-15
Year 4		
Fall		
ECON 3503 or ECON 3703	Introduction to Econometrics or Econometric Theory	3
Select one of the following: ³		3-4
MATH 3043	Numerical Analysis I (F)	
MATH 3137	Real & Complex Analysis I	
MATH 3141	Advanced Calculus I	
Upper-level CLA Course (numbered 2000 and above)		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		15-16
Spring		
ECON 3598	Economics Writing Seminar	3
3000+ Economics Elective, with permission from faculty advisor ¹		3
Select one of the following: ³		3
MATH 3044	Numerical Analysis II	
MATH 3138	Real & Complex Analysis II	
MATH 3142	Advanced Calculus II	
Upper-level CLA Course (numbered 2000 and above)		3
GenEd Breadth Course		3
Credit Hours		15
Total Credit Hours		123

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

One of the Mathematics or Economics electives must be a writing-intensive course in order to satisfy the University requirement that each student must fulfill two writing-intensive courses within the major.

2

MATH 2041, MATH 2941, MATH 2045, or MATH 2121 may be used to fulfill the Mathematics elective at the 3000 level or above.

3

You must complete the year-long sequence of either MATH 3043 and MATH 3044; or MATH 3137 and MATH 3138; or MATH 3141 and MATH 3142.

Mathematics and Computer Science BS

Overview

Science and technology are the foundations of our future. The Department of Computer and Information Sciences (CIS) is focused on the understanding of fundamental scientific principles and the application of these principles to solving complex problems, using computing technology.

The **Bachelor of Science in Mathematics and Computer Science** is intended for students who are interested in computer science and mathematical computing. It provides a solid knowledge of theoretical computer science and its mathematical foundations and compares favorably with other theoretically-oriented computer science programs. The program is particularly recommended to those students who are interested in pursuing a graduate degree in computer science or computational mathematics.

Campus Location: Main

Program Code: ST-MACS-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.50 cumulative GPA
- achieve a minimum 3.50 GPA in the 3000+ Computer Science courses required for the major
- achieve a minimum 3.50 GPA in the 3000+ Mathematics courses required for the major
- successfully complete MATH 3098 and one of the following two-semester analysis sequences
 - MATH 3043 and MATH 3044
 - MATH 3137 and MATH 3138
 - MATH 3141 and MATH 3142

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Learn more about the Bachelor of Science in Mathematics and Computer Science.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
CIS 3296	Software Design	
CIS 4397	Independent Research in Computer Science	
CIS 4398	Projects in Computer Science	
MATH 3096 or MATH 3098	Introduction to Modern Algebra Modern Algebra	
MATH 4096	Senior Problem Solving	

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
 - Students must satisfy general Temple University residency requirements (p. 1838).
- #### 2. College Requirements
- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
 - Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.
- #### 3. Major Requirements for Bachelor of Science (72-74 s.h.)

At least 10 courses required for the major must be completed at Temple. At least 5 Math and 4 Computer Science courses must be completed at Temple.

Code	Title	Credit Hours
Computer & Information Science courses		
CIS 1068 or CIS 1968	Program Design and Abstraction Honors Program Design and Abstraction	4
CIS 1166 or CIS 1966	Mathematical Concepts in Computing I Honors Mathematical Concepts in Computing I	4
CIS 2107	Computer Systems and Low-Level Programming	4
CIS 2166	Mathematical Concepts in Computing II	4
CIS 2168	Data Structures	4
CIS 3207	Introduction to Systems Programming and Operating Systems	4
CIS 3223	Data Structures and Algorithms	3
Select one of the following:		4
CIS 3296 3000+ CIS Elective ²	Software Design ¹	
Mathematics courses		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
Select one of the following:		3-4
MATH 2101	Linear Algebra	
MATH 2103	Linear Algebra with Computer Lab (F)	

MATH 2111	Basic Concepts of Math	3
MATH 3031	Probability Theory I	3
MATH 3096 or MATH 3098	Introduction to Modern Algebra Modern Algebra	3
Select one of the following:		3-4
MATH 3043	Numerical Analysis I (F)	
MATH 3137	Real & Complex Analysis I (F)	
Select one of the following:		3
MATH 3138 3000+ MATH Elective ⁴	Real & Complex Analysis II (S) ³	
Science courses		
Select one of the following sequences:		8
CHEM 1031 & CHEM 1033 & CHEM 1032 & CHEM 1034	General Chemistry I and General Chemistry Laboratory I and General Chemistry II and General Chemistry Laboratory II	
CHEM 1951 & CHEM 1953 & CHEM 1952 & CHEM 1954	Honors General Chemical Science I and Honors Chemical Science Laboratory I and Honors General Chemical Science II and Honors Chemical Science Laboratory II	
PHYS 1061 & PHYS 1062	Elementary Classical Physics I and Elementary Classical Physics II	
PHYS 1961 & PHYS 1962	Honors Elementary Classical Physics I and Honors Elementary Classical Physics II (F, S)	
PHYS 2021 & PHYS 2022	General Physics I and General Physics II	
PHYS 2921 & PHYS 2922	Honors General Physics I and Honors General Physics II (F, S)	
Capstone course		
Select one of the following:		3
CIS 4397	Independent Research in Computer Science	
CIS 4398	Projects in Computer Science ¹	
MATH 4096	Senior Problem Solving ³	

Total Credit Hours **72-74**

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

CIS 3296 is a prerequisite for CIS 4398 and should be taken as a 3000+ Computer & Information Science elective if you plan to take CIS 4398 as the capstone course.

2

Must be approved by Computer & Information Science faculty advisor.

3

MATH 3138 is a prerequisite for MATH 4096 and should be selected as a 3000+ Math elective if you plan to take MATH 4096 as the capstone course.

4

Must be approved by Mathematics faculty advisor. Students may take MATH 2121 to fulfill this requirement.

Suggested Academic Plan

Bachelor of Science in Mathematics and Computer Science

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
CIS 1068 or CIS 1968	Program Design and Abstraction or Honors Program Design and Abstraction	4
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
SCTC 1001	CST First Year Seminar	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
Credit Hours		16
Spring		
CIS 1166 or CIS 1966	Mathematical Concepts in Computing I or Honors Mathematical Concepts in Computing I	4
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Elective		1
Credit Hours		15
Year 2		
Fall		
CIS 2168	Data Structures	4
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
Select one of the following:		3-4
MATH 2101	Linear Algebra	
MATH 2103	Linear Algebra with Computer Lab (F)	
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Elective		1-0
Credit Hours		15
Spring		
CIS 2107	Computer Systems and Low-Level Programming	4
CIS 2166	Mathematical Concepts in Computing II	4
MATH 2111	Basic Concepts of Math	3
GenEd Breadth Course		3
Elective		2
Credit Hours		16
Year 3		
Fall		
CIS 3207	Introduction to Systems Programming and Operating Systems	4
Select one of the following:		3-4
MATH 3043	Numerical Analysis I (F)	
MATH 3137	Real & Complex Analysis I (F)	
Select one of the following:		4

CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I	
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
GenEd Breadth Course		4-3
Credit Hours		15
Spring		
CIS 3223	Data Structures and Algorithms	3
Select one of the following:		3
MATH 3138	Real & Complex Analysis II (S) ¹	
3000+ MATH Elective ¹		
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II	
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	
GenEd Breadth Course		3
Elective		3
Credit Hours		16
Year 4		
Fall		
Select one of the following:		4
CIS 3296	Software Design ²	
3000+ CIS Elective ²		
MATH 3031	Probability Theory I	3
Select one of the following:		3
MATH 3096	Introduction to Modern Algebra	
MATH 3098	Modern Algebra	
Elective		3
Elective		2
Credit Hours		15
Spring		
Select one of the following:		3
CIS 4397	Independent Research in Computer Science	
CIS 4398	Projects in Computer Science ²	
MATH 4096	Senior Problem Solving ¹	
Elective		3
Elective		3
Elective		3
Elective		3
Credit Hours		15
Total Credit Hours		123

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

MATH 3138 is a prerequisite for MATH 4096 and should be selected as a 3000+ Math elective if you plan to take MATH 4096 as the capstone course. Mathematics electives must be 3000 or higher, and they must be approved by the Mathematics faculty advisor. Students may take MATH 2121 to fulfill this requirement.

2

CIS 3296 is a prerequisite for CIS 4398 and should be taken as a 3000+ Computer & Information Science elective if you plan to take CIS 4398 as the capstone course. Computer & Information Science electives must be 3000 or higher, and they must be approved by the Computer & Information Science faculty advisor.

Mathematics and Computer Science with Teaching BS

Overview

Science and technology are the foundations of our future. The Department of Computer and Information Sciences (CIS) is focused on the understanding of fundamental scientific principles and the application of these principles to solving complex problems, using computing technology.

The **Bachelor of Science in Mathematics and Computer Science with Teaching** is part of Temple's innovative "TUteach" teacher-training program. The BS in Mathematics and Computer Science with Teaching provides broad training in mathematics and computer science and prepares students for a career in secondary school teaching or an entry level position in a mathematics field or computer science. The education courses in this major include supervised teaching in school district classrooms and emphasize inquiry-based approaches to learning. Students in the BS in Mathematics and Computer Science with Teaching degree program become *eligible* for a Pennsylvania teacher certification when they complete all the requirements for the degree that include theoretical and practical courses in education specifically designed for science and mathematics majors. In order to be *recommended* for Pennsylvania teacher certification, students must graduate with:

1. a BS with Teaching degree and
2. meet GPA and testing requirements of the state of Pennsylvania.

Students will be scheduled once each semester to meet with the TUteach advisor to ensure that students have knowledge of academic programming, internships opportunities and testing options that include test preparation. The state of Pennsylvania has specific candidacy requirements. The TUteach advisor will also help the students complete and submit the candidacy documents. All students joining the program in their freshman year must complete the PAPA examination or acquire the PAPA waiver within their first 72 credits. Transfer students, from within Temple and those from other institutions, will build a tailored program with the academic and testing benchmarks structured for efficient degree completion with the TUteach advisor. Students are encouraged to complete the appropriate PRAXIS II examination prior to student teaching. Students are encouraged to take internship courses to expand their teaching portfolio or select elective courses that will extend their knowledge of science and teaching practice.

Campus Location: Main

Program Code: ST-MCTC-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.25 cumulative GPA;
- achieve a minimum 3.50 major GPA;
- achieve a minimum 3.50 in the Mathematics and Computer Science with Teaching content courses required for the major;
- successfully complete MATH 3141, MATH 3142 and MATH 4051 instead of MATH 3137 and MATH 3138;
- successfully complete MATH 3098 instead of MATH 3096;
- achieve a minimum 3.50 GPA in the following courses:
 - MATH 3098
 - MATH 3141
 - MATH 3142
 - MATH 4051
 - Any additional course from the following:

- MATH 3043
- MATH 3044
- MATH 3101; and
- achieve a minimum 3.90 GPA in the following courses:
 - MAES 2189 or SCTC 4385
 - MAES 4189 or SCTC 4485
 - EDUC 4388
 - EDUC 4802.

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Learn more about the Bachelor of Science in Mathematics and Computer Science with Teaching.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (124 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
MATH 3096	Introduction to Modern Algebra	
MATH 4096	Senior Problem Solving	
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete TUtch majors receive a waiver for 1 Human Behavior (GB), 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
 - Students must satisfy general Temple University residency requirements (p. 1838).
- #### 2. College Requirements
- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
 - Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (97-99 s.h.)¹

At least 10 courses required for the major must be completed at Temple. At least 6 Math, 2 Computer Science, and 3 Education courses must be completed at Temple. Though not required, students are strongly encouraged to increase training and field work experience by enrolling in SCTC 1385, SCTC 2385, or SCTC 2389. Students will also benefit from directed laboratory projects offered through SCTC 3185. These courses are offered every semester.

Code	Title	Credit Hours
Computer & Information Science		
CIS 1068 or CIS 1968	Program Design and Abstraction Honors Program Design and Abstraction	4
CIS 1166 or CIS 1966	Mathematical Concepts in Computing I Honors Mathematical Concepts in Computing I	4
CIS 2107	Computer Systems and Low-Level Programming	4
CIS 2168	Data Structures	4
Mathematics		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2021	Functions and Modeling (S)	3
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
MATH 2061	Euclidean Geometry (S)	3
MATH 2101 or MATH 2103	Linear Algebra Linear Algebra with Computer Lab	3-4
MATH 2111	Basic Concepts of Math	3
MATH 3096	Introduction to Modern Algebra	3
MATH 3137	Real & Complex Analysis I (F)	3
MATH 3138	Real & Complex Analysis II (S)	3
MATH 4096	Senior Problem Solving	3

Mathematics or Computer & Information Science

MATH 3003	Theory of Numbers	3-4
or CIS 2166	Mathematical Concepts in Computing II	

Physics

PHYS 1061	Elementary Classical Physics I	4
or PHYS 1961	Honors Elementary Classical Physics I	
or PHYS 2021	General Physics I	
or PHYS 2921	Honors General Physics I	
PHYS 1062	Elementary Classical Physics II	4
or PHYS 1962	Honors Elementary Classical Physics II	
or PHYS 2022	General Physics II	
or PHYS 2922	Honors General Physics II	

College of Science & Technology

SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
SCTC 1389	Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners	2
SCTC 3001	History of Science	3
SCTC 3312	Coding STEM Lessons ²	1

Education

EDUC 2179	Knowing and Learning in Mathematics and Science	3
EDUC 4388	TUteach Apprentice Teaching	4
EDUC 4802	TUteach Apprentice Teaching Seminar	3
MGSE 2189	Classroom Interactions (S)	3
or SCTC 3485	Science and Mathematics in the Classroom	
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3
MGSE 4189	Project-Based Instruction (F)	3
or SCTC 4485	Integrating STEM Practice in Diverse Teaching Environments	
SPED 2231	Introduction to Special Education	3

Research Methods

BIOL/CHEM/EES/PHYS 3091	Research Methods	3
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Total Credit Hours **97-99**

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

The certification requirements need to meet Pennsylvania Department of Education standards and are subject to change. All students are strongly recommended to check with the TUteach Advisor in the College of Science and Technology to affirm the requirements that pertain to their specific major. In addition, students should check the *Undergraduate Bulletin* web site for the most current information about these programs, or the TUteach web site. It is also recommended that all students meet with an advisor before enrolling in classes specific to these majors and leading to certification as a teacher. This is to assure that a candidate's intended program of study will be compatible with the new requirements.

2

All students are required to take a minimum of one credit.

Suggested Academic Plan**Bachelor of Science in Mathematics and Computer Science with Teaching****Suggested Plan for New Students Starting in the 2023-2024 Academic Year**

Year 1			Credit Hours
Fall			
CIS 1068	Program Design and Abstraction		4
or CIS 1968	or Honors Program Design and Abstraction		

MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I	
SCTC 1001	CST First Year Seminar	1
SCTC 1389	Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners	2
Credit Hours		15
Spring		
CIS 1166 or CIS 1966	Mathematical Concepts in Computing I or Honors Mathematical Concepts in Computing I	4
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II	
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
Credit Hours		15
Year 2		
Fall		
CIS 2168	Data Structures	4
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
MATH 2101 or MATH 2103	Linear Algebra or Linear Algebra with Computer Lab	3-4
EDUC 2179	Knowing and Learning in Mathematics and Science	3
Elective		3-2
Credit Hours		17
Spring		
CIS 2107	Computer Systems and Low-Level Programming	4
MATH 2021	Functions and Modeling (S)	3
MATH 2111	Basic Concepts of Math	3
SPED 2231	Introduction to Special Education	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		17
Year 3		
Fall		
MATH 3096	Introduction to Modern Algebra	3
MATH 3137	Real & Complex Analysis I (F)	3
SCTC 3001	History of Science	3
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Credit Hours		18
Spring		
MATH 2061	Euclidean Geometry (S)	3

MATH 3138	Real & Complex Analysis II (S)	3
Select one of the following:		3
MGSE 2189	Classroom Interactions (S)	
SCTC 3485	Science and Mathematics in the Classroom	
Select one of the following:		3
BIOL 3091	Research Methods (S)	
CHEM 3091	Research Methods (S)	
EES 3091	Research Methods (S)	
PHYS 3091	Research Methods (S)	
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		15
Year 4		
Fall		
Select one of the following:		3-4
MATH 3003	Theory of Numbers	
CIS 2166	Mathematical Concepts in Computing II	
MATH 4096	Senior Problem Solving	3
SCTC 3312	Coding STEM Lessons ¹	1
Select one of the following:		3
MGSE 4189	Project-Based Instruction (F)	
SCTC 4485	Integrating STEM Practice in Diverse Teaching Environments	
GenEd Breadth Course		3
GenEd Breadth Course		4-3
Credit Hours		17
Spring		
EDUC 4388	TUteach Apprentice Teaching	4
EDUC 4802	TUteach Apprentice Teaching Seminar	3
GenEd Breadth Course		3
Credit Hours		10
Total Credit Hours		124

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

All students are required to take a minimum of one credit.

Mathematics and Physics BS

Overview

The **Bachelor of Science in Mathematics and Physics**, a program administered jointly between the Department of Physics and the Department of Mathematics, is an interdisciplinary program providing a foundation in physical sciences with a strong emphasis on the mathematical techniques needed for analysis and modeling. It prepares the student for science or analysis careers which use these mathematical tools along with problem-solving skills, as well as for graduate studies in either mathematics or physics.

Campus Location: Main

Program Code: ST-MAPH-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.50 cumulative GPA;
- achieve a minimum 3.50 GPA in all Physics and Math courses required for the major;
- achieve a minimum 3.50 GPA in the following courses:
 - MATH 3098,
 - MATH 3141,
 - MATH 3142,
 - MATH 4051,
 - Any 4000-level course other than Individual Study; and,
- carry out an independent study, undergraduate research or undergraduate thesis project.

Consult the undergraduate Physics faculty advisor for more details.

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Learn more about the Bachelor of Science in Mathematics and Physics.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must meet all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
MATH 3098	Modern Algebra	3
MATH 4096	Senior Problem Solving	3
PHYS 2796	Introduction to Modern Physics	4
PHYS 4796	Experimental Physics	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (76 s.h.)

At least 10 courses required for the major must be completed at Temple. At least 6 Math and 5 Physics courses must be completed at Temple.

Code	Title	Credit Hours
Mathematics Courses		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
MATH 2045	Differential Equations with Linear Algebra (F)	4
MATH 2111	Basic Concepts of Math	3
MATH 3031	Probability Theory I	3
MATH 3051	Theoretical Linear Algebra (S)	4
MATH 3098	Modern Algebra (F)	3
MATH 3141	Advanced Calculus I (F)	3
MATH 3142	Advanced Calculus II (S)	3
MATH 4051	Complex Analysis (F)	3
Physics Courses		
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	
PHYS 2101	Classical Mechanics (S)	3
PHYS 2502	Mathematical Physics (S)	4
PHYS 2796	Introduction to Modern Physics (S)	4
PHYS 3101	Analytical Mechanics (F)	3
PHYS 3301	Electricity and Magnetism (F)	4
PHYS 3302	Classical Electromagnetism (S)	3
PHYS 3701	Introduction to Quantum Mechanics I (S)	3
PHYS 4101	Thermal Physics (F)	3
Capstone Course		
MATH 4096 or PHYS 4796	Senior Problem Solving Experimental Physics	3
Total Credit Hours		76

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

Suggested Academic Plan

Bachelor of Science in Mathematics and Physics

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
SCTC 1001	CST First Year Seminar	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
Credit Hours		16
Spring		
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Elective		1
Credit Hours		15
Year 2		
Fall		
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
MATH 2111	Basic Concepts of Math	3
MATH 2045	Differential Equations with Linear Algebra (F)	4
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Elective		1
Credit Hours		15
Spring		
PHYS 2502	Mathematical Physics (S)	4
PHYS 2796	Introduction to Modern Physics (S)	4
MATH 3051	Theoretical Linear Algebra (S)	4
GenEd Breadth Course		3
Credit Hours		15

Year 3		
Fall		
MATH 3031	Probability Theory I	3
MATH 3141	Advanced Calculus I (F)	3
PHYS 3301	Electricity and Magnetism (F)	4
GenEd Breadth Course		3
Elective		3
Credit Hours		16
Spring		
MATH 3142	Advanced Calculus II (S)	3
PHYS 2101	Classical Mechanics (S)	3
PHYS 3701	Introduction to Quantum Mechanics I (S)	3
GenEd Breadth Course		3-4
Elective		3
Elective		1-0
Credit Hours		16
Year 4		
Fall		
MATH 3098	Modern Algebra (F)	3
MATH 4051	Complex Analysis (F)	3
PHYS 3101	Analytical Mechanics (F)	3
PHYS 4101	Thermal Physics (F)	3
Elective		3
Credit Hours		15
Spring		
MATH 4096 or PHYS 4796	Senior Problem Solving or Experimental Physics	3
PHYS 3302	Classical Electromagnetism (S)	3
Elective		3
Elective		3
Elective		3
Credit Hours		15
Total Credit Hours		123

Code	Title	Credit Hours
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(F) - Fall only course.

(S) - Spring only course.

Mathematics and Technology with Teaching BS

Overview

The Department of Mathematics prepares students for careers, graduate study and professional programs requiring solid mathematical, quantitative or analytical skills.

The **Bachelor of Science in Mathematics and Technology with Teaching** is part of Temple's innovative "TUteach" secondary education teacher-training program. The BS in Mathematics and Technology with Teaching provides broad training in mathematics and prepares students for a career in secondary school teaching or an entry level position as a mathematics specialist. The education courses in this major include supervised teaching in school district classrooms and emphasize inquiry-based approaches to learning. Students in the BS in Mathematics and Technology with Teaching degree program become *eligible* for a Pennsylvania teacher certification when they complete all the requirements for the degree that include theoretical and practical courses in education specifically designed for science and mathematics majors. In order to be *recommended* for Pennsylvania teacher certification, students must graduate with:

1. a BS with Teaching degree and
2. meet GPA and testing requirements of the state of Pennsylvania.

Students will be scheduled once each semester to meet with the TUteach advisor to ensure that students have knowledge of academic programming, internships opportunities and testing options that include test preparation. The state of Pennsylvania has specific candidacy requirements. The TUteach advisor will also help the students complete and submit the candidacy documents. All students joining the program in their freshman year must complete the PAPA examination or acquire the PAPA waiver within their first 72 credits. Transfer students, from within Temple and those from other institutions, will build a tailored program with the academic and testing benchmarks structured for efficient degree completion with the TUteach advisor. Students are encouraged to complete the appropriate PRAXIS II examination prior to student teaching. Students are encouraged to take internship courses to expand their teaching portfolio or select elective courses that will extend their knowledge of science and teaching practice.

Campus Location: Main

Program Code: ST-MTTC-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.25 cumulative GPA;
- achieve a minimum 3.50 major GPA;
- achieve a minimum 3.50 in the Mathematics courses required for the major;
- achieve a minimum 3.50 in the Engineering courses required for the major;
- successfully complete MATH 3141, MATH 3142 and MATH 4051 instead of MATH 3137 and MATH 3138;
- successfully complete MATH 3098 instead of MATH 3096;
- achieve a minimum 3.50 GPA in the following courses:
 - MATH 3098
 - MATH 3141
 - MATH 3142
 - MATH 4051
 - Any additional course from the following:
 - MATH 3043
 - MATH 3044
 - MATH 3101
 - Any 4000-level course other than Individual Study; and
- achieve a minimum 3.90 GPA in the following courses:
 - MAES 2189 or SCTC 4385
 - MAES 4189 or SCTC 4485
 - EDUC 4388
 - EDUC 4802.

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Learn more about the Bachelor of Science in Mathematics and Technology with Teaching.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (124 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
MATH 3096	Introduction to Modern Algebra	
MATH 4096	Senior Problem Solving	
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete TUteach majors receive a waiver for 1 Human Behavior (GB), 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (98-101 s.h.)¹

At least 10 courses required for the major must be completed at Temple. At least 7 Math, 2 Engineering, and 3 Education courses must be completed at Temple. Though not required, students are strongly encouraged to increase training and field work experience by enrolling in SCTC 1385, SCTC 2385, or SCTC 2389. Students will also benefit from directed laboratory projects offered through SCTC 3185. These courses are offered every semester.

Code	Title	Credit Hours
Mathematics		
MATH 1041	Calculus I	4
or MATH 1941	Honors Calculus I	

MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2021	Functions and Modeling (S)	3
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
MATH 2061	Euclidean Geometry (S)	3
MATH 2101 or MATH 2103	Linear Algebra Linear Algebra with Computer Lab	3-4
MATH 2111	Basic Concepts of Math	3
MATH 3003	Theory of Numbers	3
MATH 3031	Probability Theory I	3
MATH 3096	Introduction to Modern Algebra	3
MATH 3137	Real & Complex Analysis I (F)	3
MATH 3138	Real & Complex Analysis II (S)	3
MATH 4096	Senior Problem Solving	3
One Mathematics 3000+ elective ²		3
Chemistry or Physics		
Select one of the following sets: ³		8
CHEM 1031 & CHEM 1033 & CHEM 1032 & CHEM 1034	General Chemistry I and General Chemistry Laboratory I and General Chemistry II and General Chemistry Laboratory II	
CHEM 1951 & CHEM 1953 & CHEM 1952 & CHEM 1954	Honors General Chemical Science I and Honors Chemical Science Laboratory I and Honors General Chemical Science II and Honors Chemical Science Laboratory II	
PHYS 1061 or PHYS 1961 or PHYS 2021 or PHYS 2921	Elementary Classical Physics I Honors Elementary Classical Physics I General Physics I Honors General Physics I	
and		
PHYS 1062 or PHYS 1962 or PHYS 2022 or PHYS 2922	Elementary Classical Physics II Honors Elementary Classical Physics II General Physics II Honors General Physics II	
Engineering Foundation courses		
Select one of the following:		3
ENGR 1101	Introduction to Engineering & Engineering Technology	
ENGR 1102	Introduction to Engineering Problem Solving	
ENGR 1901	Honors Introduction to Engineering	
ENGR 1117	Engineering Graphics	2
Engineering Concentration Courses		
Select two courses within the same track: ³		6-8
Track 1 - Environment		
EES 2001	Physical Geology	
CEE 2711 or CEE 3711	Environmental Chemistry & Microbiology Environmental Engineering	
Track 2 - Robotics		
ECE 2312 & ECE 2313	Electrical Engineering Science I and Electrical Engineering Science I Lab	
ECE 2612 & ECE 2613	Digital Circuit Design and Digital Circuit Design Laboratory	
Track 3 - Energy		

ENGR 3571	Classical and Statistical Thermodynamics	
MEE 4575	Renewable and Alternative Energy	
Track 4 - Bioengineering		
BIOE 2001	Frontiers in Bioengineering	
BIOE 3725 or BIOL 3334	Cell Biology for Engineers Mammalian Physiology	
College of Science & Technology		
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
SCTC 1389	Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners	2
SCTC 3001	History of Science	3
SCTC 3312	Coding STEM Lessons ⁴	1
Education		
EDUC 2179	Knowing and Learning in Mathematics and Science	3
EDUC 4388	TUteach Apprentice Teaching	4
EDUC 4802	TUteach Apprentice Teaching Seminar	3
MGSE 2189 or SCTC 3485	Classroom Interactions (S) Science and Mathematics in the Classroom	3
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3
MGSE 4189 or SCTC 4485	Project-Based Instruction (F) Integrating STEM Practice in Diverse Teaching Environments	3
SPED 2231	Introduction to Special Education	3
Research Methods		
BIOL/CHEM/EES/PHYS 3091	Research Methods (S)	3
Total Credit Hours		98-101

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1
The certification requirements need to meet Pennsylvania Department of Education standards and are subject to change. All students are strongly recommended to check with the TUteach Advisor in the College of Science and Technology to affirm the requirements that pertain to their specific major. In addition, students should check the *Undergraduate Bulletin* web site for the most current information about these programs, or the TUteach web site. It is also recommended that all students meet with an advisor before enrolling in classes specific to these majors and leading to certification as a teacher. This is to assure that a candidate's intended program of study will be compatible with the new requirements.

2
MATH 2041, MATH 2941, MATH 2045, or MATH 2121 may be used to fulfill the Mathematics elective at the 3000 level or above.

3
Most engineering concentration courses require either Chemistry or Physics as a prerequisite, so students should choose the course that best prepares them for their intended track. The Environment and Bioengineering tracks cannot be completed without the chemistry sequence, and the Robotics and Energy tracks cannot be completed without the physics sequence.

4
All students are required to take a minimum of one credit.

Suggested Academic Plan

Bachelor of Science in Mathematics and Technology with Teaching

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
Select one of the following: ¹		4

CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I	
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
SCTC 1001	CST First Year Seminar	1
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
SCTC 1389	Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners	2
GenEd Breadth Course		3
Credit Hours		17
Spring		
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
Select one of the following: ¹		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II	
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	
Select one of the following:		3
ENGR 1101	Introduction to Engineering & Engineering Technology	
ENGR 1102	Introduction to Engineering Problem Solving	
ENGR 1901	Honors Introduction to Engineering	
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		15
Year 2		
Fall		
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
MATH 2101 or MATH 2103	Linear Algebra or Linear Algebra with Computer Lab	3-4
ENGR 1117	Engineering Graphics	2
EDUC 2179	Knowing and Learning in Mathematics and Science	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Elective		1-0
Credit Hours		16
Spring		
MATH 2021	Functions and Modeling (S)	3
MATH 2061	Euclidean Geometry (S)	3
MATH 2111	Basic Concepts of Math	3
SPED 2231	Introduction to Special Education	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Credit Hours		18

Year 3		
Fall		
MATH 3003	Theory of Numbers	3
MATH 3137	Real & Complex Analysis I (F)	3
Engineering Concentration Elective ¹		3-4
SCTC 3001	History of Science	3
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3
Elective		1-0
Credit Hours		16
Spring		
MATH 3096	Introduction to Modern Algebra	3
MATH 3138	Real & Complex Analysis II (S)	3
Select one of the following:		3
MGSE 2189	Classroom Interactions (S)	
SCTC 3485	Science and Mathematics in the Classroom	
Select one of the following:		3
BIOL 3091	Research Methods (S)	
CHEM 3091	Research Methods (S)	
EES 3091	Research Methods (S)	
PHYS 3091	Research Methods (S)	
Engineering Concentration Elective ¹		3-4
Elective		1-0
Credit Hours		16
Year 4		
Fall		
Mathematics Elective (3000+) ²		3
MATH 3031	Probability Theory I	3
MATH 4096	Senior Problem Solving	3
SCTC 3312	Coding STEM Lessons ³	1
Select one of the following:		3
MGSE 4189	Project-Based Instruction (F)	
SCTC 4485	Integrating STEM Practice in Diverse Teaching Environments	
GenEd Breadth Course		3
Credit Hours		16
Spring		
EDUC 4388	TUteach Apprentice Teaching	4
EDUC 4802	TUteach Apprentice Teaching Seminar	3
GenEd Breadth Course		3
Credit Hours		10
Total Credit Hours		124

1

The two (2) Engineering concentration electives must be chosen from the same track. See major requirements for details. Most engineering concentration courses require either Chemistry or Physics as a prerequisite, so students should choose the course that best prepares them for their intended track. The Environment and Bioengineering tracks cannot be completed without the chemistry sequence, and the Robotics and Energy tracks cannot be completed without the physics sequence.

2

MATH 2041, MATH 2941, MATH 2045, or MATH 2121 may be used to fulfill the Mathematics elective at the 3000 level or above.

3

All students are required to take a minimum of one credit.

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

Mathematics BA

Overview

The **Bachelor of Arts in Mathematics**, offered by the Department of Mathematics, provides a solid mathematical foundation and also allows for the most flexibility. This program prepares students for a variety of jobs in business and industry, as well as for graduate study in fields related to mathematics.

Campus Location: Main

Program Code: ST-MATH-BA

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.25 cumulative GPA;
- achieve a minimum 3.50 major GPA;
- successfully complete MATH 3141, MATH 3142 and MATH 4051 instead of MATH 3137 and MATH 3138;
- successfully complete MATH 3098 instead of MATH 3096; and
- achieve a minimum 3.50 GPA in the following courses:
 - MATH 3098
 - MATH 3141
 - MATH 3142
 - MATH 4051
 - Any additional course from the following:
 - MATH 3043
 - MATH 3044
 - MATH 3101
 - Any 4000-level course other than Individual Study.

Accelerated Programs

Accelerated programs provide a pathway for students to pursue both an undergraduate degree and an advanced degree in a shorter amount of time. Below is a list of available accelerated programs for students in the BA in Mathematics.

- BA in Mathematics / MEd in Middle Grades Education with a Concentration in Mathematics
- BA in Mathematics / MEd in Middle Grades Education with a Concentration in Mathematics and Language Arts
- BA in Mathematics / MEd in Secondary Education with a Concentration in Mathematics Education
- BA in Mathematics / MS in Mathematics (p. 1441)

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Learn more about the Bachelor of Arts in Mathematics.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Arts Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
MATH 3096	Introduction to Modern Algebra	3
MATH 4096	Senior Problem Solving	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
 - A minimum of 6 of these credits must be upper-level (courses numbered 2000 and above) CLA credits.
- Successful completion or waiver from the second level of a foreign language.
- Complete a one-credit first-year seminar or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Arts (53-55 s.h.)

At least 7 courses required for the major must be completed at Temple. At least 7 Math courses must be completed at Temple.

Code	Title	Credit Hours
Computer Programming course		
Select one of the following:		3-4
CIS 1051 or CIS 1951	Introduction to Problem Solving and Programming in Python Honors Introduction to Problem Solving and Programming in Python	
CIS 1057	Computer Programming in C	
CIS 1068 or CIS 1968	Program Design and Abstraction Honors Program Design and Abstraction	
MATH 1033 & MATH 1034	Computing in MATLAB and Applications in MATLAB	
Mathematics courses		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
MATH 2101 or MATH 2103	Linear Algebra Linear Algebra with Computer Lab	3-4
MATH 2111	Basic Concepts of Math	3
MATH 3031	Probability Theory I	3

MATH 3096	Introduction to Modern Algebra	3
MATH 3137	Real & Complex Analysis I (F)	3
MATH 3138	Real & Complex Analysis II (S)	3
MATH 4096	Senior Problem Solving	3
Three Mathematics electives at the 3000 level or above ¹		9

Physics courses

Select one of the following: 4

PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	

Select one of the following: 4

PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	

Total Credit Hours 53-55

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

(MATH 2041 or MATH 2941 or MATH 2045), MATH 2061, or MATH 2121 may be used to fulfill up to two of the Mathematics electives at the 3000 level or above.

Suggested Academic Plan

Bachelor of Arts in Mathematics

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
Select one of the following:		3-4
CIS 1051 or CIS 1951	Introduction to Problem Solving and Programming in Python or Honors Introduction to Problem Solving and Programming in Python	
CIS 1057	Computer Programming in C	
CIS 1068 or CIS 1968	Program Design and Abstraction or Honors Program Design and Abstraction	
MATH 1033 & MATH 1034	Computing in MATLAB and Applications in MATLAB	
SCTC 1001	CST First Year Seminar	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Elective		3-2
Credit Hours		15
Spring		
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	

PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Elective		1
Credit Hours		15
Year 2		
Fall		
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
MATH 2101 or MATH 2103	Linear Algebra or Linear Algebra with Computer Lab	3-4
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Elective		2-1
Credit Hours		16
Spring		
MATH 2111	Basic Concepts of Math	3
MATH 3031	Probability Theory I	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Elective		3
Credit Hours		15
Year 3		
Fall		
MATH 3137	Real & Complex Analysis I (F)	3
3000+ Mathematics Elective ¹		3
Foreign Language 1001 - First Level		4
GenEd Breadth Course		3
Elective		3
Credit Hours		16
Spring		
MATH 3096	Introduction to Modern Algebra	3
MATH 3138	Real & Complex Analysis II (S)	3
3000+ Mathematics Elective ¹		3
Foreign Language 1002 - Second Level		4
GenEd Breadth Course		3-4
Credit Hours		16-17
Year 4		
Fall		
3000+ Mathematics Elective ¹		3
Upper-level CLA Course (numbered 2000 and above)		3
Elective		3
Elective		3
Elective		3
Credit Hours		15

Spring		
MATH 4096	Senior Problem Solving	3
Upper-level CLA Course (numbered 2000 and above)		3
Elective		3
Elective		3
Elective		3-2
Credit Hours		15-14
Total Credit Hours		123

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

1

(MATH 2041 or MATH 2941 or MATH 2045), MATH 2061, or MATH 2121 may be used to fulfill up to two of the Mathematics electives at the 3000 level or above.

Mathematics BS

Overview

The **Bachelor of Science in Mathematics**, offered by the Department of Mathematics, provides an in-depth theoretical background focusing on the traditional core areas of mathematics. This program provides a foundation for graduate study or careers in fields using sophisticated quantitative and mathematical analysis. In particular, this program is suitable preparation for graduate study in mathematics.

Campus Location: Main

Program Code: ST-MATH-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.25 overall GPA;
- achieve a minimum 3.50 GPA in the Mathematics courses required for the major; and,
- achieve a minimum 3.50 GPA in the following courses:
 - MATH 3098
 - MATH 3141
 - MATH 3142
 - MATH 4051
 - Any additional course from the following:
 - MATH 3043
 - MATH 3044
 - MATH 3101
 - Any 4000-level course other than Individual Study.

Accelerated Programs

Accelerated programs provide a pathway for students to pursue both an undergraduate degree and an advanced degree in a shorter amount of time. Below is a list of available accelerated programs for students in the BS in Mathematics.

- BS in Mathematics / MEd in Middle Grades Education with a Concentration in Mathematics
- BS in Mathematics / MEd in Middle Grades Education with a Concentration in Mathematics and Science
- BS in Mathematics / MEd in Secondary Education with a Concentration in Mathematics Education
- BS in Mathematics / MS in Mathematics (p. 1442)

Undergraduate Contact Information

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Learn more about the Bachelor of Science in Mathematics.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
MATH 3098	Modern Algebra	3
MATH 4096	Senior Problem Solving	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (64-65 s.h.)

At least 9 courses required for the major must be completed at Temple. At least 8 Math courses must be completed at Temple.

Code	Title	Credit Hours
Computer Programming course		
Select one of the following:		3-4
CIS 1051 or CIS 1951	Introduction to Problem Solving and Programming in Python Honors Introduction to Problem Solving and Programming in Python	
CIS 1057	Computer Programming in C	
CIS 1068 or CIS 1968	Program Design and Abstraction Honors Program Design and Abstraction	
MATH 1033 & MATH 1034	Computing in MATLAB and Applications in MATLAB	
Mathematics courses		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042	Calculus II	4

or MATH 1942	Honors Calculus II	
MATH 2043	Calculus III	4
or MATH 2943	Honors Calculus III	
MATH 2045	Differential Equations with Linear Algebra (F)	4
MATH 2111	Basic Concepts of Math	3
MATH 3031	Probability Theory I	3
MATH 3051	Theoretical Linear Algebra (S)	4
MATH 3098	Modern Algebra (F)	3
MATH 3101	Topics in Modern Algebra (S)	3
MATH 3141	Advanced Calculus I (F)	3
MATH 3142	Advanced Calculus II (S)	3
MATH 4051	Complex Analysis (F)	3
MATH 4096	Senior Problem Solving	3
Three Mathematics electives at the 3000+level or above ¹		9
Physics courses		
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	
Total Credit Hours		64-65

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

Must be approved by Mathematics faculty advisor.

Suggested Academic Plan

Bachelor of Science in Mathematics

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
MATH 1041	Calculus I	4
or MATH 1941	or Honors Calculus I	
Select one of the following:		3-4
CIS 1051	Introduction to Problem Solving and Programming in Python	
or CIS 1951	or Honors Introduction to Problem Solving and Programming in Python	
CIS 1057	Computer Programming in C	
CIS 1068	Program Design and Abstraction	
or CIS 1968	or Honors Program Design and Abstraction	
MATH 1033 & MATH 1034	Computing in MATLAB and Applications in MATLAB	
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	

PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
SCTC 1001	CST First Year Seminar	1
GenEd Breadth Course		4-3
Credit Hours		16
Spring		
MATH 1042	Calculus II	4
or MATH 1942	or Honors Calculus II	
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Breadth Course		3
Credit Hours		15
Year 2		
Fall		
MATH 2043	Calculus III	4
or MATH 2943	or Honors Calculus III	
MATH 2111	Basic Concepts of Math	3
MATH 2045	Differential Equations with Linear Algebra (F)	4
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
GenEd Breadth Course		3
Credit Hours		17
Spring		
MATH 3031	Probability Theory I	3
MATH 3051	Theoretical Linear Algebra (S)	4
IH 0852	Intellectual Heritage II: The Common Good	3
or IH 0952	or Honors Intellectual Heritage II: The Common Good	
GenEd Breadth Course		3
Elective		2
Credit Hours		15
Year 3		
Fall		
MATH 3098	Modern Algebra (F)	3
MATH 3141	Advanced Calculus I (F)	3
GenEd Breadth Course		3
Elective		3
Elective		3
Credit Hours		15
Spring		
MATH 3101	Topics in Modern Algebra (S)	3
MATH 3142	Advanced Calculus II (S)	3
3000+ Mathematics Elective ¹		3
Elective		3
Elective		3
Credit Hours		15

Year 4		
Fall		
MATH 4051	Complex Analysis (F)	3
3000+ Mathematics Elective ¹		3
Elective		3
Elective		3
Elective		3
Credit Hours		15
Spring		
MATH 4096	Senior Problem Solving	3
3000+ Mathematics Elective ¹		3
Elective		3
Elective		3
Elective		3
Credit Hours		15
Total Credit Hours		123

Code	Title	Credit Hours
(F) - Fall only courses		
(S) - Spring only courses		

1

Must be approved by Mathematics faculty advisor.

Mathematics Minor

Overview

Offered by the Department of Mathematics, the **Minor in Mathematics** is intended for students interested in the logical thinking and problem solving skills that are gained in studying mathematics. This minor is ideal for students seeking to apply mathematical methods in other disciplines, particularly in the sciences, engineering, social sciences, computing, or business.

Campus Location: Main

Undergraduate Contact Information

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 215-204-7847
 mathadvising@temple.edu

Minor Requirements

Code	Title	Credit Hours
Three semesters of calculus		
MATH 1041	Calculus I (F)	4
or MATH 1941	Honors Calculus I	
MATH 1042	Calculus II	4

or MATH 1942	Honors Calculus II	
MATH 2043	Calculus III	4
or MATH 2943	Honors Calculus III	
Linear algebra		
MATH 2101	Linear Algebra	3-4
or MATH 2103	Linear Algebra with Computer Lab	
Additional Mathematics courses		
Three Mathematics courses at the 3000 level or above ¹		9-12
Total Credit Hours		24-28

Code	Title	Credit Hours
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(F) - Fall only course

1

One of the following courses may be used to fulfill one of the Mathematics courses at the 3000 level or above: MATH 2111, MATH 2121, MATH 2041, or MATH 2045.

Residency Requirements: At least 4 courses required for the minor must be completed at Temple. At least 4 Mathematics courses must be completed at Temple.

Mathematics with Teaching BS

Overview

The Department of Mathematics prepares students for careers, graduate study and professional programs requiring solid mathematical, quantitative or analytical skills.

The **Bachelor of Science in Mathematics with Teaching** is part of Temple's innovative "TUteach" secondary education teacher-training program. The BS in Mathematics with Teaching provides broad training in mathematics and prepares students for a career in secondary school teaching or an entry level position in a mathematical field. The education courses in this major include supervised teaching in school district classrooms and emphasize inquiry-based approaches to learning. Students in the BS in Mathematics with Teaching degree program become *eligible* for a Pennsylvania teacher certification when they complete all the requirements for the degree that include theoretical and practical courses in education specifically designed for science and mathematics majors. In order to be *recommended* for Pennsylvania teacher certification, students must graduate with:

1. a BS with Teaching degree and
2. meet GPA and testing requirements of the state of Pennsylvania.

Students will be scheduled once each semester to meet with the TUteach advisor to ensure that students have knowledge of academic programming, internships opportunities and testing options that include test preparation. The state of Pennsylvania has specific candidacy requirements. The TUteach advisor will also help the students complete and submit the candidacy documents. All students joining the program in their freshman year must complete the PAPA examination or acquire the PAPA waiver within their first 72 credits. Transfer students, from within Temple and those from other institutions, will build a tailored program with the academic and testing benchmarks structured for efficient degree completion with the TUteach advisor. Students are encouraged to complete the appropriate PRAXIS II examination prior to student teaching. Students are encouraged to take internship courses to expand their teaching portfolio or select elective courses that will extend their knowledge of science and teaching practice.

Campus Location: Main

Program Code: ST-MATC-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.25 cumulative GPA;
- achieve a minimum 3.50 major GPA;
- achieve a minimum 3.50 in the Mathematics courses required for the major;
- successfully complete MATH 3141, MATH 3142 and MATH 4051 instead of MATH 3137 and MATH 3138;
- successfully complete MATH 3098 instead of MATH 3096;
- achieve a minimum 3.50 GPA in the following courses:

- MATH 3098
- MATH 3141
- MATH 3142
- MATH 4051
- Any additional course from the following:
 - MATH 3043
 - MATH 3044
 - MATH 3101; and
- achieve a minimum 3.90 GPA in the following courses:
 - MAES 2189 or SCTC 4385
 - MAES 4189 or SCTC 4485
 - EDUC 4388
 - EDUC 4802.

Undergraduate Contact Information

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Learn more about the Bachelor of Science in Mathematics with Teaching.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (124 total s.h.)
 - Students must complete all University requirements including those listed below.
 - All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
MATH 3096	Introduction to Modern Algebra	
MATH 3098	Modern Algebra	
MATH 4096	Senior Problem Solving	
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete TTeach majors receive a waiver for 1 Human Behavior (GB), 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (90-92 s.h.)¹

At least 9 courses required for the major must be completed at Temple. At least 7 Math courses and 3 Education courses must be completed at Temple. Though not required, students are strongly encouraged to increase training and field work experience by enrolling in SCTC 1385, SCTC 2385, or SCTC 2389. Students will also benefit from directed laboratory projects offered through SCTC 3185. These courses are offered every semester.

Code	Title	Credit Hours
Computer Programming		
Select one of the following:		3-4
CIS 1051 or CIS 1951	Introduction to Problem Solving and Programming in Python Honors Introduction to Problem Solving and Programming in Python	
CIS 1057	Computer Programming in C	
CIS 1068 or CIS 1968	Program Design and Abstraction Honors Program Design and Abstraction	
MATH 1033 & MATH 1034	Computing in MATLAB and Applications in MATLAB	
Mathematics		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2021	Functions and Modeling (S)	3
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
MATH 2061	Euclidean Geometry (S)	3
MATH 2101 or MATH 2103	Linear Algebra Linear Algebra with Computer Lab	3-4
MATH 2111	Basic Concepts of Math	3
MATH 3003	Theory of Numbers	3
MATH 3031	Probability Theory I	3
MATH 3096	Introduction to Modern Algebra	3
MATH 3137	Real & Complex Analysis I (F)	3
MATH 3138	Real & Complex Analysis II (S)	3
MATH 4096	Senior Problem Solving	3
One Mathematics elective at the 3000 level or above ²		3
Physics		

Select one of the following: 4

PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	

Select one of the following: 4

PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	

College of Science & Technology

SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
SCTC 1389	Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners	2
SCTC 3001	History of Science	3
SCTC 3312	Coding STEM Lessons ³	1

Education

EDUC 2179	Knowing and Learning in Mathematics and Science	3
EDUC 4388	TUteach Apprentice Teaching	4
EDUC 4802	TUteach Apprentice Teaching Seminar	3
MGSE 2189	Classroom Interactions (S)	3
or SCTC 3485	Science and Mathematics in the Classroom	
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3
MGSE 4189	Project-Based Instruction (F)	3
or SCTC 4485	Integrating STEM Practice in Diverse Teaching Environments	
SPED 2231	Introduction to Special Education	3

Research Methods

BIOL/CHEM/EES/PHYS 3091	Research Methods	3
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Total Credit Hours 90-92

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

The certification requirements need to meet Pennsylvania Department of Education standards and are subject to change. All students are strongly recommended to check with the TUteach Advisor in the College of Science and Technology to affirm the requirements that pertain to their specific major. In addition, students should check the *Undergraduate Bulletin* web site for the most current information about these programs, or the TUteach web site. It is also recommended that all students meet with an advisor before enrolling in classes specific to these majors and leading to certification as a teacher. This is to assure that a candidate's intended program of study will be compatible with the new requirements.

2

MATH 2041, MATH 2941, MATH 2045, or MATH 2121 may be used to fulfill the Mathematics elective at the 3000 level or above.

3

All students are required to take a minimum of one credit.

Suggested Academic Plan

Bachelor of Science in Mathematics with Teaching

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4

Select one of the following:		3-4
CIS 1051 or CIS 1951	Introduction to Problem Solving and Programming in Python or Honors Introduction to Problem Solving and Programming in Python	
CIS 1057	Computer Programming in C	
CIS 1068 or CIS 1968	Program Design and Abstraction or Honors Program Design and Abstraction	
MATH 1033 & MATH 1034	Computing in MATLAB and Applications in MATLAB	
SCTC 1001	CST First Year Seminar	1
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
SCTC 1389	Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners	2
GenEd Breadth Course		3
Elective		1-0
Credit Hours		17
Spring		
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
EDUC 2179	Knowing and Learning in Mathematics and Science	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		15
Year 2		
Fall		
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
MATH 2101 or MATH 2103	Linear Algebra or Linear Algebra with Computer Lab	3-4
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	
SPED 2231	Introduction to Special Education	3
Elective		3-2
Credit Hours		17
Spring		
MATH 2021	Functions and Modeling (S)	3
MATH 2061	Euclidean Geometry (S)	3
MATH 2111	Basic Concepts of Math	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
MATH 3003	Theory of Numbers	3
MATH 3137	Real & Complex Analysis I (F)	3

SCTC 3001	History of Science	3
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Elective		2
Credit Hours		17
Spring		
MATH 3096	Introduction to Modern Algebra	3
MATH 3138	Real & Complex Analysis II (S)	3
Select one of the following:		3
BIOL 3091	Research Methods (S)	
CHEM 3091	Research Methods (S)	
EES 3091	Research Methods (S)	
PHYS 3091	Research Methods (S)	
Select one of the following:		3
MGSE 2189	Classroom Interactions (S)	
SCTC 3485	Science and Mathematics in the Classroom	
GenEd Breadth Course		3
Elective		1
Credit Hours		16
Year 4		
Fall		
MATH 3031	Probability Theory I	3
MATH 4096	Senior Problem Solving	3
3000+ Math Elective ¹		3
SCTC 3312	Coding STEM Lessons ²	1
Select one of the following:		3
MGSE 4189	Project-Based Instruction (F)	
SCTC 4485	Integrating STEM Practice in Diverse Teaching Environments	
GenEd Breadth Course		3-4
Elective		1-0
Credit Hours		17
Spring		
EDUC 4388	TUteach Apprentice Teaching	4
EDUC 4802	TUteach Apprentice Teaching Seminar	3
Elective		3
Credit Hours		10
Total Credit Hours		124

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

MATH 2041, MATH 2941, MATH 2045, or MATH 2121 may be used to fulfill the Mathematics elective at the 3000 level or above.

2

All students are required to take a minimum of one credit.

Mobile Application Development Certificate

Overview

Mobile devices are the computers that we carry with us at all times. Our mobile devices are our source for news and entertainment, our method of getting around, the way we record experiences, and is our conduit to the rest of the world. However, we use this computer in different ways than we use any other computer. Our interactions with it are frequent, frequently interrupted, and becoming ever more necessary. Offered by the Department of Computer and Information Sciences, the **Certificate in Mobile Application Development** will introduce students to advanced concepts in application development for mobile devices. Students will learn to leverage the various novel components found in modern mobile devices such as sensors, wireless communication, and global navigation systems, to build applications that are aware of and act based on their environment. Students will learn to work in teams to design and implement complex applications and learn how to address challenges in hardware and user interfaces by incorporating software design and user-interaction design principles.

Programmers proficient in this area are in increasing demand.

Campus Location: Main

Program Code: ST-MAPD-CERT

Undergraduate Contact Information

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Learn more about the undergraduate certificate in Mobile Application Development.

Certificate Requirements

Prerequisite Courses

Students desiring a Certificate in Mobile Application Development must have already completed the following courses:

Code	Title	Credit Hours
CIS 1068 or CIS 1968	Program Design and Abstraction Honors Program Design and Abstraction	4
CIS 1166 or CIS 1966	Mathematical Concepts in Computing I Honors Mathematical Concepts in Computing I	4
CIS 2168	Data Structures	4
Total Credit Hours		12

Required Courses

Students desiring a Certificate in Mobile Application Development must complete the following courses:

Code	Title	Credit Hours
CIS 3515	Introduction to Mobile Application Development	4
CIS 4515	Advanced Mobile Application Development	4
Select one of the following:		3-4
CIS 2109	Database Management Systems	
CIS 3374	Quality Assurance & Testing	
CIS 3603	User Experience Design	

Residency Requirements: At least 2 courses required for the certificate must be completed at Temple.

Natural Sciences BA with Biology Concentration

Overview

The Natural Sciences program provides students more breadth than traditional science programs.

Natural Sciences students **must select one of the following concentrations:**

- Biology
- Chemistry
- Earth and Environmental Sciences
- Physics

Many exciting areas of scientific inquiry, such as the neurosciences, environmental sciences, and biophysical sciences, require general science backgrounds that encompass multiple science disciplines. The **Bachelor of Arts in Natural Sciences with a concentration in Biology** helps students to explore both domestic and international culture through the foreign language and upper-level liberal arts course requirements.

Students planning graduate study or technical careers in one of these interdisciplinary areas, as well as students preparing for careers in health sciences, legal professions, science education, science-related business, or social service might be well served by the BA in Natural Sciences. This program of study can prepare students for graduate study in a traditional science discipline, and many Natural Sciences graduates have found employment in technical fields.

Students in this program can apply to our Professional Science Master's (PSM) programs in Bioinnovation, Biotechnology and Scientific Writing. Students interested in these PSM programs can apply for admission to the +1 BA/PSM accelerated options for completion of these degrees. PSM programs provide specific curricula and training for workforce entry or re-entry.

Campus Location: Main

Program Code: ST-NATS-BA

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.33 GPA in major or
- achieve a minimum 3.0 cumulative GPA and successfully complete six credits of internship coursework (SCTC 1385, SCTC 2385, or SCTC 3185) with approval by the program director.

Accelerated Programs

Accelerated programs provide a pathway for students to pursue both an undergraduate degree and an advanced degree in a shorter amount of time. Below is a list of available accelerated programs for students in the BA in Natural Sciences.

- BA or BS in Natural Sciences / PSM in Scientific Writing
- BA or BS in Natural Sciences / PSM in Bioinnovation
- BA or BS in Natural Sciences / PSM in Biotechnology
- BA in Natural Sciences / MEd in Middle Grades Education with a Concentration in Science
- BA in Natural Sciences / MEd in Middle Grades Education with a Concentration in Science and Language Arts

Undergraduate Contact Information

Susan Varnum, Program Director and Professor of Chemistry
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Learn more about the Bachelor of Arts in Natural Sciences.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Arts Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
SCTC 2396	Writing for Science and Technology	3
SCTC 4396	Paradigms of Scientific Knowledge: Knowledge Discovery from Scientific Data	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
 - A minimum of 6 of these credits must be upper-level (courses numbered 2000 and above) CLA credits.
- Successful completion or waiver from the second level of a foreign language.
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Arts (63-72 s.h.)

At least 7 courses required for the major must be completed at Temple. At least 2 courses in the chosen concentration must be completed at Temple.

Code	Title	Credit Hours
Biology		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology Honors Introduction to Organismal Biology	4
Select one of the following:		4
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology Honors Introduction to Cellular and Molecular Biology	
Chemistry		
Select one of the following:		4
CHEM 1021 & CHEM 1023	Introduction to Chemistry I and Introduction to Chemistry Laboratory I	
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
CHEM 1022 & CHEM 1024	Introduction to Chemistry II and Introduction to Chemistry Laboratory II	
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	

College of Science & Technology

SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
Select one of the following: ¹		4
SCTC 1501	STEM Challenge: The World Around Us	
SCTC 1502	STEM Challenge: The World Within	
SCTC 2396	Writing for Science and Technology	3
SCTC 3001	History of Science	3
SCTC 4396	Paradigms of Scientific Knowledge: Knowledge Discovery from Scientific Data	3

Computer Programming/Physics

Select one of the following: ²		3-4
CIS 1051	Introduction to Problem Solving and Programming in Python	
or CIS 1951	Honors Introduction to Problem Solving and Programming in Python	
or CIS 1057	Computer Programming in C	
CIS 1052	Introduction to Web Technology and Programming	
CIS 1053	Programming in Matlab	
PHYS 1004	Introduction to Astronomy (F)	
SCTC 3312	Coding STEM Lessons ³	

Earth & Environmental Science

EES 2001	Physical Geology	4
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Mathematics

Select one of the following:		4-8
MATH 1031	Differential and Integral Calculus	
MATH 1041 & MATH 1044	Calculus I and Introduction to Probability and Statistics for the Life Sciences ⁴	
MATH 1041 & MATH 1042	Calculus I and Calculus II ⁴	
MATH 1941 & MATH 1942	Honors Calculus I and Honors Calculus II ⁴	

Physics

Select one of the following:		4
PHYS 1021	Introduction to General Physics I	
PHYS 1061	Elementary Classical Physics I	
or PHYS 1961	Honors Elementary Classical Physics I	
PHYS 2021	General Physics I	
or PHYS 2921	Honors General Physics I	
Select one of the following:		4
PHYS 1022	Introduction to General Physics II	
PHYS 1062	Elementary Classical Physics II	
or PHYS 1962	Honors Elementary Classical Physics II	
PHYS 2022	General Physics II	
or PHYS 2922	Honors General Physics II	

Biology Electives

Four Upper-level (numbered 2200 and above) Biology Electives ⁵	12-16
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Total Credit Hours **63-72**

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

It is recommended that SCTC 1501 or SCTC 1502 be completed before SCTC 4396.

2

It is recommended that students take CIS 1051 (or CIS 1951) as Python is the language of choice for most science programming needs.

3

SCTC 3312 is a variable credit course and must be taken for 3 credits in order to meet the requirement for this program. Since the default credits are set to 1, students must contact CSTbce@temple.edu to have an advisor change the credits to 3.

4

These courses are not required if MATH 1031 is completed.

5

The four electives (numbered 2200 and above) must all be taken from within the Biology department and must satisfy elective criteria of the department. **Note the Exception:** Natural Science majors in the Biology concentration are permitted to take BIOL 2001 Clinical Microbiology as an elective. In the circumstance where a laboratory course is the complement of a lecture course, both must be completed to fulfill the requirement for ONE science elective.

Suggested Academic Plan

Bachelor of Arts in Natural Sciences with Concentration in Biology

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology or Honors Introduction to Organismal Biology	4
Select one of the following:		4
MATH 1031	Differential and Integral Calculus	
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	
SCTC 1001	CST First Year Seminar	1
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
Select one of the following: ¹		4
SCTC 1501	STEM Challenge: The World Around Us	
SCTC 1502	STEM Challenge: The World Within	
Credit Hours		16
Spring		
Select one of the following:		4
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes or Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology or Honors Introduction to Cellular and Molecular Biology	
Select one of the following: ²		0-4
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Elective		3
Elective		4-0
Credit Hours		15
Year 2		
Fall		
Select one of the following:		4
CHEM 1021 & CHEM 1023	Introduction to Chemistry I and Introduction to Chemistry Laboratory I	

CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I	
EES 2001	Physical Geology	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Credit Hours		14
Spring		
Select one of the following:		4
CHEM 1022 & CHEM 1024	Introduction to Chemistry II and Introduction to Chemistry Laboratory II	
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II	
Biology Upper-level Elective (numbered 2200 and above) ³		3-4
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Elective		3-2
Credit Hours		16
Year 3		
Fall		
Select one of the following:		4
PHYS 1021	Introduction to General Physics I	
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	
PHYS 2021 or PHYS 2921	General Physics I or Honors General Physics I	
SCTC 3001	History of Science	3
Biology Upper-level Elective (numbered 2200 and above) ³		3-4
Foreign Language 1001 - First Level		4
Credit Hours		14-15
Spring		
Select one of the following:		4
PHYS 1022	Introduction to General Physics II	
PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	
PHYS 2022 or PHYS 2922	General Physics II or Honors General Physics II	
SCTC 2396	Writing for Science and Technology	3
Foreign Language 1002 - Second Level		4
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		17
Year 4		
Fall		
SCTC 4396	Paradigms of Scientific Knowledge: Knowledge Discovery from Scientific Data	3
Select one of the following: ⁴		3-4
CIS 1051 or CIS 1951 or CIS 1057	Introduction to Problem Solving and Programming in Python or Honors Introduction to Problem Solving and Programming in Python or Computer Programming in C	

CIS 1052	Introduction to Web Technology and Programming	
CIS 1053	Programming in Matlab	
PHYS 1004	Introduction to Astronomy (F)	
SCTC 3312	Coding STEM Lessons ⁵	
Biology Upper-level Elective (numbered 2200 and above) ³		3-4
GenEd Breadth Course		3-4
Elective		3-1
Credit Hours		15-16
Spring		
Biology Upper-level Elective (numbered 2200 and above) ³		3-4
Upper-level CLA Course (numbered 2000 and above)		3
Upper-level CLA Course (numbered 2000 and above)		3
Elective		3
Elective		4-1
Credit Hours		16-14
Total Credit Hours		123

1

It is recommended that SCTC 1501 or SCTC 1502 be completed before SCTC 4396.

2

These courses are not required if MATH 1031 is completed.

3

The four electives (numbered 2200 and above) must all be taken from within the Biology department and must satisfy elective criteria of the department. **Note the Exception:** Natural Science majors in the Biology concentration are permitted to take BIOL 2001 Clinical Microbiology as an elective. In the circumstance where a laboratory course is the complement of a lecture course, both must be completed to fulfill the requirement for ONE science elective.

4

It is recommended that students take CIS 1051 (or CIS 1951) as Python is the language of choice for most science programming needs.

5

SCTC 3312 is a variable credit course and must be taken for 3 credits in order to meet the requirement for this program. Since the default credits are set to 1, students must contact CSTbce@temple.edu to have an advisor change the credits to 3.

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

Natural Sciences BA with Chemistry Concentration

Overview

The Natural Sciences program provides students more breadth than traditional science programs.

Natural Sciences students **must select one of the following concentrations:**

- Biology
- Chemistry
- Earth and Environmental Sciences
- Physics

Many exciting areas of scientific inquiry, such as the neurosciences, environmental sciences, and biophysical sciences, require general science backgrounds that encompass multiple science disciplines. The **Bachelor of Arts in Natural Sciences with a concentration in Chemistry** helps students to explore both domestic and international culture through the foreign language and upper-level liberal arts course requirements.

Students planning graduate study or technical careers in one of these interdisciplinary areas, as well as students preparing for careers in health sciences, legal professions, science education, science-related business, or social service might be well served by the BA in Natural Sciences.

This program of study can prepare students for graduate study in a traditional science discipline, and many Natural Sciences graduates have found employment in technical fields.

Students in this program can apply to our Professional Science Master's (PSM) programs in Bioinnovation, Biotechnology and Scientific Writing. Students interested in these PSM programs can apply for admission to the +1 BA/PSM accelerated options for completion of these degrees. PSM programs provide specific curricula and training for workforce entry or re-entry.

Campus Location: Main

Program Code: ST-NATS-BA

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.33 GPA in major or
- achieve a minimum 3.0 cumulative GPA and successfully complete six credits of internship coursework (SCTC 1385, SCTC 2385, or SCTC 3185) with approval by the program director.

Accelerated Programs

Accelerated programs provide a pathway for students to pursue both an undergraduate degree and an advanced degree in a shorter amount of time. Below is a list of available accelerated programs for students in the BA in Natural Sciences.

- BA or BS in Natural Sciences / PSM in Scientific Writing
- BA or BS in Natural Sciences / PSM in Bioinnovation
- BA or BS in Natural Sciences / PSM in Biotechnology
- BA in Natural Sciences / MEd in Middle Grades Education with a Concentration in Science
- BA in Natural Sciences / MEd in Middle Grades Education with a Concentration in Science and Language Arts

Undergraduate Contact Information

Susan Varnum, Program Director and Professor of Chemistry
 Senior Associate Dean for Undergraduate Affairs and Science Education
 College of Science and Technology
 Gladfelter Hall, Room 629
 215-204-4073
 susan.varnum@temple.edu

Learn more about the Bachelor of Arts in Natural Sciences.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Arts Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
SCTC 2396	Writing for Science and Technology	3
SCTC 4396	Paradigms of Scientific Knowledge: Knowledge Discovery from Scientific Data	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).

- A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
- A minimum of 6 of these credits must be upper-level (courses numbered 2000 and above) CLA credits.
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Arts (63-72 s.h.)

At least 7 courses required for the major must be completed at Temple. At least 2 courses in the chosen concentration must be completed at Temple.

Code	Title	Credit Hours
Biology		
Select one of the following:		4
BIOL 1011	General Biology I (F)	
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology Honors Introduction to Organismal Biology	
Select one of the following:		4
BIOL 1012	General Biology II (S)	
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology Honors Introduction to Cellular and Molecular Biology	
Chemistry		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
College of Science & Technology		
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
Select one of the following: ¹		4
SCTC 1501	STEM Challenge: The World Around Us	
SCTC 1502	STEM Challenge: The World Within	
SCTC 2396	Writing for Science and Technology	3
SCTC 3001	History of Science	3
SCTC 4396	Paradigms of Scientific Knowledge: Knowledge Discovery from Scientific Data	3
Computer Programming/Physics		
Select one of the following: ²		3-4
CIS 1051 or CIS 1951 or CIS 1057	Introduction to Problem Solving and Programming in Python Honors Introduction to Problem Solving and Programming in Python Computer Programming in C	
CIS 1052	Introduction to Web Technology and Programming	
CIS 1053	Programming in Matlab	
PHYS 1004	Introduction to Astronomy (F)	
SCTC 3312	Coding STEM Lessons ³	
Earth & Environmental Science		
EES 2001	Physical Geology	4
Mathematics		
Select one of the following:		4-8
MATH 1031	Differential and Integral Calculus	

MATH 1041 & MATH 1044	Calculus I and Introduction to Probability and Statistics for the Life Sciences ⁴
MATH 1041 & MATH 1042	Calculus I and Calculus II ⁴
MATH 1941 & MATH 1942	Honors Calculus I and Honors Calculus II ⁴

Physics

Select one of the following: 4

PHYS 1021	Introduction to General Physics I
PHYS 1061 or PHYS 1961	Elementary Classical Physics I Honors Elementary Classical Physics I
PHYS 2021 or PHYS 2921	General Physics I Honors General Physics I

Select one of the following: 4

PHYS 1022	Introduction to General Physics II
PHYS 1062 or PHYS 1962	Elementary Classical Physics II Honors Elementary Classical Physics II
PHYS 2022 or PHYS 2922	General Physics II Honors General Physics II

Chemistry Electives

Four Upper-Level (2000+) Chemistry Electives ⁵ 12-16

Total Credit Hours 63-72

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

It is recommended that SCTC 1501 or SCTC 1502 be completed before SCTC 4396.

2

It is recommended that students take CIS 1051 (or CIS 1951) as Python is the language of choice for most science programming needs.

3

SCTC 3312 is a variable credit course and must be taken for 3 credits in order to meet the requirement for this program. Since the default credits are set to 1, students must contact CSTbce@temple.edu to have an advisor change the credits to 3.

4

These courses are not required if MATH 1031 is completed.

5

The four electives must all be taken from within the Chemistry department and must satisfy elective criteria of the department. In the circumstance where a laboratory course is the complement of a lecture course, both must be completed to fulfill the requirement for ONE science elective. Note: If CHEM 3103 is selected as an elective, it is recommended that students register for CHEM 3105 as it would be considered a complementary lab to CHEM 3103.

Suggested Academic Plan

Bachelor of Arts in Natural Sciences with Concentration in Chemistry

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1

Fall **Credit Hours**

Select one of the following: 4

CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)

Select one of the following:		4
MATH 1031	Differential and Integral Calculus	
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	
SCTC 1001	CST First Year Seminar	1
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
Select one of the following: ¹		4
SCTC 1501	STEM Challenge: The World Around Us	
SCTC 1502	STEM Challenge: The World Within	
Credit Hours		16

Spring

Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
Select one of the following: ²		0-4
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Elective		3
Elective		4-0
Credit Hours		15

Year 2**Fall**

Select one of the following:		4
BIOL 1011	General Biology I (F)	
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology or Honors Introduction to Organismal Biology	
EES 2001	Physical Geology	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Credit Hours		14

Spring

Select one of the following:		4
BIOL 1012	General Biology II (S)	
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes or Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology or Honors Introduction to Cellular and Molecular Biology	
Chemistry Elective (2000+) ³		3-4
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Elective		3-2
Credit Hours		16

Year 3**Fall**

Select one of the following:		4
PHYS 1021	Introduction to General Physics I	

PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	
PHYS 2021 or PHYS 2921	General Physics I or Honors General Physics I	
SCTC 3001	History of Science	3
Chemistry Elective (2000+)	³	3-4
Foreign Language 1001 - First Level		4
Elective		1-0
Credit Hours		15
Spring		
Select one of the following:		4
PHYS 1022	Introduction to General Physics II	
PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	
PHYS 2022 or PHYS 2922	General Physics II or Honors General Physics II	
SCTC 2396	Writing for Science and Technology	3
Foreign Language 1002 - Second Level		4
GenEd Breadth Course		3
Elective		3
Credit Hours		17
Year 4		
Fall		
SCTC 4396	Paradigms of Scientific Knowledge: Knowledge Discovery from Scientific Data	3
Select one of the following:		⁴ 3-4
CIS 1051 or CIS 1951 or CIS 1057	Introduction to Problem Solving and Programming in Python or Honors Introduction to Problem Solving and Programming in Python or Computer Programming in C	
CIS 1052	Introduction to Web Technology and Programming	
CIS 1053	Programming in Matlab	
PHYS 1004	Introduction to Astronomy (F)	
SCTC 3312	Coding STEM Lessons ⁵	
Chemistry Elective (2000+)	³	3-4
GenEd Breadth Course		3
Elective		3-1
Credit Hours		15
Spring		
Chemistry Elective (2000+)	³	3-4
Upper-level CLA Course (numbered 2000 and above)		3
Upper-level CLA Course (numbered 2000 and above)		3
GenEd Breadth Course		3-4
Elective		3-1
Credit Hours		15
Total Credit Hours		123

1

It is recommended that SCTC 1501 or SCTC 1502 be completed before SCTC 4396.

2

These courses are not required if MATH 1031 is completed.

3

The four electives must all be taken from within the Chemistry department and must satisfy elective criteria of the department. In the circumstance where a laboratory course is the complement of a lecture course, both must be completed to fulfill the requirement for ONE science elective. Note: If CHEM 3103 is selected as an elective, it is recommended that students register for CHEM 3105 as it would be considered a complementary lab to CHEM 3103.

4

It is recommended that students take CIS 1051 (or CIS 1951) as Python is the language of choice for most science programming needs.

5

SCTC 3312 is a variable credit course and must be taken for 3 credits in order to meet the requirement for this program. Since the default credits are set to 1, students must contact CSTbce@temple.edu to have an advisor change the credits to 3.

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

Natural Sciences BA with Earth and Environmental Sciences Concentration

Overview

The Natural Sciences program provides students more breadth than traditional science programs.

Natural Sciences students **must select one of the following concentrations:**

- Biology
- Chemistry
- Earth and Environmental Sciences
- Physics

Many exciting areas of scientific inquiry, such as the neurosciences, environmental sciences, and biophysical sciences, require general science backgrounds that encompass multiple science disciplines. The **Bachelor of Arts in Natural Sciences with a concentration in Earth and Environmental Sciences** helps students to explore both domestic and international culture through the foreign language and upper-level liberal arts course requirements.

Students planning graduate study or technical careers in one of these interdisciplinary areas, as well as students preparing for careers in health sciences, legal professions, science education, science-related business, or social service might be well served by the BA in Natural Sciences. This program of study can prepare students for graduate study in a traditional science discipline, and many Natural Sciences graduates have found employment in technical fields.

Students in this program can apply to our Professional Science Master's (PSM) programs in Bioinnovation, Biotechnology and Scientific Writing. Students interested in these PSM programs can apply for admission to the +1 BA/PSM accelerated options for completion of these degrees. PSM programs provide specific curricula and training for workforce entry or re-entry.

Campus Location: Main

Program Code: ST-NATS-BA

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.33 GPA in major or
- achieve a minimum 3.0 cumulative GPA and successfully complete six credits of internship coursework (SCTC 1385, SCTC 2385, or SCTC 3185) with approval by the program director.

Accelerated Programs

Accelerated programs provide a pathway for students to pursue both an undergraduate degree and an advanced degree in a shorter amount of time. Below is a list of available accelerated programs for students in the BA in Natural Sciences.

- BA or BS in Natural Sciences / PSM in Scientific Writing
- BA or BS in Natural Sciences / PSM in Bioinnovation
- BA or BS in Natural Sciences / PSM in Biotechnology
- BA in Natural Sciences / MEd in Middle Grades Education with a Concentration in Science
- BA in Natural Sciences / MEd in Middle Grades Education with a Concentration in Science and Language Arts

Undergraduate Contact Information

Susan Varnum, Program Director and Professor of Chemistry
 Senior Associate Dean for Undergraduate Affairs and Science Education
 College of Science and Technology
 Gladfelter Hall, Room 629
 215-204-4073
 susan.varnum@temple.edu

Learn more about the Bachelor of Arts in Natural Sciences.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Arts Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
SCTC 2396	Writing for Science and Technology	3
SCTC 4396	Paradigms of Scientific Knowledge: Knowledge Discovery from Scientific Data	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
 - A minimum of 6 of these credits must be upper-level (courses numbered 2000 and above) CLA credits.
- Successful completion or waiver from the second level of a foreign language.
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Arts (63-72 s.h.)

At least 7 courses required for the major must be completed at Temple. At least 2 courses in the chosen concentration must be completed at Temple.

Code	Title	Credit Hours
Biology		
Select one of the following:		4
BIOL 1011	General Biology I (F)	
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology Honors Introduction to Organismal Biology	
Select one of the following:		4
BIOL 1012	General Biology II (S)	
BIOL 1112	Introduction to Biomolecules, Cells and Genomes	

or BIOL 1912	Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112	Introduction to Cellular and Molecular Biology	
or BIOL 2912	Honors Introduction to Cellular and Molecular Biology	
Chemistry		
Select one of the following:		4
CHEM 1021 & CHEM 1023	Introduction to Chemistry I and Introduction to Chemistry Laboratory I	
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
CHEM 1022 & CHEM 1024	Introduction to Chemistry II and Introduction to Chemistry Laboratory II	
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
College of Science & Technology		
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
Select one of the following: ¹		4
SCTC 1501	STEM Challenge: The World Around Us	
SCTC 1502	STEM Challenge: The World Within	
SCTC 2396	Writing for Science and Technology	3
SCTC 3001	History of Science	3
SCTC 4396	Paradigms of Scientific Knowledge: Knowledge Discovery from Scientific Data	3
Computer Programming/Physics		
Select one of the following: ²		3-4
CIS 1051 or CIS 1951 or CIS 1057	Introduction to Problem Solving and Programming in Python Honors Introduction to Problem Solving and Programming in Python Computer Programming in C	
CIS 1052	Introduction to Web Technology and Programming	
CIS 1053	Programming in Matlab	
PHYS 1004	Introduction to Astronomy (F)	
SCTC 3312	Coding STEM Lessons ³	
Earth & Environmental Science		
EES 2001	Physical Geology	4
Mathematics		
Select one of the following:		4-8
MATH 1031	Differential and Integral Calculus	
MATH 1041 & MATH 1044	Calculus I and Introduction to Probability and Statistics for the Life Sciences ⁴	
MATH 1041 & MATH 1042	Calculus I and Calculus II ⁴	
MATH 1941 & MATH 1942	Honors Calculus I and Honors Calculus II ⁴	
Physics		
Select one of the following:		4
PHYS 1021	Introduction to General Physics I	
PHYS 1061 or PHYS 1961	Elementary Classical Physics I Honors Elementary Classical Physics I	
PHYS 2021 or PHYS 2921	General Physics I Honors General Physics I	
Select one of the following:		4

PHYS 1022	Introduction to General Physics II
PHYS 1062 or PHYS 1962	Elementary Classical Physics II Honors Elementary Classical Physics II
PHYS 2022 or PHYS 2922	General Physics II Honors General Physics II

Earth and Environmental Science Electives

Four Upper-Level (2000+) EES Electives ⁵ 12-16

Total Credit Hours **63-72**

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

It is recommended that SCTC 1501 or SCTC 1502 be completed before SCTC 4396.

2

It is recommended that students take CIS 1051 (or CIS 1951) as Python is the language of choice for most science programming needs.

3

SCTC 3312 is a variable credit course and must be taken for 3 credits in order to meet the requirement for this program. Since the default credits are set to 1, students must contact CSTbce@temple.edu to have an advisor change the credits to 3.

4

These courses are not required if MATH 1031 is completed.

5

The four electives (2000+) must all be taken from within the EES department and must satisfy elective criteria of the department. In the circumstance where a laboratory course is the complement of a lecture course, both must be completed to fulfill the requirement for ONE science elective.

Suggested Academic Plan

Bachelor of Arts in Natural Sciences with Concentration in Earth and Environmental Sciences

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
Select one of the following:		4
CHEM 1021 & CHEM 1023	Introduction to Chemistry I and Introduction to Chemistry Laboratory I	
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
MATH 1031	Differential and Integral Calculus	
MATH 1041	Calculus I	
MATH 1941	Honors Calculus I	
SCTC 1001	CST First Year Seminar	1
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
Select one of the following: ¹		4
SCTC 1501	STEM Challenge: The World Around Us	
SCTC 1502	STEM Challenge: The World Within	
Credit Hours		16
Spring		
Select one of the following:		4

CHEM 1022 & CHEM 1024	Introduction to Chemistry II and Introduction to Chemistry Laboratory II	
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
Select one of the following: ²		0-4
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
MATH 1042	Calculus II	
MATH 1942	Honors Calculus II	
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Elective		3
Elective		4-0
Credit Hours		15
Year 2		
Fall		
Select one of the following:		4
BIOL 1011	General Biology I (F)	
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology or Honors Introduction to Organismal Biology	
EES 2001	Physical Geology	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Credit Hours		14
Spring		
Select one of the following:		4
BIOL 1012	General Biology II (S)	
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes or Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology or Honors Introduction to Cellular and Molecular Biology	
EES Elective (2000+) ³		3-4
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Elective		3-2
Credit Hours		16
Year 3		
Fall		
Select one of the following:		4
PHYS 1021	Introduction to General Physics I	
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	
PHYS 2021 or PHYS 2921	General Physics I or Honors General Physics I	
SCTC 3001	History of Science	3
EES Elective (2000+) ³		3-4
Foreign Language 1001 - First Level		4
Elective		2-0
Credit Hours		16-15

Spring

Select one of the following:		4
PHYS 1022	Introduction to General Physics II	
PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	
PHYS 2022 or PHYS 2922	General Physics II or Honors General Physics II	
SCTC 2396	Writing for Science and Technology	3
Foreign Language 1002 - Second Level		4
GenEd Breadth Course		3
Elective		2

Credit Hours**16****Year 4****Fall**

SCTC 4396	Paradigms of Scientific Knowledge: Knowledge Discovery from Scientific Data	3
Select one of the following: ⁴		3-4
CIS 1051 or CIS 1951 or CIS 1057	Introduction to Problem Solving and Programming in Python or Honors Introduction to Problem Solving and Programming in Python or Computer Programming in C	
CIS 1052	Introduction to Web Technology and Programming	
CIS 1053	Programming in Matlab	
PHYS 1004	Introduction to Astronomy (F)	
SCTC 3312	Coding STEM Lessons ⁵	
EES Elective (2000+) ³		3-4
GenEd Breadth Course		3-4
Elective		3-2

Credit Hours**15-17****Spring**

EES Elective (2000+) ³		3-4
Upper-level CLA Course (numbered 2000 and above)		3
Upper-level CLA Course (numbered 2000 and above)		3
GenEd Breadth Course		3
Elective		3-1

Credit Hours**15-14****Total Credit Hours****123**

1

It is recommended that SCTC 1501 or SCTC 1502 be completed before SCTC 4396.

2

These courses are not required if MATH 1031 is completed.

3

The four electives (2000+) must all be taken from within the EES department and must satisfy elective criteria of the department. In the circumstance where a laboratory course is the complement of a lecture course, both must be completed to fulfill the requirement for ONE science elective.

4

It is recommended that students take CIS 1051 (or CIS 1951) as Python is the language of choice for most science programming needs.

5

SCTC 3312 is a variable credit course and must be taken for 3 credits in order to meet the requirement for this program. Since the default credits are set to 1, students must contact CSTbce@temple.edu to have an advisor change the credits to 3.

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

Natural Sciences BA with Physics Concentration

Overview

The Natural Sciences program provides students more breadth than traditional science programs.

Natural Sciences students **must select one of the following concentrations**:

- Biology
- Chemistry
- Earth and Environmental Sciences
- Physics

Many exciting areas of scientific inquiry, such as the neurosciences, environmental sciences, and biophysical sciences, require general science backgrounds that encompass multiple science disciplines. The **Bachelor of Arts in Natural Sciences with a concentration in Physics** helps students to explore both domestic and international culture through the foreign language and upper-level liberal arts course requirements.

Students planning graduate study or technical careers in one of these interdisciplinary areas, as well as students preparing for careers in health sciences, legal professions, science education, science-related business, or social service might be well served by the BA in Natural Sciences. This program of study can prepare students for graduate study in a traditional science discipline, and many Natural Sciences graduates have found employment in technical fields.

Students in this program can apply to our Professional Science Master's (PSM) programs in Bioinnovation, Biotechnology and Scientific Writing. Students interested in these PSM programs can apply for admission to the +1 BA/PSM accelerated options for completion of these degrees. PSM programs provide specific curricula and training for workforce entry or re-entry.

Campus Location: Main

Program Code: ST-NATS-BA

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.33 GPA in major or
- achieve a minimum 3.0 cumulative GPA and successfully complete six credits of internship coursework (SCTC 1385, SCTC 2385, or SCTC 3185) with approval by the program director.

Accelerated Programs

Accelerated programs provide a pathway for students to pursue both an undergraduate degree and an advanced degree in a shorter amount of time. Below is a list of available accelerated programs for students in the BA in Natural Sciences.

- BA or BS in Natural Sciences / PSM in Scientific Writing
- BA or BS in Natural Sciences / PSM in Bioinnovation
- BA or BS in Natural Sciences / PSM in Biotechnology
- BA in Natural Sciences / MEd in Middle Grades Education with a Concentration in Science
- BA in Natural Sciences / MEd in Middle Grades Education with a Concentration in Science and Language Arts

Undergraduate Contact Information

Susan Varnum, Program Director and Professor of Chemistry
Senior Associate Dean for Undergraduate Affairs and Science Education
College of Science and Technology
Gladfelter Hall, Room 629
215-204-4073
susan.varnum@temple.edu

Learn more about the Bachelor of Arts in Natural Sciences.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Arts Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
SCTC 2396	Writing for Science and Technology	3
SCTC 4396	Paradigms of Scientific Knowledge: Knowledge Discovery from Scientific Data	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
 - Students must satisfy general Temple University residency requirements (p. 1838).
- #### 2. College Requirements
- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
 - A minimum of 6 of these credits must be upper-level (courses numbered 2000 and above) CLA credits.
 - Successful completion or waiver from the second level of a foreign language.
 - Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Arts (67-72 s.h.)

At least 7 courses required for the major must be completed at Temple. At least 2 courses in the chosen concentration must be completed at Temple.

Code	Title	Credit Hours
Biology		
Select one of the following:		4
BIOL 1011	General Biology I (F)	
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology Honors Introduction to Organismal Biology	
Select one of the following:		4
BIOL 1012	General Biology II (S)	
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology Honors Introduction to Cellular and Molecular Biology	
Chemistry		
Select one of the following:		4
CHEM 1021 & CHEM 1023	Introduction to Chemistry I and Introduction to Chemistry Laboratory I	
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
CHEM 1022 & CHEM 1024	Introduction to Chemistry II and Introduction to Chemistry Laboratory II	
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	

CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
College of Science & Technology		
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
Select one of the following: ¹		4
SCTC 1501	STEM Challenge: The World Around Us	
SCTC 1502	STEM Challenge: The World Within	
SCTC 2396	Writing for Science and Technology	3
SCTC 3001	History of Science	3
SCTC 4396	Paradigms of Scientific Knowledge: Knowledge Discovery from Scientific Data	3
Computer Programming/Physics		
Select one of the following: ²		3-4
CIS 1051 or CIS 1951 or CIS 1057	Introduction to Problem Solving and Programming in Python Honors Introduction to Problem Solving and Programming in Python Computer Programming in C	
CIS 1052	Introduction to Web Technology and Programming	
CIS 1053	Programming in Matlab	
PHYS 1004	Introduction to Astronomy (F)	
SCTC 3312	Coding STEM Lessons ³	
Earth & Environmental Science		
EES 2001	Physical Geology	4
Mathematics		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
Physics		
Select one of the following:		4
PHYS 1061 or PHYS 1961	Elementary Classical Physics I Honors Elementary Classical Physics I	
PHYS 2021 or PHYS 2921	General Physics I Honors General Physics I	
Select one of the following:		4
PHYS 1062 or PHYS 1962	Elementary Classical Physics II Honors Elementary Classical Physics II	
PHYS 2022 or PHYS 2922	General Physics II Honors General Physics II	
Physics Electives		
Four Upper-Level (2000+) Physics Electives ⁴		12-16
Total Credit Hours		67-72

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

1

It is recommended that SCTC 1501 or SCTC 1502 be completed before SCTC 4396.

2

It is recommended that students take CIS 1051 (or CIS 1951) as Python is the language of choice for most science programming needs.

3

SCTC 3312 is a variable credit course and must be taken for 3 credits in order to meet the requirement for this program. Since the default credits are set to 1, students must contact cstcmp@temple.edu to have an advisor change the credits to 3.

4

MATH 2043 is approved to satisfy one of the four concentration electives. The remaining concentration electives must all be taken from within the Physics department and must satisfy elective criteria of the department. In the circumstance where a laboratory course is the complement of a lecture course, both must be completed to fulfill the requirement for ONE science elective.

Suggested Academic Plan

Bachelor of Arts in Natural Sciences with Concentration in Physics

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
Select one of the following:		4
CHEM 1021 & CHEM 1023	Introduction to Chemistry I and Introduction to Chemistry Laboratory I	
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
SCTC 1001	CST First Year Seminar	1
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
Select one of the following: ¹		4
SCTC 1501	STEM Challenge: The World Around Us	
SCTC 1502	STEM Challenge: The World Within	
Credit Hours		16
Spring		
Select one of the following:		4
CHEM 1022 & CHEM 1024	Introduction to Chemistry II and Introduction to Chemistry Laboratory II	
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
Credit Hours		15
Year 2		
Fall		
Select one of the following:		4
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	
PHYS 2021 or PHYS 2921	General Physics I or Honors General Physics I	
Select one of the following:		4
BIOL 1011	General Biology I (F)	
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology or Honors Introduction to Organismal Biology	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3

Elective		4
Credit Hours		15
Spring		
Select one of the following:		4
PHYS 1062 or PHYS 1961	Elementary Classical Physics II or Honors Elementary Classical Physics I	
PHYS 2022 or PHYS 2922	General Physics II or Honors General Physics II	
Select one of the following:		4
BIOL 1012	General Biology II (S)	
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes or Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology or Honors Introduction to Cellular and Molecular Biology	
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Elective		3
Credit Hours		17
Year 3		
Fall		
EES 2001	Physical Geology	4
SCTC 3001	History of Science	3
Foreign Language 1001 - First Level		4
GenEd Breadth Course		3
Credit Hours		14
Spring		
SCTC 2396	Writing for Science and Technology	3
Physics Elective (2000+) ²		3-4
Foreign Language 1002 - Second Level		4
GenEd Breadth Course		4-3
Elective		2
Credit Hours		16
Year 4		
Fall		
SCTC 4396	Paradigms of Scientific Knowledge: Knowledge Discovery from Scientific Data	3
Select one of the following:		3-4
CIS 1051 or CIS 1951 or CIS 1057	Introduction to Problem Solving and Programming in Python or Honors Introduction to Problem Solving and Programming in Python or Computer Programming in C	
CIS 1052	Introduction to Web Technology and Programming	
CIS 1053	Programming in Matlab	
PHYS 1004	Introduction to Astronomy (F)	
SCTC 3312	Coding STEM Lessons	
Physics Elective (2000+) ²		4-3
Upper-level CLA Course (numbered 2000 and above)		3
GenEd Breadth Course		3
Credit Hours		16
Spring		
Physics Elective (2000+) ²		3-4
Physics Elective (2000+) ²		3-4
Upper-level CLA Course (numbered 2000 and above)		3
Elective		3

Elective	2-0
Credit Hours	14
Total Credit Hours	123

1

MATH 2043 is recommended as it is a prerequisite and/or co-requisite of most Physics Concentration Electives.

2

See Requirements for course options.

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

Natural Sciences BS with Biology Concentration

Overview

The Natural Sciences program provides students more breadth than traditional science programs.

Natural Sciences students **must select one of the following concentrations:**

- Biology
- Chemistry
- Earth and Environmental Sciences
- Physics

Many exciting areas of scientific inquiry, such as the neurosciences, environmental sciences, and biophysical sciences, require general science backgrounds that encompass multiple science disciplines. The **Bachelor of Science in Natural Sciences with a concentration in Biology** prepares students for these trans-disciplinary programs.

With careful selection of laboratory-based courses, students are well prepared for entry-level science positions, and a variety of graduate programs both disciplinary and interdisciplinary. In particular, this is an excellent background for students wishing to enter graduate programs in education, forensic science, scientific writing or editing, or related science technology areas. Students may also select many of the courses required for a variety of pre-health and professional school programs.

In the Bachelor of Science degree, there is greater emphasis on depth of science content knowledge and application of knowledge compared with the Bachelor of Arts in Natural Sciences. The BS degree requires additional science coursework and offers more advanced study in natural sciences. This option provides more flexibility for students declaring the BS in Natural Sciences later in their undergraduate course of study as they can apply more disciplinary science courses to meet the additional science requirements of this degree.

This program of study can prepare students for graduate study in a traditional science discipline, and many Natural Sciences graduates have found employment in technical fields.

Students in this program can apply to our Professional Science Master's (PSM) programs in Bioinnovation, Biotechnology and Scientific Writing. Students interested in these PSM programs can apply for admission to the +1 BS/PSM accelerated options for completion of these degrees. PSM programs provide specific curricula and training for workforce entry or re-entry.

Campus Location: Main

Program Code: ST-NATS-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.33 GPA in major or
- achieve a minimum 3.0 cumulative GPA and successfully complete six credits of internship coursework (SCTC 1385, SCTC 2385, or SCTC 3185) with approval by the program director.

Accelerated Programs

Accelerated programs provide a pathway for students to pursue both an undergraduate degree and an advanced degree in a shorter amount of time. Below is a list of available accelerated programs for students in the BS in Natural Sciences.

- BA or BS in Natural Sciences / PSM in Scientific Writing
- BA or BS in Natural Sciences / PSM in Bioinnovation
- BA or BS in Natural Sciences / PSM in Biotechnology

Undergraduate Contact Information

Susan Varnum, Program Director and Professor of Chemistry
Senior Associate Dean for Undergraduate Affairs and Science Education
College of Science and Technology
Gladfelter Hall, Room 629
215-204-4073
susan.varnum@temple.edu

Learn more about the Bachelor of Science in Natural Sciences.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
SCTC 2396	Writing for Science and Technology	3
SCTC 4396	Paradigms of Scientific Knowledge: Knowledge Discovery from Scientific Data	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (76-88 s.h.)

At least 7 courses required for the major must be completed at Temple. At least 2 courses in the chosen concentration must be completed at Temple.

Code	Title	Credit Hours
Biology		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology Honors Introduction to Organismal Biology	4
Select one of the following:		4
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology Honors Introduction to Cellular and Molecular Biology	

Chemistry

Select one of the following:

4

CHEM 1021 & CHEM 1023	Introduction to Chemistry I and Introduction to Chemistry Laboratory I
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)

Select one of the following:

4

CHEM 1022 & CHEM 1024	Introduction to Chemistry II and Introduction to Chemistry Laboratory II
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)

College of Science & Technology

SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
SCTC 1501	STEM Challenge: The World Around Us	4
SCTC 1502	STEM Challenge: The World Within	4
SCTC 2396	Writing for Science and Technology	3
SCTC 3001	History of Science	3
SCTC 4396	Paradigms of Scientific Knowledge: Knowledge Discovery from Scientific Data	3

Computer Programming/Physics

Select two of the following:

6-8

CIS 1051 or CIS 1951 or CIS 1057	Introduction to Problem Solving and Programming in Python ¹ Honors Introduction to Problem Solving and Programming in Python Computer Programming in C
CIS 1052	Introduction to Web Technology and Programming
CIS 1053	Programming in Matlab
PHYS 1004	Introduction to Astronomy (F)
SCTC 3312	Coding STEM Lessons ²

Earth & Environmental Science

EES 2001	Physical Geology	4
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Mathematics

Select one of the following:

4-8

MATH 1031	Differential and Integral Calculus
MATH 1041 & MATH 1044	Calculus I and Introduction to Probability and Statistics for the Life Sciences ³
MATH 1041 & MATH 1042	Calculus I and Calculus II ³
MATH 1941 & MATH 1942	Honors Calculus I and Honors Calculus II ³

Physics

Select one of the following:

4

PHYS 1021	Introduction to General Physics I
PHYS 1061 or PHYS 1961	Elementary Classical Physics I Honors Elementary Classical Physics I
PHYS 2021 or PHYS 2921	General Physics I Honors General Physics I

Select one of the following:

4

PHYS 1022	Introduction to General Physics II
PHYS 1062 or PHYS 1962	Elementary Classical Physics II Honors Elementary Classical Physics II
PHYS 2022 or PHYS 2922	General Physics II Honors General Physics II

Biology Concentration ElectivesFour Upper-Level (2200+) Biology Electives ⁴ 12-16**Science Breadth Electives**

Select one of the following: 3-4

ANTH 2705	Introduction to Evolutionary Anthropology
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I
CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II
ENST 2001	Environment and Society
MATH 2031	Probability and Statistics
PHIL 2157	Environmental Ethics
SCTC 2100	Special Topics in Science and Technology
SCTC 2101	Medical Imaging Physics - Seeing Through Ourselves
SCTC 2102	SERC: Science of Energy Resource Consumption

Select one of the following: 3-4

Any Upper-Level (2000+) CST Course

Total Credit Hours 76-88

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

Students may **not** take both CIS 1051 and CIS 1057 as their two CIS electives. They must choose one and then make another choice from the list for their second elective. Note: It is recommended that students take CIS 1051 as Python is the language of choice for most science programming needs.

2

SCTC 3312 is a variable credit course and must be taken for 3 credits in order to meet the requirement for this program. Since the default credits are set to 1, students must contact CSTbce@temple.edu to have an advisor change the credits to 3.

3

These courses are not required if MATH 1031 is completed.

4

The four electives (2200+) must all be taken from within the Biology department and must satisfy elective criteria of the department. **Note the Exception:** Natural Science majors in the Biology concentration are permitted to take BIOL 2001 Clinical Microbiology as an elective. In the circumstance where a laboratory course is the complement of a lecture course, both must be completed to fulfill the requirement for ONE science elective.

Suggested Academic Plan**Bachelor of Science in Natural Sciences with Concentration in Biology****Suggested Plan for New Students Starting in the 2023-2024 Academic Year**

Year 1		Credit Hours
Fall		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology or Honors Introduction to Organismal Biology	4
Select one of the following:		4
MATH 1031	Differential and Integral Calculus	
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	
SCTC 1001	CST First Year Seminar	1
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3

SCTC 1501	STEM Challenge: The World Around Us	4
Credit Hours		16
Spring		
Select one of the following:		4
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes or Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology or Honors Introduction to Cellular and Molecular Biology	
Select one of the following: ¹		0-4
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
SCTC 1502	STEM Challenge: The World Within	4
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Elective		4-0
Credit Hours		16
Year 2		
Fall		
Select one of the following:		4
CHEM 1021 & CHEM 1023	Introduction to Chemistry I and Introduction to Chemistry Laboratory I	
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I	
EES 2001	Physical Geology	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Credit Hours		14
Spring		
Select one of the following:		4
CHEM 1022 & CHEM 1024	Introduction to Chemistry II and Introduction to Chemistry Laboratory II	
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II	
Biology Elective (2200+) ²		3-4
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Elective		3-2
Credit Hours		16
Year 3		
Fall		
Select one of the following:		4
PHYS 1021	Introduction to General Physics I	
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	
PHYS 2021 or PHYS 2921	General Physics I or Honors General Physics I	

SCTC 3001	History of Science	3
Biology Elective (2200+) ²		3-4
GenEd Breadth Course		3-4
Elective		2-0
Credit Hours		15
Spring		
Select one of the following:		4
PHYS 1022	Introduction to General Physics II	
PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	
PHYS 2022 or PHYS 2922	General Physics II or Honors General Physics II	
Select one of the following:		3-4
CIS 1051 or CIS 1951 or CIS 1057	Introduction to Problem Solving and Programming in Python or Honors Introduction to Problem Solving and Programming in Python or Computer Programming in C	
CIS 1052	Introduction to Web Technology and Programming	
CIS 1053	Programming in Matlab	
SCTC 3312	Coding STEM Lessons (must be taken for 3 credits)	
SCTC 2396	Writing for Science and Technology	3
GenEd Breadth Course		3
Elective		2-1
Credit Hours		15
Year 4		
Fall		
Select one of the following:		3-4
PHYS 1004	Introduction to Astronomy (F)	
CIS 1051 or CIS 1951 or CIS 1057	Introduction to Problem Solving and Programming in Python or Honors Introduction to Problem Solving and Programming in Python or Computer Programming in C	
CIS 1052	Introduction to Web Technology and Programming	
CIS 1053	Programming in Matlab	
SCTC 3312	Coding STEM Lessons (must be taken for 3 credits)	
Biology Elective (2200+) ²		3-4
Science Breadth Elective ³		3-4
GenEd Breadth Course		3
Elective		3-0
Credit Hours		15
Spring		
SCTC 4396	Paradigms of Scientific Knowledge: Knowledge Discovery from Scientific Data	3
Biology Elective (2200+) ²		3-4
Science Breadth Elective ³		3-4
Elective		3
Elective		4-2
Credit Hours		16
Total Credit Hours		123

1

These courses are not required if MATH 1031 is completed.

2

The four electives (2200+) must all be taken from within the Biology department and must satisfy elective criteria of the department. **Note the Exception:** Natural Science majors in the Biology concentration are permitted to take BIOL 2001 Clinical Microbiology as an elective. In the circumstance where a laboratory course is the complement of a lecture course, both must be completed to fulfill the requirement for ONE science elective.

3

See Requirements for course options.

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

Natural Sciences BS with Chemistry Concentration

Overview

The Natural Sciences program provides students more breadth than traditional science programs.

Natural Sciences students **must select one of the following concentrations:**

- Biology
- Chemistry
- Earth and Environmental Sciences
- Physics

Many exciting areas of scientific inquiry, such as the neurosciences, environmental sciences, and biophysical sciences, require general science backgrounds that encompass multiple science disciplines. The **Bachelor of Science in Natural Sciences with a concentration in Chemistry** prepares students for these trans-disciplinary programs.

With careful selection of laboratory-based courses, students are well prepared for entry-level science positions, and a variety of graduate programs both disciplinary and interdisciplinary. In particular, this is an excellent background for students wishing to enter graduate programs in education, forensic science, scientific writing or editing, or related science technology areas. Students may also select many of the courses required for a variety of pre-health and professional school programs.

In the Bachelor of Science degree, there is greater emphasis on depth of science content knowledge and application of knowledge compared with the Bachelor of Arts in Natural Sciences. The BS degree requires additional science coursework and offers more advanced study in natural sciences. This option provides more flexibility for students declaring the BS in Natural Sciences later in their undergraduate course of study as they can apply more disciplinary science courses to meet the additional science requirements of this degree.

This program of study can prepare students for graduate study in a traditional science discipline, and many Natural Sciences graduates have found employment in technical fields.

Students in this program can apply to our Professional Science Master's (PSM) programs in Bioinnovation, Biotechnology and Scientific Writing. Students interested in these PSM programs can apply for admission to the +1 BS/PSM accelerated options for completion of these degrees. PSM programs provide specific curricula and training for workforce entry or re-entry.

Campus Location: Main

Program Code: ST-NATS-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.33 GPA in major or
- achieve a minimum 3.0 cumulative GPA and successfully complete six credits of internship coursework (SCTC 1385, SCTC 2385, or SCTC 3185) with approval by the program director.

Accelerated Programs

Accelerated programs provide a pathway for students to pursue both an undergraduate degree and an advanced degree in a shorter amount of time. Below is a list of available accelerated programs for students in the BS in Natural Sciences.

- BA or BS in Natural Sciences / PSM in Scientific Writing
- BA or BS in Natural Sciences / PSM in Bioinnovation
- BA or BS in Natural Sciences / PSM in Biotechnology

Undergraduate Contact Information

Susan Varnum, Program Director and Professor of Chemistry
 Senior Associate Dean for Undergraduate Affairs and Science Education
 College of Science and Technology
 Gladfelter Hall, Room 629
 215-204-4073
 susan.varnum@temple.edu

Learn more about the Bachelor of Science in Natural Sciences.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
SCTC 2396	Writing for Science and Technology	3
SCTC 4396	Paradigms of Scientific Knowledge: Knowledge Discovery from Scientific Data	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (76-88 s.h.)

At least 7 courses required for the major must be completed at Temple. At least 2 courses in the chosen concentration must be completed at Temple.

Code	Title	Credit Hours
Biology		
Select one of the following:		4
BIOL 1011	General Biology I (F)	
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology Honors Introduction to Organismal Biology	
Select one of the following:		4
BIOL 1012	General Biology II (S)	
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology Honors Introduction to Cellular and Molecular Biology	
Chemistry		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	

CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
College of Science & Technology		
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
SCTC 1501	STEM Challenge: The World Around Us	4
SCTC 1502	STEM Challenge: The World Within	4
SCTC 2396	Writing for Science and Technology	3
SCTC 3001	History of Science	3
SCTC 4396	Paradigms of Scientific Knowledge: Knowledge Discovery from Scientific Data	3
Computer Programming/Physics		
Select two of the following:		6-8
CIS 1051 or CIS 1951 or CIS 1057	Introduction to Problem Solving and Programming in Python ¹ Honors Introduction to Problem Solving and Programming in Python Computer Programming in C	
CIS 1052	Introduction to Web Technology and Programming	
CIS 1053	Programming in Matlab	
PHYS 1004	Introduction to Astronomy (F)	
SCTC 3312	Coding STEM Lessons ²	
Earth & Environmental Science		
EES 2001	Physical Geology	4
Mathematics		
Select one of the following:		4-8
MATH 1031	Differential and Integral Calculus	
MATH 1041 & MATH 1044	Calculus I and Introduction to Probability and Statistics for the Life Sciences ³	
MATH 1041 & MATH 1042	Calculus I and Calculus II ³	
MATH 1941 & MATH 1942	Honors Calculus I and Honors Calculus II ³	
Physics		
Select one of the following:		4
PHYS 1021	Introduction to General Physics I	
PHYS 1061 or PHYS 1961	Elementary Classical Physics I Honors Elementary Classical Physics I	
PHYS 2021 or PHYS 2921	General Physics I Honors General Physics I	
Select one of the following:		4
PHYS 1022	Introduction to General Physics II	
PHYS 1062 or PHYS 1962	Elementary Classical Physics II Honors Elementary Classical Physics II	
PHYS 2022 or PHYS 2922	General Physics II Honors General Physics II	
Chemistry Concentration Electives		
Four Upper-Level (2000+) Chemistry Electives ⁴		12-16
Science Breadth Electives		
Select one of the following:		3-4
ANTH 2705	Introduction to Evolutionary Anthropology	
ENST 2001	Environment and Society	

MATH 2031	Probability and Statistics	
PHIL 2157	Environmental Ethics	
SCTC 2100	Special Topics in Science and Technology	
SCTC 2101	Medical Imaging Physics - Seeing Through Ourselves	
SCTC 2102	SERC: Science of Energy Resource Consumption	
Select one of the following:		3-4
Any Upper-Level (2000+) CST Course		

Total Credit Hours **76-88**

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

Students may **not** take both CIS 1051 and CIS 1057 as their two CIS electives. They must choose one and then make another choice from the list for their second elective. It is recommended that students take CIS 1051 (or CIS 1951) as Python is the language of choice for programming in most sciences.

2

SCTC 3312 is a variable credit course and must be taken for 3 credits in order to meet the requirement for this program. Since the default credits are set to 1, students must contact CSTbce@temple.edu to have an advisor change the credits to 3.

3

These courses are not required if MATH 1031 is completed.

4

The four electives must all be taken from within the Chemistry department and must satisfy elective criteria of the department. In the circumstance where a laboratory course is the complement of a lecture course, both must be completed to fulfill the requirement for ONE science elective. Note: If CHEM 3103 is selected as an elective, it is recommended that students register for CHEM 3105 as it would be considered a complementary lab to CHEM 3103.

Suggested Academic Plan

Bachelor of Science in Natural Sciences with Concentration in Chemistry

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
MATH 1031	Differential and Integral Calculus	
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	
SCTC 1001	CST First Year Seminar	1
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
SCTC 1501	STEM Challenge: The World Around Us	4
Credit Hours		16
Spring		
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	

Select one of the following: ¹		0-4
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
SCTC 1502	STEM Challenge: The World Within	4
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Elective		4-0
Credit Hours		16
Year 2		
Fall		
Select one of the following:		4
BIOL 1011	General Biology I (F)	
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology or Honors Introduction to Organismal Biology	
EES 2001	Physical Geology	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Credit Hours		14
Spring		
Select one of the following:		4
BIOL 1012	General Biology II (S)	
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes or Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology or Honors Introduction to Cellular and Molecular Biology	
Chemistry Elective (2000+) ²		3-4
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Elective		3-2
Credit Hours		16
Year 3		
Fall		
Select one of the following:		4
PHYS 1021	Introduction to General Physics I	
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	
PHYS 2021 or PHYS 2921	General Physics I or Honors General Physics I	
SCTC 3001	History of Science	3
Chemistry Elective (2000+) ²		3-4
GenEd Breadth Course		3-4
Elective		2-0
Credit Hours		15
Spring		
Select one of the following:		4
PHYS 1022	Introduction to General Physics II	
PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	
PHYS 2022 or PHYS 2922	General Physics II or Honors General Physics II	

Select one of the following:		3-4
CIS 1051	Introduction to Problem Solving and Programming in Python	
or CIS 1951	or Honors Introduction to Problem Solving and Programming in Python	
or CIS 1057	or Computer Programming in C	
CIS 1052	Introduction to Web Technology and Programming	
CIS 1053	Programming in Matlab	
SCTC 3312	Coding STEM Lessons (Must be taken for 3 credits)	
SCTC 2396	Writing for Science and Technology	3
GenEd Breadth Course		3
Elective		2-1
Credit Hours		15
Year 4		
Fall		
Select one of the following:		3-4
PHYS 1004	Introduction to Astronomy (F)	
CIS 1051	Introduction to Problem Solving and Programming in Python	
or CIS 1951	or Honors Introduction to Problem Solving and Programming in Python	
or CIS 1057	or Computer Programming in C	
CIS 1052	Introduction to Web Technology and Programming	
CIS 1053	Programming in Matlab	
SCTC 3312	Coding STEM Lessons (Must be taken for 3 credits)	
Chemistry Elective (2000+) ²		3-4
Science Breadth Elective ³		3-4
GenEd Breadth Course		3
Elective		3-0
Credit Hours		15
Spring		
SCTC 4396	Paradigms of Scientific Knowledge: Knowledge Discovery from Scientific Data	3
Chemistry Elective (2000+) ²		3-4
Science Breadth Elective ³		3-4
Elective		3
Elective		4-2
Credit Hours		16
Total Credit Hours		123

1

These courses are not required if MATH 1031 is completed.

2

The four electives must all be taken from within the Chemistry department and must satisfy elective criteria of the department. In the circumstance where a laboratory course is the complement of a lecture course, both must be completed to fulfill the requirement for ONE science elective. Note: If CHEM 3103 is selected as an elective, it is recommended that students register for CHEM 3105 as it would be considered a complementary lab to CHEM 3103.

3

See Requirements for course options.

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

Natural Sciences BS with Earth and Environmental Sciences Concentration

Overview

The Natural Sciences program provides students more breadth than traditional science programs.

Natural Sciences students **must select one of the following concentrations:**

- Biology
- Chemistry
- Earth and Environmental Sciences
- Physics

Many exciting areas of scientific inquiry, such as the neurosciences, environmental sciences, and biophysical sciences, require general science backgrounds that encompass multiple science disciplines. The **Bachelor of Science in Natural Sciences with a concentration in Earth and Environmental Sciences** prepares students for these trans-disciplinary programs.

With careful selection of laboratory-based courses, students are well prepared for entry-level science positions, and a variety of graduate programs both disciplinary and interdisciplinary. In particular, this is an excellent background for students wishing to enter graduate programs in education, forensic science, scientific writing or editing, or related science technology areas. Students may also select many of the courses required for a variety of pre-health and professional school programs.

In the Bachelor of Science degree, there is greater emphasis on depth of science content knowledge and application of knowledge compared with the Bachelor of Arts in Natural Sciences. The BS degree requires additional science coursework and offers more advanced study in natural sciences. This option provides more flexibility for students declaring the BS in Natural Sciences later in their undergraduate course of study as they can apply more disciplinary science courses to meet the additional science requirements of this degree.

This program of study can prepare students for graduate study in a traditional science discipline, and many Natural Sciences graduates have found employment in technical fields.

Students in this program can apply to our Professional Science Master's (PSM) programs in Bioinnovation, Biotechnology and Scientific Writing. Students interested in these PSM programs can apply for admission to the +1 BS/PSM accelerated options for completion of these degrees. PSM programs provide specific curricula and training for workforce entry or re-entry.

Campus Location: Main

Program Code: ST-NATS-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.33 GPA in major or
- achieve a minimum 3.0 cumulative GPA and successfully complete six credits of internship coursework (SCTC 1385, SCTC 2385, or SCTC 3185) with approval by the program director.

Accelerated Programs

Accelerated programs provide a pathway for students to pursue both an undergraduate degree and an advanced degree in a shorter amount of time. Below is a list of available accelerated programs for students in the BS in Natural Sciences.

- BA or BS in Natural Sciences / PSM in Scientific Writing
- BA or BS in Natural Sciences / PSM in Bioinnovation
- BA or BS in Natural Sciences / PSM in Biotechnology

Undergraduate Contact Information

Susan Varnum, Program Director and Professor of Chemistry
Senior Associate Dean for Undergraduate Affairs and Science Education
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215-204-4073
susan.varnum@temple.edu

Learn more about the Bachelor of Science in Natural Sciences.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
SCTC 2396	Writing for Science and Technology	3
SCTC 4396	Paradigms of Scientific Knowledge: Knowledge Discovery from Scientific Data	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
 - Students must satisfy general Temple University residency requirements (p. 1838).
- #### 2. College Requirements
- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
 - Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (76-88 s.h.)

At least 7 courses required for the major must be completed at Temple. At least 2 courses in the chosen concentration must be completed at Temple.

Code	Title	Credit Hours
Biology		
Select one of the following:		4
BIOL 1011	General Biology I (F)	
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology Honors Introduction to Organismal Biology	
Select one of the following:		4
BIOL 1012	General Biology II (S)	
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology Honors Introduction to Cellular and Molecular Biology	
Chemistry		
Select one of the following:		4
CHEM 1021 & CHEM 1023	Introduction to Chemistry I and Introduction to Chemistry Laboratory I	
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
CHEM 1022 & CHEM 1024	Introduction to Chemistry II and Introduction to Chemistry Laboratory II	
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	

CHEM 1952 Honors General Chemical Science II
& CHEM 1954 and Honors Chemical Science Laboratory II (S)

College of Science & Technology

SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
SCTC 1501	STEM Challenge: The World Around Us	4
SCTC 1502	STEM Challenge: The World Within	4
SCTC 2396	Writing for Science and Technology	3
SCTC 3001	History of Science	3
SCTC 4396	Paradigms of Scientific Knowledge: Knowledge Discovery from Scientific Data	3

Computer Programming/Physics

Select two of the following: 6-8

CIS 1051	Introduction to Problem Solving and Programming in Python ¹	
or CIS 1951	Honors Introduction to Problem Solving and Programming in Python	
or CIS 1057	Computer Programming in C	
CIS 1052	Introduction to Web Technology and Programming	
CIS 1053	Programming in Matlab	
PHYS 1004	Introduction to Astronomy (F)	
SCTC 3312	Coding STEM Lessons ²	

Earth & Environmental Science

EES 2001	Physical Geology	4
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Mathematics

Select one of the following: 4-8

MATH 1031	Differential and Integral Calculus	
MATH 1041	Calculus I	
& MATH 1044	and Introduction to Probability and Statistics for the Life Sciences ³	
MATH 1041	Calculus I	
& MATH 1042	and Calculus II ³	
MATH 1941	Honors Calculus I	
& MATH 1942	and Honors Calculus II ³	

Physics

Select one of the following: 4

PHYS 1021	Introduction to General Physics I	
PHYS 1061	Elementary Classical Physics I	
or PHYS 1961	Honors Elementary Classical Physics I	
PHYS 2021	General Physics I	
or PHYS 2921	Honors General Physics I	

Select one of the following: 4

PHYS 1022	Introduction to General Physics II	
PHYS 1062	Elementary Classical Physics II	
or PHYS 1962	Honors Elementary Classical Physics II	
PHYS 2022	General Physics II	
or PHYS 2922	Honors General Physics II	

Earth and Environmental Science Electives

Four Upper-Level (2000+) EES Electives ⁴ 12-16

Science Breadth Electives

Select one of the following: 3-4

ANTH 2705	Introduction to Evolutionary Anthropology	
ENST 2001	Environment and Society	
MATH 2031	Probability and Statistics	
PHIL 2157	Environmental Ethics	
SCTC 2100	Special Topics in Science and Technology	
SCTC 2101	Medical Imaging Physics - Seeing Through Ourselves	
SCTC 2102	SERC: Science of Energy Resource Consumption	

Select one of the following:	3-4
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Any Upper-Level (2000+) CST Course	3-4
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Total Credit Hours	76-88
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Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

Students may **not** take both CIS 1051 and CIS 1057 as their two CIS electives. They must choose one and then make another choice from the list for their second elective.

2

SCTC 3312 is a variable credit course and must be taken for 3 credits in order to meet the requirement for this program. Since the default credits are set to 1, students must contact CSTbce@temple.edu to have an advisor change the credits to 3.

3

These courses are not required if MATH 1031 is completed.

4

The four science electives must be taken from within the EES department and satisfy elective criteria within that department. In the circumstance where a laboratory course is the complement of a lecture course, both must be completed to fulfill the requirement for ONE science elective.

Suggested Academic Plan

Bachelor of Science in Natural Sciences with Concentration in Earth and Environmental Sciences

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
Select one of the following:		4
CHEM 1021 & CHEM 1023	Introduction to Chemistry I and Introduction to Chemistry Laboratory I	
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
MATH 1031	Differential and Integral Calculus	
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	
SCTC 1001	CST First Year Seminar	1
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
SCTC 1501	STEM Challenge: The World Around Us	4
Credit Hours		16
Spring		
Select one of the following:		4
CHEM 1022 & CHEM 1024	Introduction to Chemistry II and Introduction to Chemistry Laboratory II	
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
Select one of the following: ¹		0-4
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	

MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
SCTC 1502	STEM Challenge: The World Within	4
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Elective		4-0
Credit Hours		16
Year 2		
Fall		
Select one of the following:		4
BIOL 1011	General Biology I (F)	
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology or Honors Introduction to Organismal Biology	
EES 2001	Physical Geology	4
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Credit Hours		14
Spring		
Select one of the following:		4
BIOL 1012	General Biology II (S)	
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes or Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology or Honors Introduction to Cellular and Molecular Biology	
Earth and Environmental Science Elective (2000+) ²		3-4
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Elective		3-2
Credit Hours		16
Year 3		
Fall		
Select one of the following:		4
PHYS 1021	Introduction to General Physics I	
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	
PHYS 2021 or PHYS 2921	General Physics I or Honors General Physics I	
SCTC 3001	History of Science	3
Earth and Environmental Science Elective (2000+) ²		3-4
GenEd Breadth Course		3-4
Elective		2-0
Credit Hours		15
Spring		
Select one of the following:		4
PHYS 1022	Introduction to General Physics II	
PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	
PHYS 2022 or PHYS 2922	General Physics II or Honors General Physics II	
Select one of the following:		3-4

CIS 1051 or CIS 1951 or CIS 1057	Introduction to Problem Solving and Programming in Python or Honors Introduction to Problem Solving and Programming in Python or Computer Programming in C	
CIS 1052	Introduction to Web Technology and Programming	
CIS 1053	Programming in Matlab	
SCTC 3312	Coding STEM Lessons (Must be taken for 3 credits)	
SCTC 2396	Writing for Science and Technology	3
GenEd Breadth Course		3
Elective		2-1
Credit Hours		15
Year 4		
Fall		
Select one of the following:		3-4
PHYS 1004	Introduction to Astronomy (F)	
CIS 1051 or CIS 1951 or CIS 1057	Introduction to Problem Solving and Programming in Python or Honors Introduction to Problem Solving and Programming in Python or Computer Programming in C	
CIS 1052	Introduction to Web Technology and Programming	
CIS 1053	Programming in Matlab	
SCTC 3312	Coding STEM Lessons (Must be taken for 3 credits)	
Earth and Environmental Science Elective (2000+) ²		3-4
Science Breadth Elective ³		3-4
GenEd Breadth Course		3
Elective		3-0
Credit Hours		15
Spring		
SCTC 4396	Paradigms of Scientific Knowledge: Knowledge Discovery from Scientific Data	3
Earth and Environmental Science Elective (2000+) ²		3-4
Science Breadth Elective ³		3-4
Elective		3
Elective		4-2
Credit Hours		16
Total Credit Hours		123

1

These courses are not required if MATH 1031 is completed.

2

The four science electives must satisfy elective criteria within the department, and all four courses must be taken from within the EES department. In the circumstance where a laboratory course is the complement of a lecture course, both must be completed to fulfill the requirement for ONE science elective.

3

See Requirements for course options.

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

Natural Sciences BS with Physics Concentration

Overview

The Natural Sciences program provides students more breadth than traditional science programs.

Natural Sciences students **must select one of the following concentrations:**

- Biology
- Chemistry
- Earth and Environmental Sciences
- Physics

Many exciting areas of scientific inquiry, such as the neurosciences, environmental sciences, and biophysical sciences, require general science backgrounds that encompass multiple science disciplines. The **Bachelor of Science in Natural Sciences with a concentration in Physics** prepares students for these trans-disciplinary programs.

With careful selection of laboratory-based courses, students are well prepared for entry-level science positions, and a variety of graduate programs both disciplinary and interdisciplinary. In particular, this is an excellent background for students wishing to enter graduate programs in education, forensic science, scientific writing or editing, or related science technology areas. Students may also select many of the courses required for a variety of pre-health and professional school programs.

In the Bachelor of Science degree, there is greater emphasis on depth of science content knowledge and application of knowledge compared with the Bachelor of Arts in Natural Sciences. The BS degree requires additional science coursework and offers more advanced study in natural sciences. This option provides more flexibility for students declaring the BS in Natural Sciences later in their undergraduate course of study as they can apply more disciplinary science courses to meet the additional science requirements of this degree.

This program of study can prepare students for graduate study in a traditional science discipline, and many Natural Sciences graduates have found employment in technical fields.

Students in this program can apply to our Professional Science Master's (PSM) programs in Bioinnovation, Biotechnology and Scientific Writing. Students interested in these PSM programs can apply for admission to the +1 BS/PSM accelerated options for completion of these degrees. PSM programs provide specific curricula and training for workforce entry or re-entry.

Campus Location: Main

Program Code: ST-NATS-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.33 GPA in major or
- achieve a minimum 3.0 cumulative GPA and successfully complete six credits of internship coursework (SCTC 1385, SCTC 2385, or SCTC 3185) with approval by the program director.

Accelerated Programs

Accelerated programs provide a pathway for students to pursue both an undergraduate degree and an advanced degree in a shorter amount of time. Below is a list of available accelerated programs for students in the BS in Natural Sciences.

- BA or BS in Natural Sciences / PSM in Scientific Writing
- BA or BS in Natural Sciences / PSM in Bioinnovation
- BA or BS in Natural Sciences / PSM in Biotechnology

Undergraduate Contact Information

Susan Varnum, Program Director and Professor of Chemistry
Senior Associate Dean for Undergraduate Affairs and Science Education
College of Science and Technology
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215-204-4073
susan.varnum@temple.edu

Learn more about the Bachelor of Science in Natural Sciences.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
SCTC 2396	Writing for Science and Technology	3
SCTC 4396	Paradigms of Scientific Knowledge: Knowledge Discovery from Scientific Data	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
 - Students must satisfy general Temple University residency requirements (p. 1838).
- #### 2. College Requirements
- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
 - Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (80-88 s.h.)

At least 7 courses required for the major must be completed at Temple. At least 2 courses in the chosen concentration must be completed at Temple.

Code	Title	Credit Hours
Biology		
Select one of the following:		4
BIOL 1011	General Biology I (F)	
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology Honors Introduction to Organismal Biology	
Select one of the following:		4
BIOL 1012	General Biology II (S)	
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology Honors Introduction to Cellular and Molecular Biology	
Chemistry		
Select one of the following:		4
CHEM 1021 & CHEM 1023	Introduction to Chemistry I and Introduction to Chemistry Laboratory I	
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
CHEM 1022 & CHEM 1024	Introduction to Chemistry II and Introduction to Chemistry Laboratory II	
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
College of Science & Technology		

SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
SCTC 1501	STEM Challenge: The World Around Us	4
SCTC 1502	STEM Challenge: The World Within	4
SCTC 2396	Writing for Science and Technology	3
SCTC 3001	History of Science	3
SCTC 4396	Paradigms of Scientific Knowledge: Knowledge Discovery from Scientific Data	3

Computer Programming/Physics

Select two of the following: ¹ 6-8

CIS 1051	Introduction to Problem Solving and Programming in Python	
or CIS 1951	Honors Introduction to Problem Solving and Programming in Python	
or CIS 1057	Computer Programming in C	
CIS 1052	Introduction to Web Technology and Programming	
CIS 1053	Programming in Matlab	
PHYS 1004	Introduction to Astronomy (F)	
SCTC 3312	Coding STEM Lessons ²	

Earth & Environmental Science

EES 2001	Physical Geology	4
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Mathematics

MATH 1041	Calculus I	4
or MATH 1941	Honors Calculus I	
MATH 1042	Calculus II	4
or MATH 1942	Honors Calculus II	

Physics

Select one of the following: 4

PHYS 1061	Elementary Classical Physics I	
or PHYS 1961	Honors Elementary Classical Physics I	
PHYS 2021	General Physics I	
or PHYS 2921	Honors General Physics I	

Select one of the following: 4

PHYS 1062	Elementary Classical Physics II	
or PHYS 1962	Honors Elementary Classical Physics II	
PHYS 2022	General Physics II	
or PHYS 2922	Honors General Physics II	

Science Electives

Four Upper-Level (2000+) Physics Electives ³ 12-16

Science Breadth Electives

Select one of the following: 3-4

ANTH 2705	Introduction to Evolutionary Anthropology	
ENST 2001	Environment and Society	
MATH 2031	Probability and Statistics	
PHIL 2157	Environmental Ethics	
SCTC 2100	Special Topics in Science and Technology	
SCTC 2101	Medical Imaging Physics - Seeing Through Ourselves	
SCTC 2102	SERC: Science of Energy Resource Consumption	

Select one of the following: 3-4

Any Upper-Level (2000+) CST Course

Total Credit Hours 80-88

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

Students may **not** take both CIS 1051 and CIS 1057 as their two CIS electives. They must choose one and then make another choice from the list for their second elective.

2

SCTC 3312 is a variable credit course and must be taken for 3 credits in order to meet the requirement for this program. Since the default credits are set to 1, students must contact cstcmp@temple.edu to have an advisor change the credits to 3.

3

MATH 2043 is approved to satisfy one of the four concentration electives. The remaining concentration electives must all be taken from within the Physics department and must satisfy elective criteria of the department. In the circumstance where a laboratory course is the complement of a lecture course, both must be completed to fulfill the requirement for ONE science elective.

Suggested Academic Plan

Bachelor of Science in Natural Sciences with Concentration in Physics

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
Select one of the following:		4
CHEM 1021 & CHEM 1023	Introduction to Chemistry I and Introduction to Chemistry Laboratory I	
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
SCTC 1001	CST First Year Seminar	1
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
SCTC 1501	STEM Challenge: The World Around Us	4
Credit Hours		16
Spring		
Select one of the following:		4
CHEM 1022 & CHEM 1024	Introduction to Chemistry II and Introduction to Chemistry Laboratory II	
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
SCTC 1502	STEM Challenge: The World Within	4
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Credit Hours		16
Year 2		
Fall		
Select one of the following:		4
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	
PHYS 2021 or PHYS 2921	General Physics I or Honors General Physics I	
Select one of the following:		4
BIOL 1011	General Biology I (F)	

BIOL 1111 or BIOL 1911	Introduction to Organismal Biology or Honors Introduction to Organismal Biology	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3

Credit Hours **14**

Spring

Select one of the following: 4

PHYS 1062 or PHYS 1962	Elementary Classical Physics II or Honors Elementary Classical Physics II	
PHYS 2022 or PHYS 2922	General Physics II or Honors General Physics II	

Select one of the following: 4

BIOL 1012	General Biology II (S)	
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes or Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology or Honors Introduction to Cellular and Molecular Biology	
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3

GenEd Breadth Course 3

Elective 2

Credit Hours **16**

Year 3**Fall**

EES 2001	Physical Geology	4
SCTC 3001	History of Science	3
Physics Elective (2000+) ¹		3-4
GenEd Breadth Course		3-4
Elective		2-0

Credit Hours **15**

Spring

Select one of the following: 3-4

CIS 1051 or CIS 1951 or CIS 1057	Introduction to Problem Solving and Programming in Python or Honors Introduction to Problem Solving and Programming in Python or Computer Programming in C	
CIS 1052	Introduction to Web Technology and Programming	
CIS 1053	Programming in Matlab	
SCTC 3312	Coding STEM Lessons (Must be taken for 3 credits)	
SCTC 2396	Writing for Science and Technology	3

Physics Elective (2000+)² 3-4

GenEd Breadth Course 3

Elective 3-1

Credit Hours **15**

Year 4**Fall**

Select one of the following: 3-4

PHYS 1004	Introduction to Astronomy (F)	
CIS 1051 or CIS 1951 or CIS 1057	Introduction to Problem Solving and Programming in Python or Honors Introduction to Problem Solving and Programming in Python or Computer Programming in C	
CIS 1052	Introduction to Web Technology and Programming	
CIS 1053	Programming in Matlab	
SCTC 3312	Coding STEM Lessons (Must be taken for 3 credits)	

Physics Elective (2000+) ²		3-4
Science Breadth Elective ²		3-4
GenEd Breadth Course		3
Elective		3-0
	Credit Hours	15
Spring		
SCTC 4396	Paradigms of Scientific Knowledge: Knowledge Discovery from Scientific Data	3
Physics Elective (2000+) ²		3-4
Science Breadth Elective ²		3-4
Elective		3
Elective		4-2
	Credit Hours	16
	Total Credit Hours	123

1

MATH 2043 is recommended as it is a prerequisite and / or co-requisite of most Physics Concentration Electives.

2

See Requirements for course options.

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

Natural Sciences Minor

Overview

Modeled after the existing Natural Sciences bachelor's degree programs, the **Minor in Natural Sciences** is available to students from both the College of Science and Technology (CST) and other colleges. For students outside of CST who have previously taken a small number of CST classes either for their major or to gain exposure to one or more of the natural science disciplines, this minor offers opportunities to explore further and gain a natural science credential. For CST students switching programs to another college, the Natural Sciences minor allows them to document completed science coursework.

Campus Location: Main

Undergraduate Contact Information

Susan Varnum, Program Director and Professor of Chemistry
 Senior Associate Dean for Undergraduate Affairs and Science Education
 College of Science and Technology
 Gladfelter Hall, Room 629
 215-204-4073
 susan.varnum@temple.edu

Minor Requirements

To earn a minor in Natural Sciences, students must meet the requirements listed below. Please note that many of these courses have Math course prerequisites that, if not already satisfied by major degree requirements, may add to the Total Credit Hours for the minor. For more information, please consult the course descriptions or ask an academic advisor.

Residency Requirements: At least 12 credits required for the minor must be completed at Temple. At least 12 SCTC credits must be completed at Temple.

Code	Title	Credit Hours
College of Science and Technology		
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
SCTC 1301	Problem Solving in Science	2
SCTC 1501	STEM Challenge: The World Around Us	4

or SCTC 1502	STEM Challenge: The World Within	
SCTC 2396	Writing for Science and Technology	3
SCTC 3001	History of Science	3
SCTC 3312	Coding STEM Lessons	1

Laboratory Science 1¹

Select one of the following: 4

BIOL 1011	General Biology I	
BIOL 1111	Introduction to Organismal Biology	
or BIOL 1911	Honors Introduction to Organismal Biology	
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
EES 2001	Physical Geology	
PHYS 1021	Introduction to General Physics I	
PHYS 1061	Elementary Classical Physics I	
or PHYS 1961	Honors Elementary Classical Physics I	
PHYS 2021	General Physics I	
or PHYS 2921	Honors General Physics I	

Laboratory Science 2¹

Select one of the following: 3-4

BIOL 1012	General Biology II	
BIOL 1112	Introduction to Biomolecules, Cells and Genomes	
or BIOL 1912	Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112	Introduction to Cellular and Molecular Biology	
or BIOL 2912	Honors Introduction to Cellular and Molecular Biology	
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II	
EES 2021	Sedimentary Environments	
PHYS 1004	Introduction to Astronomy (F)	
PHYS 1022	Introduction to General Physics II	
PHYS 1062	Elementary Classical Physics II	
or PHYS 1962	Honors Elementary Classical Physics II	
PHYS 2022	General Physics II	
or PHYS 2922	Honors General Physics II	

Total Credit Hours**23-24**

1

The two laboratory science courses must be from the same department.

Neuroscience: Cellular and Molecular BS

Overview

Offered by the Department of Biology, the **Bachelor of Science in Neuroscience: Cellular and Molecular** is designed to provide rigorous preparation in scientific knowledge at the molecular and cellular level to those students interested in pursuing advanced studies and professional development in neuroscience, medicine or a related field in life sciences. In addition to neuroscience, graduates in the major will be well prepared for graduate or professional studies in cell or molecular biology, biochemistry, biophysics, biomedical sciences, medicine, pharmacy, dentistry, and many allied health fields. Neuroscience graduates who do not pursue graduate studies will be prepared to accept technical positions in industry (pharmaceutical, biotech) or government and university laboratories. Graduates will be ready to conduct research on a range of neuroscience and related topics at the level of cells or molecules, including nervous system function, development, disease or injury.

Campus Location: Main

Program Code: ST-NSCM-BS

Distinction in the Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.2 cumulative GPA;
- successfully complete two semesters of BIOL 4591;
- submit final research paper; and
- present their research at a departmental research poster session.

Accelerated Programs

Accelerated programs provide a pathway for students to pursue both an undergraduate degree and an advanced degree in a shorter amount of time. Below is a list of available accelerated programs for students in the BS in Neuroscience: Cellular and Molecular.

- BS in Neuroscience: Cellular and Molecular / PSM in Biotechnology
- BS in Neuroscience: Cellular and Molecular / PSM in Bioinformatics and Biological Data Science
- BS in Neuroscience: Cellular and Molecular / PSM in Bioinnovation

Undergraduate Contact Information

Robert Sanders, Chair
Biology-Life Sciences Building, Room 255
215-204-8851

Erik Cordes, Vice Chair
Biology-Life Sciences Building, Room 315
215-204-8876

Eleni Anni, Faculty Advisor for Neuroscience: Cellular and Molecular Majors
Biology-Life Sciences Building, Room 352B
215-204-5764
eleni.anni@temple.edu

Learn more about the Bachelor of Science in Neuroscience: Cellular and Molecular.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
BIOL 2297	Research Techniques in Genetics (S)	3
BIOL 3396	Scientific Writing for Biology: The Art of Communicating	3
BIOL 4396	Advanced Study in Biology	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
 - Students must satisfy general Temple University residency requirements (p. 1838).
- #### 2. College Requirements
- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
 - Complete a one-credit first-year or transfer seminar.

- SCTC 1001 CST First Year Seminar for every entering first-year CST student.
- SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (77-84 s.h.)

At least 9 courses required for the major must be completed at Temple. At least 4 Biology courses must be completed at Temple.

Code	Title	Credit Hours
Biology		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology Honors Introduction to Organismal Biology	4
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology Honors Introduction to Cellular and Molecular Biology	4
BIOL 2207	Genetics (S)	3
BIOL 2297	Research Techniques in Genetics (WI, S) ¹	3
BIOL 3204	Cell Structure and Function (F)	4
BIOL 3352	Systems Neuroscience	3
BIOL 3358	Cellular and Molecular Neuroscience (S)	3
Chemistry		
CHEM 1031 & CHEM 1033 or CHEM 1951 & CHEM 1953	General Chemistry I and General Chemistry Laboratory I Honors General Chemical Science I and Honors Chemical Science Laboratory I	4
CHEM 1032 & CHEM 1034 or CHEM 1952 & CHEM 1954	General Chemistry II and General Chemistry Laboratory II Honors General Chemical Science II and Honors Chemical Science Laboratory II	4
CHEM 2201 & CHEM 2203 or CHEM 2211 & CHEM 2213 or CHEM 2921 & CHEM 2923	Organic Chemistry I and Organic Chemistry Laboratory I Organic Chemistry for Majors I and Organic Majors Laboratory I Organic Chemistry for Honors I and Organic Honors Laboratory I	4
CHEM 2202 & CHEM 2204 or CHEM 2212 & CHEM 2214 or CHEM 2922 & CHEM 2924	Organic Chemistry II and Organic Chemistry Laboratory II Organic Chemistry for Majors II and Organic Majors Laboratory II Organic Chemistry for Honors II and Organic Honors Laboratory II	4
Mathematics		
Select one of the following:		4
MATH 1041	Calculus I	
MATH 1941	Honors Calculus I	
Select one of the following:		4
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
MATH 1042	Calculus II	
MATH 1942	Honors Calculus II	
Neuroscience		
Neuroscience electives - select five of the following: ²		15-20
BIOL 3265	Developmental Biology	
BIOL 3312	Biostatistics	
BIOL 3324	Molecular Biology	
BIOL 3325	Research Techniques in Molecular Biology (S)	
BIOL 3333	Advanced Techniques in Microscopy (S)	
BIOL 3334	Mammalian Physiology (S)	
BIOL 3337	Comparative Biomechanics	

BIOL 3354	Neural Basis of Animal Behavior (F)
BIOL 3356	Organization and Development of the Nervous System (S)
BIOL 3361	Molecular Neuropharmacology (F)
BIOL 3365	The New Neuroimmunology (S)
BIOL 4364	Biochemistry of Embryogenesis
BIOL 4375	General Biochemistry I
BIOL 4396	Advanced Study in Biology (WI)
NSCI 3087	Techniques in Neuroscience (non-CST course)
PSY 2501	Foundations of Behavioral Neuroscience (non-CST course)
PSY 2502	Foundations of Cognitive Neuroscience (non-CST course)

Neuroscience Research/Independent Study courses ³

Take the following for a total of 6-8 credits: 6-8

BIOL 4591	Research in Neuroscience
BIOL 3082	Independent Research II

Physics

PHYS 2021	General Physics I	4
or PHYS 2921	Honors General Physics I	
PHYS 2022	General Physics II	4
or PHYS 2922	Honors General Physics II	

Total Credit Hours **77-84**

1

This course has a co-requisite of BIOL 2207.

2

Three of the five electives must be within the College of Science & Technology.

3

Research in Neuroscience (BIOL 4591)/Independent Research II (BIOL 3082) course choice should be determined in consultation with the Neuroscience faculty advisor. Students are required to have BOTH a B- or above in BIOL 3352 AND a Science GPA of 3.2 to take BIOL 4591 Research in Neuroscience. Students are required to have BOTH a B- or above in BIOL 3352 AND a Science GPA of 3.0 to take BIOL 3082 Independent Research II. The Science GPA consists of all required courses in Biology, Calculus, Chemistry, and Physics.

Code	Title	Credit Hours
(F) - Fall course only		
(S) - Spring only course		

With the exception in footnote 3 above, the research and independent study courses shown below do not count as Neuroscience electives, but may count as free elective credits toward graduation. Most research courses can only be taken ONCE for a letter grade. Check individual course descriptions for details and/or exceptions.

Code	Title	Credit Hours
BIOL 2082	Independent Research I	1 to 4
BIOL 3082	Independent Research II	1 to 4
BIOL 3181	Cooperative Research in Biochemistry	3
BIOL 3681	Cooperative Studies	2 to 4
BIOL 3685	Externship Studies	3
BIOL 4291	Extrdepartmental Research	1 to 4
BIOL 4391	Accelerated Research in Biology	1 to 4
BIOL 4483	Accelerated Research in Biochemistry	3
BIOL 4491	Research in Biochemistry	3
BIOL 4591	Research in Neuroscience	1 to 4

Note: Grades of C- or higher are required unless otherwise specified in all courses for the major, including course prerequisites. The College of Science and Technology requires that students have a GPA of at least 2.00 overall and at least 2.00 in the courses applicable to their major and/or minor GPA to graduate.

Suggested Academic Plan

Bachelor of Science in Neuroscience: Cellular and Molecular

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
SCTC 1001	CST First Year Seminar	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Elective		2
Credit Hours		15
Spring		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology or Honors Introduction to Organismal Biology	4
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
Select one of the following:		4
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
MATH 1042	Calculus II	
MATH 1942	Honors Calculus II	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Credit Hours		15
Year 2		
Fall		
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology or Honors Introduction to Cellular and Molecular Biology	4
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2211 & CHEM 2213	Organic Chemistry for Majors I and Organic Majors Laboratory I	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I (F)	
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Elective		5
Credit Hours		16
Spring		
BIOL 2207	Genetics (S)	3

BIOL 2297	Research Techniques in Genetics (S)	3
BIOL 3352	Systems Neuroscience	3
Select one of the following:		4
CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II	
CHEM 2212 & CHEM 2214	Organic Chemistry for Majors II and Organic Majors Laboratory II	
CHEM 2922 & CHEM 2924	Organic Chemistry for Honors II and Organic Honors Laboratory II (S)	
GenEd Breadth Course		3
Credit Hours		16
Year 3		
Fall		
BIOL 3204	Cell Structure and Function (F)	4
Neuroscience Elective ¹		3-4
PHYS 2021 or PHYS 2921	General Physics I or Honors General Physics I	4
GenEd Breadth Course		3
Elective		1-0
Credit Hours		15
Spring		
BIOL 3358	Cellular and Molecular Neuroscience (S)	3
Neuroscience Elective ¹		3-4
PHYS 2022 or PHYS 2922	General Physics II or Honors General Physics II	4
GenEd Breadth Course		3-4
Elective		2-0
Credit Hours		15
Year 4		
Fall		
Select one of the following: ²		3-4
BIOL 4591	Research in Neuroscience	
BIOL 3082	Independent Research II	
Neuroscience Elective ¹		3-4
Choose one of the following: ³		3-4
BIOL 4396	Advanced Study in Biology	
Neuroscience Elective ¹		
GenEd Breadth Course		3
Elective		3-0
Credit Hours		15
Spring		
Select one of the following: ²		3-4
BIOL 4591	Research in Neuroscience	
BIOL 3082	Independent Research II	
Choose one of the following: ³		3-4
BIOL 4396	Advanced Study in Biology	
Neuroscience Elective ¹		
GenEd Breadth Course		3
Elective		7-5
Credit Hours		16
Total Credit Hours		123

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

Select from the Neuroscience Electives list under Requirements.

2

Research in Neuroscience (BIOL 4591)/Independent Research II (BIOL 3082) course choice should be determined in consultation with the Neuroscience faculty advisor. Students are required to have BOTH a B- or above in BIOL 3352 AND a Science GPA of 3.2 to take BIOL 4591 Research in Neuroscience. Students are required to have BOTH a B- or above in BIOL 3352 AND a Science GPA of 3.0 to take BIOL 3082 Independent Research II. The Science GPA consists of all required courses in Biology, Calculus, Chemistry, and Physics.

3

Either BIOL 4396 or a Neuroscience elective can be chosen in the fall term. The course not completed in the fall must be completed in the spring term.

Pharmaceutical Sciences BS

Overview

The **Bachelor of Science in Pharmaceutical Sciences** is designed for students who are planning to obtain both a Bachelor of Science in Pharmaceutical Sciences and a Doctor of Pharmacy degree in seven years. It provides a solid science foundation and broad liberal arts education while preparing students for careers in the areas of research/laboratory work, quality control, and administration in pharmaceuticals, biotechnology, and healthcare industries.

This major is open to incoming first year students who are direct admits to the Temple University School of Pharmacy. Current students who have been admitted to the Pharmacy School and can complete this major within their first year of Temple University School of Pharmacy are welcome to declare this major.

The BS in Pharmaceutical Sciences is a 4-year, non-licensure, undergraduate bachelor's degree program, and does not qualify the student for state board examination to become a registered pharmacist.

Students must meet the admissions requirements for early admission to the Temple University School of Pharmacy.

Campus Location: Main

Program Code: ST-PS-BS

Contact Information

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Office of Pre-Professional Health Advising
 Mitten Hall, Suite 110
 215-204-2513
 healthadvising@temple.edu

Learn more about the Bachelor of Science in Pharmaceutical Sciences.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
SCTC 2396	Writing for Science and Technology	3
And one additional writing-intensive course		3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
 - Students must satisfy general Temple University residency requirements (p. 1838).
- #### 2. College Requirements
- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above). Up to 33 credits taken during the first year at the School of Pharmacy can be used toward this requirement.
 - Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (47-50 s.h.)

At least 9 courses required for the major must be completed at Temple. Pharmacy courses will count towards this requirement.

Code	Title	Credit Hours
Chemistry		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2211 & CHEM 2213	Organic Chemistry for Majors I and Organic Majors Laboratory I (F)	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I (F)	
Select one of the following:		4
CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II	
CHEM 2212 & CHEM 2214	Organic Chemistry for Majors II and Organic Majors Laboratory II (S)	

CHEM 2922 & CHEM 2924	Organic Chemistry for Honors II and Organic Honors Laboratory II (S)	
Biology		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology Honors Introduction to Organismal Biology	4
Select one of the following:		4
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology Honors Introduction to Cellular and Molecular Biology	
Mathematics		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
Physics		
Select one of the following:		4
PHYS 1021	Introduction to General Physics I	
PHYS 1061 or PHYS 1961	Elementary Classical Physics I Honors Elementary Classical Physics I	
PHYS 2021 or PHYS 2921	General Physics I Honors General Physics I	
Anatomy & Physiology		
Select one of the following: ¹		3-4
KINS 1221	Principles of Anatomy and Physiology I	
KINS 1223	Human Anatomy and Physiology I	
BIOL 2233	Mammalian Anatomy (F)	
Select one of the following: ¹		3-4
KINS 1222	Principles of Anatomy and Physiology II	
KINS 1224	Human Anatomy and Physiology II	
BIOL 3334	Mammalian Physiology (S)	
Economics		
Select one of the following:		3
ECON 1101	Macroeconomic Principles	
ECON 1102	Microeconomic Principles	
ECON 1901	Honors Macroeconomic Principles	
ECON 1902	Honors Microeconomic Principles	
Science and Technology		
SCTC 2396	Writing for Science and Technology (WI)	3
Writing-Intensive		
Writing-Intensive Course (WI)		3-4
Total Credit Hours		47-50
Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

1

The anatomy and physiology courses must either both be KINS courses or BIOL courses. Students may not mix and match these courses.

4. School of Pharmacy requirements (33 s.h.)

Suggested Academic Plan

Bachelor of Science in Pharmaceutical Sciences

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
SCTC 1001	CST First Year Seminar	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Elective		2
Credit Hours		15
Spring		
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology or Honors Introduction to Organismal Biology	4
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Elective		4
Credit Hours		15
Year 2		
Fall		
Select one of the following:		4
BIOL 1112 or BIOL 1912	Introduction to Biomolecules, Cells and Genomes or Honors Introduction to Biomolecules, Cells and Genomes	
BIOL 2112 or BIOL 2912	Introduction to Cellular and Molecular Biology or Honors Introduction to Cellular and Molecular Biology	
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2211 & CHEM 2213	Organic Chemistry for Majors I and Organic Majors Laboratory I (F)	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I (F)	
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Credit Hours		14
Spring		
Select one of the following:		4
CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II	

CHEM 2212 & CHEM 2214	Organic Chemistry for Majors II and Organic Majors Laboratory II (S)	
CHEM 2922 & CHEM 2924	Organic Chemistry for Honors II and Organic Honors Laboratory II (S)	
Select one of the following:		4
PHYS 1021	Introduction to General Physics I	
PHYS 1061 or PHYS 1961	Elementary Classical Physics I or Honors Elementary Classical Physics I	
PHYS 2021 or PHYS 2921	General Physics I or Honors General Physics I	
GenEd Breadth Course		3
Elective		3
Elective		2
Credit Hours		16
Year 3		
Fall		
Select one of the following: ¹		3-4
BIOL 2233	Mammalian Anatomy (F)	
KINS 1221	Principles of Anatomy and Physiology I (F)	
KINS 1223	Human Anatomy and Physiology I	
Select one of the following:		3
ECON 1101	Macroeconomic Principles	
ECON 1102	Microeconomic Principles	
ECON 1901	Honors Macroeconomic Principles	
ECON 1902	Honors Microeconomic Principles	
Writing-Intensive Course ^{WI}		3-4
GenEd Breadth Course		3-4
Elective		3-0
Credit Hours		15
Spring		
Select one of the following: ¹		3-4
BIOL 3334	Mammalian Physiology (S)	
KINS 1222	Principles of Anatomy and Physiology II (S)	
KINS 1224	Human Anatomy and Physiology II	
SCTC 2396	Writing for Science and Technology	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Elective		3-2
Credit Hours		15
Year 4		
Fall		
School of Pharmacy courses		16
Credit Hours		16
Spring		
School of Pharmacy courses		17
Credit Hours		17
Total Credit Hours		123

1

The anatomy and physiology courses must either both be KINS courses or BIOL courses. Students may not mix and match these courses.

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

NOTES:

- 62-65 credits - required undergraduate prerequisites for admission to the Pharmacy Program.
- 28-25 credits - required to complete undergraduate degree requirements, including GenEd and Writing Intensive requirements not satisfied with the 62-65 credits required for admission to the Pharmacy Program.
- 33 credits - School of Pharmacy credits.

Physics BA

Overview

The **Bachelor of Arts in Physics**, offered by the Department of Physics, is designed for students who are planning for a non-research career in a field which nevertheless has an important science component. Examples include patent law, environmental law enforcement, medicine, or sales or management in a high-technology industry. Physics students learn how the natural world works. The laboratory, math and problem-solving skills they pick up are great for the job market. Physics majors teach, work on Wall Street and serve in the military. They also perform well on the admission tests for law and medical schools.

Campus Location: Main

Program Code: ST-PHYS-BA

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.5 major GPA and
- carry out an independent study or undergraduate thesis project.

Consult the undergraduate physics faculty advisor for more details.

Accelerated Programs

Accelerated programs provide a pathway for students to pursue both an undergraduate degree and an advanced degree in a shorter amount of time. Below is a list of available accelerated programs for students in the BA in Physics.

- BA in Physics / MEd in Middle Grades Education with a Concentration in Science
- BA in Physics / MEd in Middle Grades Education with a Concentration in Science and Language Arts
- BA in Physics / MS in Physics (p. 1446)

Undergraduate Contact Information

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 215-204-5655

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 215-204-7639
 zbig.dziembowski@temple.edu

Learn more about the Bachelor of Arts in Physics.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Arts Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
PHYS 2796	Introduction to Modern Physics	4
PHYS 4796	Experimental Physics	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
 - Students must satisfy general Temple University residency requirements (p. 1838).
- #### 2. College Requirements
- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
 - A minimum of 6 of these credits must be upper-level (courses numbered 2000 and above) CLA credits.
 - Successful completion or waiver from the second level of a foreign language.
 - Complete a one-credit first-year seminar or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Arts (56 s.h.)

At least 7 courses required for the major must be completed at Temple. At least 5 Physics courses must be completed at Temple.

Code	Title	Credit Hours
Mathematics		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
Sequenced Science Courses ¹		
Select one of the following sequences:		8
BIOL 1011 & BIOL 1012	General Biology I and General Biology II ²	
BIOL 1111 & BIOL 2112	Introduction to Organismal Biology and Introduction to Cellular and Molecular Biology	
BIOL 1911 & BIOL 2912	Honors Introduction to Organismal Biology and Honors Introduction to Cellular and Molecular Biology	
CHEM 1031 & CHEM 1033 & CHEM 1032 & CHEM 1034	General Chemistry I and General Chemistry Laboratory I and General Chemistry II and General Chemistry Laboratory II	
EES 2001	Physical Geology (and a 2000+ Elective)	
Physics Courses		
PHYS 1008	Physics Seminar I	1
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	

PHYS 2921	Honors General Physics I (F)	
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	
PHYS 2101	Classical Mechanics (S)	3
PHYS 2502	Mathematical Physics (S)	4
PHYS 2796	Introduction to Modern Physics (S)	4
PHYS 3301	Electricity and Magnetism (F)	4
PHYS 4796	Experimental Physics (S)	3
Physics Electives		
Select three of the following:		9
PHYS 1004	Introduction to Astronomy (F)	
PHYS 2511 & PHYS 3511	Scientific Computing I and Scientific Computing II	
PHYS 3101	Analytical Mechanics (F)	
PHYS 3302	Classical Electromagnetism (S)	
PHYS 3701	Introduction to Quantum Mechanics I (S)	
PHYS 4101	Thermal Physics (F)	
PHYS 4301	Electronics (S - odd years)	
PHYS 4302	Optics (F)	
PHYS 4701	Introduction to Solid State Physics (S - even years)	
PHYS 4702	Introduction to Quantum Mechanics II (F)	

Total Credit Hours **56**

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

Note: PHYS 3091 is not available for major credit.

1

Students are required to take a two-semester sequence of laboratory science electives not within physics. The science courses can be chosen from Biology, Chemistry, or Earth & Environmental Science.

2

BIOL 1011 is a Fall only course; BIOL 1012 is a Spring only course.

Suggested Academic Plan

Bachelor of Arts in Physics

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
PHYS 1008	Physics Seminar I	1
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
SCTC 1001	CST First Year Seminar	1

ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Elective		1
Credit Hours		15
Spring		
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Elective		4
Credit Hours		15
Year 2		
Fall		
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Elective		9
Credit Hours		16
Spring		
PHYS 2502	Mathematical Physics (S)	4
PHYS 2796	Introduction to Modern Physics (S)	4
GenEd Breadth Course		3-4
Elective		4-3
Credit Hours		15
Year 3		
Fall		
PHYS 3301	Electricity and Magnetism (F)	4
Sequenced Science Part 1 ¹		4
Foreign Language 1001 - First Level		4
GenEd Breadth Course		3
Credit Hours		15
Spring		
PHYS 2101	Classical Mechanics (S)	3
Sequenced Science Part 2 ¹		4
Foreign Language 1002 - Second Level		4
GenEd Breadth Course		3
Elective		2
Credit Hours		16
Year 4		
Fall		
Physics Elective ²		3
Physics Elective ²		3
Upper-level CLA Course (numbered 2000 and above)		3
GenEd Breadth Course		3
Elective		4
Credit Hours		16

Spring

PHYS 4796	Experimental Physics (S)	3
Physics Elective ²		3
Upper-level CLA Course (numbered 2000 and above)		3
GenEd Breadth Course		3
Elective		3
Credit Hours		15
Total Credit Hours		123

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

Select from the Sequenced Science Courses list under Requirements.

2

Select from the Physics Electives list under Requirements.

Physics BS

Overview

The **Bachelor of Science in Physics**, offered by the Department of Physics, provides strong preparation for those wishing to attend graduate school in physics or related disciplines and is recommended for those who intend to enter the scientific workforce upon completion of a bachelor's degree. Physics students learn how the natural world works. The laboratory, math and problem-solving skills they pick up are great for the job market. Physics majors teach, work on Wall Street and serve in the military. They also perform well on the admission tests for law and medical schools.

Campus Location: Main**Program Code:** ST-PHYS-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.5 major GPA and
- carry out an independent study or undergraduate thesis project.

Consult the undergraduate physics faculty advisor for more details.

Accelerated Programs

Accelerated programs provide a pathway for students to pursue both an undergraduate degree and an advanced degree in a shorter amount of time. Below is a list of available accelerated programs for students in the BS in Physics.

- BS in Physics / MEd in Middle Grades Education with a Concentration in Science
- BS in Physics / MEd in Middle Grades Education with a Concentration in Mathematics and Science
- BS in Physics / MS in Physics (p. 1447)

Undergraduate Contact Information

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Zbigniew Dziembowski, Faculty Advisor
 Science, Education and Research Center, Room 412
 215-204-7639
 zbig.dziembowski@temple.edu

Learn more about the Bachelor of Science in Physics.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
PHYS 2796	Introduction to Modern Physics	4
PHYS 4796	Experimental Physics	3

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (72-77 s.h.)

A least 9 courses required for the major must be completed at Temple. At least 8 Physics courses must be completed at Temple.

Code	Title	Credit Hours
Mathematics		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
Select one of the following:		3-4
MATH 2041	Differential Equations I	
MATH 2045	Differential Equations with Linear Algebra	
MATH 2941	Honors Differential Equations I	
Two science or mathematics elective courses		
These two electives can be chosen from Biology, Chemistry, Engineering, Earth & Environmental Science, Mathematics or Physics in consultation with the faculty advisor.		6-8
Physics Courses		
PHYS 1008	Physics Seminar I	1
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	

PHYS 2922	Honors General Physics II (S)	
PHYS 2101	Classical Mechanics (S)	3
PHYS 2511	Scientific Computing I	1.5
PHYS 3511	Scientific Computing II	1.5
PHYS 2502	Mathematical Physics (S)	4
PHYS 2796	Introduction to Modern Physics (S)	4
PHYS 3101	Analytical Mechanics (F)	3
PHYS 3301	Electricity and Magnetism (F)	4
PHYS 3302	Classical Electromagnetism (S)	3
PHYS 3701	Introduction to Quantum Mechanics I (S)	3
PHYS 4101	Thermal Physics (F)	3
PHYS 4302	Optics (F)	3
PHYS 4796	Experimental Physics (S)	3
Select two of the following:		6-8
PHYS 1454	Observational Astronomy Through Design	
PHYS 3424	Introduction to Astrophysics	
PHYS 3702	Optical and Electronic Properties of Materials, Including Thin Films and Nanomaterials (F)	
PHYS 4801	Atomic, Molecular and Optical Physics	
PHYS 4301	Electronics (S (odd years))	
PHYS 4701	Introduction to Solid State Physics (S (even years))	
PHYS 4702	Introduction to Quantum Mechanics II (F)	

Total Credit Hours **72-77**

Note: PHYS 3091 is not available for major credit.

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

Suggested Academic Plan

Bachelor of Science in Physics

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MATH 1041 or MATH 1941	Calculus I or Honors Calculus I	4
PHYS 1008	Physics Seminar I	1
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
SCTC 1001	CST First Year Seminar	1
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
Elective		1
Credit Hours		15
Spring		
MATH 1042 or MATH 1942	Calculus II or Honors Calculus II	4

Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	
PHYS 2511	Scientific Computing I	1.5
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
Elective		3
Credit Hours		15.5
Year 2		
Fall		
MATH 2043 or MATH 2943	Calculus III or Honors Calculus III	4
Select one of the following:		3-4
MATH 2041	Differential Equations I	
MATH 2045	Differential Equations with Linear Algebra	
MATH 2941	Honors Differential Equations I	
PHYS 2796	Introduction to Modern Physics	4
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Elective		4-3
Credit Hours		18
Spring		
PHYS 2101	Classical Mechanics (S)	3
PHYS 2502	Mathematical Physics (S)	4
GenEd Breadth Course		3-4
Elective		6-5
Credit Hours		16
Year 3		
Fall		
PHYS 3101	Analytical Mechanics (F)	3
PHYS 3301	Electricity and Magnetism (F)	4
PHYS 3511	Scientific Computing II	1.5
Science Elective ¹		3-4
GenEd Breadth Course		3
Elective		2-1
Credit Hours		16.5
Spring		
PHYS 3302	Classical Electromagnetism (S)	3
PHYS 3701	Introduction to Quantum Mechanics I (S)	3
Science Elective ¹		3-4
GenEd Breadth Course		3
Elective		3-2
Credit Hours		15
Year 4		
Fall		
PHYS 4101	Thermal Physics (F)	3
PHYS 4302	Optics (F)	3
Physics Elective ^{2, 3}		3-4
GenEd Breadth Course		3

Elective		3-2
	Credit Hours	15
Spring		
PHYS 4796	Experimental Physics (S)	3
Physics Elective ^{2, 3}		3-4
GenEd Breadth Course		3
Elective		3-2
	Credit Hours	12
	Total Credit Hours	123

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

1

The elective can be chosen from Biology, Chemistry, Engineering, Earth & Environmental Science, Mathematics or Physics in consultation with the faculty advisor.

2

Complete two of the seven courses listed: PHYS 1454, PHYS 3424, PHYS 3702, PHYS 4301, PHYS 4701, PHYS 4702, PHYS 4801.

3

PHYS 3424 and PHYS 4701 are offered in even-numbered years. PHYS 3702 and PHYS 4301 are offered in odd-numbered years.

Physics Minor

Overview

Offered by the Department of Physics, the **Minor in Physics** is designed to provide a solid foundation in physics beyond the introductory course level, followed by elective courses which will familiarize the student with areas of modern physics, and the concepts and techniques employed therein.

Campus Location: Main

Undergraduate Contact Information

Peter Riseborough, Chair
Science, Education and Research Center, Room 444
215-204-5655

Zbigniew Dziembowski, Faculty Advisor
Science, Education and Research Center, Room 412
215-204-7639
zbig.dziembowski@temple.edu

Minor Requirements

Code	Title	Credit Hours
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I (calculus-based physics or equivalent)	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II (calculus-based physics or equivalent)	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	
PHYS 3301	Electricity and Magnetism (F)	4

or ECE 3712	Introduction to Electromagnetic Fields and Waves	
PHYS 2796	Introduction to Modern Physics (S)	4
Six additional semester hours of Physics courses at or above the 2000-level chosen with the approval of the undergraduate Physics advisor		6
Total Credit Hours		22

Residency Requirements: At least 3 courses required for the minor must be completed at Temple. At least 3 Physics courses must be completed at Temple.

Physics with Teaching BS

Overview

The **Bachelor of Science in Physics with Teaching**, offered by the Department of Physics, is part of Temple's innovative "TUteach" teacher-training program. The BS in Physics with Teaching provides broad training in physics and prepares students for a career in secondary school teaching or an entry level position as a physicist. The education courses in major include supervised teaching in school district classrooms and emphasize inquiry-based approaches to learning. Students in the BS in Physics with Teaching degree program become *eligible* for a Pennsylvania teacher certification when they complete all the requirements for the degree that include theoretical and practical courses in education specifically designed for science and mathematics majors. In order to be *recommended* for Pennsylvania teacher certification, students must graduate with:

1. a BS with Teaching degree and
2. meet GPA and testing requirements of the state of Pennsylvania.

Students will be scheduled once each semester to meet with the TUteach advisor to ensure that students have knowledge of academic programming, internships opportunities and testing options that include test preparation. The state of Pennsylvania has specific candidacy requirements. The TUteach advisor will also help the students complete and submit the candidacy documents. All students joining the program in their freshman year must complete the PAPA examination or acquire the PAPA waiver within their first 72 credits. Transfer students, from within Temple and those from other institutions, will build a tailored program with the academic and testing benchmarks structured for efficient degree completion with the TUteach advisor. Students are encouraged to complete the appropriate PRAXIS II examination prior to student teaching. Students are encouraged to take internship courses to expand their teaching portfolio or select elective courses that will extend their knowledge of science and teaching practice.

Campus Location: Main

Program Code: ST-PHTC-BS

Distinction in Major

To graduate with distinction in this major, a student must satisfy the following criteria:

- achieve a minimum 3.5 major GPA;
- achieve a minimum 3.5 GPA in all Physics courses required for the major;
- achieve a minimum 3.9 GPA in the following courses:
 - SCES 2189 or SCTC 3485
 - SCES 4189 or SCTC 4485
 - EDUC 4802
 - EDUC 4388;
- write a final research paper either in a topic combining both major content and pedagogy; and
- present at a departmental research poster session.

Consult the undergraduate TUteach advisor for more details.

Undergraduate Contact Information

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Kenneth Ruff, TUTEACH Faculty Advisor, Academic Programs Director, and Assistant Professor of Practice
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Learn more about the Bachelor of Science in Physics with Teaching.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Bachelor of Science Requirements

Summary of Requirements for the Degree

1. University Requirements (124 total s.h.)

- Students must complete all University requirements including those listed below.
- All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
EES 2096	Climate Change: Oceans To Atmosphere	
EES 4696	Vertebrate Paleontology and Taphonomy	
PHYS 2796	Introduction to Modern Physics	
PHYS 4796	Experimental Physics	
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	

- Students must complete the General Education (GenEd) requirements.
 - See the General Education (p. 83) section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete TUTEACH majors receive a waiver for 1 Human Behavior (GB), 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (p. 1838).

2. College Requirements

- A minimum of 90 total credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), and/or the College of Engineering (ENG).
 - A minimum of 45 of these credits must be upper-level (courses numbered 2000 and above).
- Complete a one-credit first-year or transfer seminar.
 - SCTC 1001 CST First Year Seminar for every entering first-year CST student.
 - SCTC 2001 CST Transfer Seminar for every entering transfer CST student.

3. Major Requirements for Bachelor of Science (90 s.h.)¹

At least 9 courses required for the major must be completed at Temple. At least 6 Physics courses and 3 Education courses must be completed at Temple. Though not required, students are strongly encouraged to increase training and field work experience by enrolling in SCTC 1385, SCTC 2385, or SCTC 2389. Students will also benefit from directed laboratory projects offered through SCTC 3185. These courses are offered every semester.

Code	Title	Credit Hours
Mathematics		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042	Calculus II	4

or MATH 1942	Honors Calculus II	
MATH 2043	Calculus III	4
or MATH 2943	Honors Calculus III	
Physics		
PHYS 1008	Physics Seminar I	1
PHYS 1061	Elementary Classical Physics I	4
or PHYS 1961	Honors Elementary Classical Physics I	
or PHYS 2021	General Physics I	
or PHYS 2921	Honors General Physics I	
PHYS 1062	Elementary Classical Physics II	4
or PHYS 1962	Honors Elementary Classical Physics II	
or PHYS 2022	General Physics II	
or PHYS 2922	Honors General Physics II	
PHYS 2101	Classical Mechanics	3
PHYS 2502	Mathematical Physics	4
PHYS 2796	Introduction to Modern Physics	4
PHYS 3091	Research Methods	3
PHYS 3301	Electricity and Magnetism	4
PHYS 4796	Experimental Physics	3
Physics Electives - Select three of the following:		9
PHYS 1004	Introduction to Astronomy	
PHYS 2511 & PHYS 3511	Scientific Computing I and Scientific Computing II	
PHYS 3101	Analytical Mechanics	
PHYS 3302	Classical Electromagnetism	
PHYS 3701	Introduction to Quantum Mechanics I	
PHYS 4101	Thermal Physics	
PHYS 4301	Electronics	
PHYS 4302	Optics	
PHYS 4701	Introduction to Solid State Physics	
PHYS 4702	Introduction to Quantum Mechanics II	
Sequenced Science courses ²		
Select one of the following sequences:		8
BIOL 1011 & BIOL 1012	General Biology I and General Biology II	
BIOL 1111 & BIOL 2112	Introduction to Organismal Biology and Introduction to Cellular and Molecular Biology	
CHEM 1031 & CHEM 1033 & CHEM 1032 & CHEM 1034	General Chemistry I and General Chemistry Laboratory I and General Chemistry II and General Chemistry Laboratory II	
EES 2001	Physical Geology (and an Earth & Environmental Science 2002+ Elective)	
College of Science & Technology		
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
SCTC 1389	Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners	2
SCTC 3001	History of Science	3
SCTC 3312	Coding STEM Lessons ³	1
Education		
EDUC 2179	Knowing and Learning in Mathematics and Science	3
EDUC 4388	TUteach Apprentice Teaching	4
EDUC 4802	TUteach Apprentice Teaching Seminar	3
MGSE 2189	Classroom Interactions (S)	3
or SCTC 3485	Science and Mathematics in the Classroom	

MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3
MGSE 4189	Project-Based Instruction (F)	3
or SCTC 4485	Integrating STEM Practice in Diverse Teaching Environments	
SPED 2231	Introduction to Special Education	3
Total Credit Hours		90

1

The certification requirements need to meet Pennsylvania Department of Education standards and are subject to change. All students are strongly recommended to check with the TUteach Advisor in the College of Science and Technology to affirm the requirements that pertain to their specific major. In addition, students should check the *Undergraduate Bulletin* web site for the most current information about these programs, or the TUteach web site. It is also recommended that all students meet with an advisor before enrolling in classes specific to these majors and leading to certification as a teacher. This is to assure that a candidate's intended program of study will be compatible with the new requirements.

2

Students are required to take a two-semester sequence of laboratory science electives not within physics. The science courses can be chosen from Biology, Chemistry or Earth & Environmental Science.

3

All students are required to take a minimum of one credit.

Suggested Academic Plan

Bachelor of Science in Physics with Teaching

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
MATH 1041	Calculus I	4
or MATH 1941	or Honors Calculus I	
PHYS 1008	Physics Seminar I	1
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
SCTC 1001	CST First Year Seminar	1
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
SCTC 1389	Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners	2
Credit Hours		15
Spring		
MATH 1042	Calculus II	4
or MATH 1942	or Honors Calculus II	
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Breadth Course		3
Elective		2
Credit Hours		17
Year 2		
Fall		
MATH 2043	Calculus III	4
or MATH 2943	or Honors Calculus III	

EDUC 2179	Knowing and Learning in Mathematics and Science	3
SPED 2231	Introduction to Special Education	3
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
Credit Hours		16
Spring		
PHYS 2101	Classical Mechanics (S)	3
PHYS 2502	Mathematical Physics (S)	4
PHYS 2796	Introduction to Modern Physics (S)	4
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Credit Hours		17
Year 3		
Fall		
PHYS 3301	Electricity and Magnetism (F)	4
Physics Elective (see approved list) ¹		3
Sequenced Science Part 1 (see approved list) ²		4
SCTC 3001	History of Science	3
MGSE 3796	Differentiated Literacy Instruction in the Disciplines (grades 7-12)	3
Credit Hours		17
Spring		
Physics Elective (see approved list) ¹		3
PHYS 3091	Research Methods (S)	3
PHYS 4796	Experimental Physics (S)	3
Select one of the following:		3
MGSE 2189	Classroom Interactions (S)	
SCTC 3485	Science and Mathematics in the Classroom	
Elective		3
Credit Hours		15
Year 4		
Fall		
Physics Elective (see approved list) ¹		3
Sequenced Science Part 2 (see approved list) ²		4
SCTC 3312	Coding STEM Lessons ³	1
Select one of the following:		3
MGSE 4189	Project-Based Instruction (F)	
SCTC 4485	Integrating STEM Practice in Diverse Teaching Environments	
GenEd Breadth Course		3-4
Elective		3-2
Credit Hours		17
Spring		
EDUC 4388	TUteach Apprentice Teaching	4
EDUC 4802	TUteach Apprentice Teaching Seminar	3
Elective		3
Credit Hours		10
Total Credit Hours		124

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		
1	Students are required to take three advanced physics electives selected from the list in the requirements section.	
2	Students are required to take a two-semester sequence of laboratory science electives not within physics. The science courses can be chosen from Biology, Chemistry or Earth & Environmental Science from the list in the requirements section.	
3	All students are required to take a minimum of one credit.	

Science and Technology Writing Certificate

Overview

In an era of accelerating scientific discovery and new challenges to society and the world, an understanding of science and technology (scientific literacy) is essential for the support of a well-informed public and enabling rational policies. The effective communication of science and technology is integral to science literacy. Individuals with skills in communicating and writing in the sciences and technology, and having a strong foundation in the sciences or related field, can gain rewarding careers in the private and public sector, in bringing to the public scientific matters at a variety of levels.

The **Certificate in Science and Technology Writing** provides a foundational step for individuals seeking careers in this area. As science and technology writing necessarily requires a strong foundation in the sciences, the certificate program is taken alongside a major in a science field. The program is open to students from any college provided their major is STEM-based.

Campus Location: Main

Program Code: ST-SATW-CERT

Undergraduate Contact Information

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Jay Lunden, Faculty Advisor for Biology Majors - first and second year
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evleck@temple.edu

Learn more about the undergraduate certificate in Science and Technology Writing.

Certificate Requirements

Prerequisites

Prerequisites for BIOL 4522, BIOL 4532 and BIOL 4533 include the requirement that students will have completed at least one of the following upper-level courses.

Code	Title	Credit Hours
Select one of the following:		
BIOL 3114	Evolutionary Ecology	3-4
BIOL 3201	Human Genetics	
BIOL 3204	Cell Structure and Function (F)	
BIOL 3225	Evolutionary Genetics	
BIOL 3232	Behavioral Genetics	
BIOL 3241	Genomics and Evolutionary Biology of Parasites and Other Dependent Species	
BIOL 3245	Marine Ecology	
BIOL 3254	Animal Behavior	
BIOL 3265	Developmental Biology	
BIOL 3275	Ecology of Invasive Species	
BIOL 3307	Conservation Biology	
BIOL 3316	Tropical Marine Biology	
BIOL 3321	Plant Community Ecology	
BIOL 3323	Global Change Science: Analytics with R	
BIOL 3324	Molecular Biology	
BIOL 3325	Research Techniques in Molecular Biology	
BIOL 3327	Immunology	
BIOL 3328	Virology	
BIOL 3329	Developmental Genetics	
BIOL 3336	Freshwater Ecology	
BIOL 3352	Systems Neuroscience	
BIOL 3364	Theory and Applications of Cancer Biology	
BIOL 3379	Biotechnology	
BIOL 3389	Field Research in Community Ecology	
BIOL 3396	Scientific Writing for Biology: The Art of Communicating	
BIOL 3403	Genomic Biology	
CHEM 3001	Inorganic Chemistry	
CHEM 3301	Physical Chemistry Lecture I	
CHEM 3302	Physical Chemistry Lecture II	
CHEM 4401	Biochemistry I	
CIS 3207	Introduction to Systems Programming and Operating Systems	
CIS 3223	Data Structures and Algorithms	
CIS 3309	Component-Based Software Design	
CIS 3329	Network Architectures	
EES 2022	Paleontology and Stratigraphy	
EES 3001	Igneous and Metamorphic Petrology	
EES 4101	Structural Geology	
MATH 3043	Numerical Analysis I	
MATH 3096	Introduction to Modern Algebra	
MATH 3098	Modern Algebra	
MATH 3137	Real & Complex Analysis I	
MATH 3141	Advanced Calculus I	
PHYS 3301	Electricity and Magnetism	
PHYS 3302	Classical Electromagnetism	

PHYS 3701	Introduction to Quantum Mechanics I	
PHYS 4101	Thermal Physics	
Total Credit Hours		3-4

Required Courses

Students pursuing a Certificate in Science and Technology Writing must complete the following courses:

Code	Title	Credit Hours
College of Science and Technology		
SCTC 2396	Writing for Science and Technology	3
Discipline-Based Writing Intensive Course from Biology, Chemistry, Earth and Environmental Science, Computer and Information Sciences, Mathematics, Physics or other Science Major		
Select one of the following:		3-6
BIOL 2207 & BIOL 2297	Genetics and Research Techniques in Genetics (S) ¹	
BIOL 3396	Scientific Writing for Biology: The Art of Communicating	
BIOL 4396	Advanced Study in Biology	
CHEM 4196	Techniques of Chemical Measurement II	
CIS 3296	Software Design	
CIS 4397	Independent Research in Computer Science	
CIS 4398	Projects in Computer Science	
EES 2096	Climate Change: Oceans To Atmosphere	
EES 2097	Process Geomorphology	
ENVS 4198	Environmental Science Senior Seminar	
MATH 3096	Introduction to Modern Algebra	
MATH 3098	Modern Algebra	
MATH 4096	Senior Problem Solving	
PHYS 2796	Introduction to Modern Physics	
PHYS 4796	Experimental Physics	
Electives		
Select two of the following: ²		6
BIOL 4522	Introduction to Scientific and Regulatory Writing	
BIOL 4532	Introduction to Grant Writing	
BIOL 4533	Communicating Science to a Broader Audience / Non-Scientists	
SCTC 2105	Best Selling Science and Mathematics	
SCTC 2106	Learning Science with New Media	
Total Credit Hours		12-15

1

BIOL 2207 and BIOL 2297 are co-requisites of each other. Must be taken together.

2

Students may take only one of the following SCTC courses as an elective: SCTC 2105 or SCTC 2106. The other elective must be chosen from BIOL 4522, BIOL 4532 or BIOL 4533.

Residency Requirement: At least two courses for the certificate must be completed at Temple.

School of Sport, Tourism and Hospitality Management

Overview

Established in 1998, the School of Sport, Tourism and Hospitality Management (STHM) has a distinguished tradition preparing leaders in the sport, recreation, tourism and hospitality industries. Our innovative approach to learning combined with our location in the heart of Philadelphia fosters transformational education experiences and prepares students for the "experience economy." The total experience within the School of Sport, Tourism and Hospitality Management enables students to have an excellent fundamental education and exposure to working professionals, internships, and personalized placement services. As a result, students are given a competitive advantage in a job market projected to double in the next decade.

STHM's Department of Sport, Tourism and Hospitality Management offers three undergraduate major programs:

- Sport and Recreation Management
- Tourism and Hospitality Management
- Event and Entertainment Management

The focus of the undergraduate programs is to provide a broad educational foundation and to prepare students for entry into the sport and recreation management, event management, or tourism and hospitality occupations at the professional level.

The Sport and Recreation Management program prepares students interested in sport and recreation careers in the private/commercial sector, public recreation and park agencies, professional sports, interscholastic/intercollegiate athletics, youth sport agencies, voluntary agencies, campus services, armed forces and corporate/industrial settings.

The Tourism and Hospitality Management program prepares students for entry-level to mid-level positions in tourism, hospitality and event management. The program prepares students to work in convention and visitors' bureaus, destination management organizations, conference centers, resorts, casinos, hotels, theme parks, theaters and clubs.

The Event and Entertainment Management program provides students with the theoretical and practical knowledge, skills and tools to become leaders in the event and entertainment industries. Graduates will be able to pursue careers in a variety of areas related to the event and entertainment industries, including fairs, festivals, meetings, trade shows, live performances within events, historical/cultural/educational exhibits, online events, hybrid events, digital media events, film events, weddings, social events and special events.

All programs consist of coursework in the University's General Education (GenEd (p. 83)) program, the Fox School of Business and Management, STHM's major course requirements, and two supervised field experiences / internships.

Admissions

If you are applying for admission to Temple University as a freshman or a transfer student and wish to major in one of the above programs, you should select the School of Sport, Tourism and Hospitality Management as your school/college. Then choose your major—Sport and Recreation Management, Tourism and Hospitality Management, or Event and Entertainment Management—as your curriculum. Submit the required materials to the Office of Undergraduate Admissions. Once you apply, you will receive an AccessNet Username and Password to check your application status online on the Student TUportal System.

Information regarding the admissions process should be directed to the School's Enrollment Management team at asksthm@temple.edu.

Financial Aid and Scholarships

Information regarding financial aid and scholarships is available from the Office of Student Financial Services. For additional information pertaining to specific scholarships within the School's disciplines, refer to the Center for Student Services.

Honors Community

Students admitted to the University Honors Program are by default part of the School of Sport, Tourism and Hospitality Management's Honors Community. Students participate in pre-approved Fox School of Business and Management Honors courses and work with their STHM faculty to create honors versions of courses within the School of Sport, Tourism and Hospitality Management.

Student Association Information

Professional development begins with membership to associations/organizations for all School of Sport, Tourism and Hospitality Management students. We encourage our students to consider joining one of the below listed groups during their academic tenure in STHM. More information about each STHM Student Professional Organization (SPO) is available on Owl Connect.

Undergraduate Student Professional Organizations

Event Planning Association (EPA)

The Event Planning Association of STHM plans and engages all SPOs in social, bonding and informational activities, to ensure that the students are networking throughout STHM to help better their future careers.

Society of Minorities in Sport (SMS)

SMS is a professional organization that seeks to bring together undergraduate students in the community of sport who are underrepresented in the area of sport, leisure and recreation management. SMS empowers people to proactively advocate and encourage diverse experiences and opportunities that we as students bring together while working with professionals in the industry. Through conversations with minorities in leadership, as well as the facilitation of networking opportunities, SMS looks to expose students to a variety of learning and volunteer opportunities across our industry. From working with the Best Buddies initiative on their annual Friendship Walk, to programs with professors about the lack of representation among sports journalists, the experiences SMS provides for students help build awareness of issues facing minorities in sport. SMS believes in creating open and respectable environments to discuss issues within sport. SMS wants to ensure students receive the most up-to-date information possible to inspire them to make a difference in the world of sport.

Sport and Governance Association (SAGA)

The purpose of the Sport and Governance Association is to expose its members to the following opportunities: networking events with established professionals in the sports law industry, information sessions on the potential careers available, guest speaker engagements, and access to LSAT preparatory resources. All of these opportunities guide the members throughout the process of becoming successful sport business professionals. As a member of the Sport and Governance Association, individuals will gain an understanding of all the legal implications of business.

Tourism and Hospitality Student Professional Organization

This SPO will allow students an active role within their area(s) of interest as part of the Tourism and Hospitality industry. Partnering with several professional organizations, this is a great way to extend your network, become more involved, strengthen your resume and much, much more.

Women in Sport and Recreation Management

Women in Sport and Recreation Management is dedicated to uplifting women in sport and providing culminating experiences with a focus on creating connections and a positive culture for women in all areas of sport given the underrepresentation of women in the sport industry. This organization will aim to help students grow personally and professionally by having social events as well as professional development events (e.g., networking, guest speakers).

Honors Societies

Eta Sigma Delta (ESD)

Eta Sigma Delta is an international honor society that recognizes exceptional academic achievement among hospitality and tourism students. Eta Sigma Delta is administered by the International Council on Hotel, Restaurant and Institutional Education (International CHRIE), the leading international association devoted to hospitality and tourism education. To earn this membership, students have to hold at least a 3.0 minimum in a 4.0 grade point average system and be in the top 20% of their class to be eligible for this invitation. With the expansion of International CHRIE, membership is no longer limited to those who are studying in the United States.

Rho Phi Lambda (RPL) Professional Honorary Fraternity

Rho Phi Lambda is a National Honorary Recreation, Parks and Leisure Services Fraternity. Rho Phi Lambda strives to recognize Sport and Recreation Management majors who have exemplified academic excellence in scholarship, leadership and service. Membership in Rho Phi Lambda cultivates student professional development through networking opportunities, scholarship eligibility, résumé building, and campus and community service initiatives.

Special Facilities and Programs

Center for Student Services (CSS)

The CSS encourages a collaborative relationship between advisor and student, ultimately empowering the student to make sound and responsible decisions concerning their education. The student takes an active role in the utilization of the services offered by the School, and the University at large, while the academic advisor strives to assist the student with their academic, cultural, emotional and pre-professional needs.

Center for Industry Engagement (CIE)

The CIE links classroom learning to successful career development. The CIE resources offer students the latest internship and job opportunities through counseling on résumés, cover letters, interviewing skills and selection criteria.

Sport Industry Research Center (SIRC)

SIRC provides opportunities for academics, students and practitioners to explore the potential of sport to impact the communities within which they exist. Through a series of initiatives, SIRC attempts to conduct and disseminate research, educate and train executives, and function as a think tank and informational resource for those involved in the sport industry. Included among the initiatives that SIRC is involved in are: executive workshops, doctoral student training, community-based programming, event management and program consulting, and academic dissemination of cutting-edge research and managerial best practices.

U.S.-Asia Center for Tourism & Hospitality Research

Temple University's U.S.-Asia Center for Tourism & Hospitality Research was established to be a leading braintrust that advances the development of the U.S. and Asian tourism and hospitality industries, education, and research. With extensive connections across the globe and deep roots in the city of Philadelphia—the first World Heritage City in the U.S.—the Center is uniquely positioned to propel Temple University and STHM's international presence.

The U.S.-Asia Center conducts cutting-edge multidisciplinary research and consultancy specific to the tourism, hospitality and related industries in the U.S., Asia, and the entire Asia-Pacific region. It aims to establish and enhance connections between government, industry and other public entities in the tourism and hospitality areas. A few research areas include:

- destination marketing
- big data analytics
- consumer profile analysis
- yield and revenue management
- hospitality asset evaluation

Members of the Center are STHM faculty with national and international recognition, and come from broad disciplinary and industry backgrounds.

STHM Leadership and Contact Information

Larry Hunter, PhD, Dean

Daniel Funk, PhD, Associate Dean
1810 N. 13th Street
Philadelphia, PA 19122
215-204-1972
dfunk@temple.edu

Heather A. Blackburn, EdD, Assistant Dean
108 Speakman Hall
1810 N. 13th Street
Philadelphia, PA 19122
215-204-4503
hblackburn@temple.edu

School web site: <https://sthm.temple.edu/>
General e-mail address: sthm@temple.edu

Undergraduate Programs

- Esports Certificate (p. 1758)
- Event and Entertainment Management BS (p. 1759)
- Event and Entertainment Management Certificate (p. 1763)
- Event and Entertainment Management Minor (p. 1764)
- Sport and Recreation Management BS (p. 1764)
- Sport Management Certificate (p. 1769)
- Sport Management Minor (p. 1770)
- Sport Marketing Certificate (p. 1771)
- Tourism and Hospitality Management BS (p. 1772)
- Tourism and Hospitality Management Certificate (p. 1776)
- Tourism and Hospitality Management Minor (p. 1777)

Academic Policies & Regulations

Please see Undergraduate Academic Policies (p. 1835) in this *Bulletin*. Students are responsible for complying with all university-wide academic policies that apply to their individual academic status. Additional and unique policies, or exceptions for the School of Sport, Tourism and Hospitality Management, appear below.

All advising issues regarding academic policies and regulations should be directed to the School of Sport, Tourism and Hospitality Management's Center for Student Services (CSS) in Speakman Hall Suite 108, 1810 N. 13th Street.

Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List (p. 1849) policy for specific GPA and credit-hour requirements.

Student Code of Conduct, Good Neighbor Policy, and STHM Students' Doctrine of Responsibility

All students in the School of Sport, Tourism and Hospitality Management are expected to abide by Temple University's Student Code of Conduct, Good Neighbor Policy, and the STHM Students' Doctrine of Responsibility.

The School of Sport, Tourism and Hospitality Management (STHM) represents a high degree of scholastic excellence. In turn, the School expects an enhanced level of responsibility and preparation from its students. STHM students represent the School in a variety of forums, including, but not limited to, the classroom, internships and workplace settings. These environments require professionalism, commitment, knowledge and mutual respect. The STHM Students' Doctrine of Responsibility policy will assist students in their pursuit of excellence while earning their degrees in Event and Entertainment Management, Sport and Recreation Management, or Tourism and Hospitality Management.

Grievance Procedures and Ombudsperson

University Ombudspersons are designated annually by the provost and vice presidents of the University. They are knowledgeable about harassment matters and trained to assist in understanding and resolving informal complaints. Ombudspersons are sensitive to the feelings, rights, and interests of all parties, and have demonstrated ability to handle confidential and sensitive matters in a discreet manner.

STHM's Academic Grievance Procedures are detailed in the STHM Academic Grievance Procedures. Additional information can be obtained from Temple University's Student and Faculty Academic Rights and Responsibilities policy.

For further information, contact:

Debra Blair, Ombudsperson
368 Speakman Hall
1810 North 13th Street
215-204-1077
dblair@temple.edu

Temple University's Statements and Policies can be found on the Office of Institutional Diversity, Equity, Advocacy and Leadership (IDEAL) web site.

Program Performance

Students not in good standing are subject to collegial warning and/or probation, or they may be academically dismissed and will be so notified by the Undergraduate Studies Office. See the University policy on Academic Standing (p. 1840) for details on academic warning, academic probation, academic dismissal and reinstatement.

Transfer Between Colleges Within the University

Students may initiate transfer to STHM from another school or college of the University if they are in academic good standing, holding a minimum cumulative GPA of 2.0.

How to Change Your Major

As you begin or make your way through your academic journey, you may find something else more suited to your interests and goals. If you are interested in a major within the School of Sport, Tourism and Hospitality Management, see below for the options available to you.

Step 1: Review the School overview in the university change of major Canvas course.

Students interested in declaring a major in STHM should review the STHM Change of Program PowerPoint presentation within the "Welcome to Temple University's Change of Program (COP) Process!" Canvas dashboard via TUPortal.

Step 2: Consult with STHM Representative.

After reviewing the school overview in Canvas, students who want to proceed with a major change or find out more information on the programs and process, should schedule an appointment with STHM assistant dean, Heather Blackburn. Students may e-mail Heather Blackburn (hblackburn@temple.edu) to setup an appointment and/or for an advisor referral.

Step 3: Complete Change of Program Request Form.

After meeting with the assistant dean, students who want to proceed with the major change should complete the Change of Program Request form online; a change of program will be processed through the registrar's office. Please allow one week for the change to be processed. Student records will be updated only during a drop/add period or the start of the next academic semester.

Step 4: Meet with an STHM Academic Advisor.

Once the Change of Program Request form is processed, students should meet with their new academic advisor to discuss their prior course history, future course registration, and graduation planning. Students will need to e-mail their advisor to make an appointment. The new advisor will be identified during the change of major meeting.

How to Add a Minor or Certificate for Non-STHM Majors

Guidelines for Non-Majors interested in STHM coursework:

- Non-Major students should, upon expressing interest in STHM coursework, seek advising guidance from their home school/college first to ensure availability within their graduation plan.
- Determine which STHM minor or certificate you wish to pursue by reviewing the Undergraduate Bulletin (p. 1753) (minors/certificates are listed under the Programs tab).
- If you would like to discuss the STHM minor or certificate more in-depth, please e-mail sthmcss@temple.edu to setup an appointment with an academic advisor assigned to the certificate of interest (see Advising (p. 1756) tab in *Bulletin*).
- You can officially declare your STHM minor or certificate via our GoogleForm. If course overrides are needed to register for certain courses, please e-mail sthmcss@temple.edu for approval.
- Students who elect to take STHM 0857 should consult with an STHM academic advisor in reference to the courses' applicability to their curriculum. There are multiple cross-listed courses with other colleges that will only apply once to a student's academic plan.
- In instances where a minor and certificate are offered with the same program titles, such as the certificate and minor in Event and Entertainment Management, the certificate and minor in Sport Management, and the certificate and minor in Tourism and Hospitality Management, students may not earn both credentials. If a student completes the certificate requirement and wishes to upgrade to the minor, then the certificate would need to be rescinded.

School Graduation Requirements

The information below is for new freshmen and transfer students admitted fall 2023 - spring 2024. For information prior to this time, refer to the catalog year for your matriculation semester and year. Click on the Archives link to see Bulletins from previous years.

- Students seeking a Bachelor of Science degree from the School of Sport, Tourism and Hospitality Management (STHM) must complete 124 semester hours of coursework and have a cumulative GPA of 2.0 and a major GPA of 2.0. Per university requirements, a letter grade of C- or better must be earned for all required coursework.
- Certain courses may fulfill multiple requirements. In consultation with an advisor, students will be able to plan their curriculum more effectively.
- The total number of credit hours at graduation may vary for some students based on initial placement exams, transfer evaluations, individual curricular choices, and academic progress.
- Students are required to ensure that they have fulfilled the necessary prerequisites for any given course or course sequence. Students may read the entire policy in the section on university-wide Academic Policies (p. 1835).
- To expose students to the wide variety of opportunities in their chosen fields and prepare for future internship opportunities, STHM requires students to complete 250 Industry-Related Hours by the start of their senior year. Students must complete a minimum of four (4) unique experiences across their 250 accumulated hours. Students are encouraged to pursue their Industry-Related Hours in diverse areas including non-profit/community support needs as well as industry specific needs. Industry Hours are submitted to the CIE via their Canvas site. Students should submit their hour submissions each semester or at minimum annually to the CIE.
- Student Professional Organizations (SPOs) exist to provide students further engagement with industry partners, events, and leadership opportunities not provided in the classroom environment. STHM offers several SPOs for students that complement our industry-focused curriculum. To ensure students are professionally ready and competitive in the internship and job market, STHM students are strongly encouraged to join and be actively engaged in an STHM- or Fox-specific SPO and are strongly encouraged to join others that meet their interests. Benefits include meeting industry leaders, attending industry conferences and expanding your network of contacts.

Awarding of Certificates and Minors after Third Attempt Dismissals

- Students dismissed from STHM due to a failure at a third course attempt may still qualify to receive a minor or certificate for their STHM course credits based on the criteria below.

- **CERTIFICATE**
 - STHM students who took four or more courses (12-17 credits) can be awarded the Sport Management (excluding Sport Marketing) certificate or the Tourism and Hospitality Management (excluding Event and Entertainment Management) certificate, if they complete a declaration form.
 - For the certificate, two or more courses at minimum should be at the 2000 level or higher (i.e., the student completes STHM 1113, THM 1311, THM 2311, and THM 3311).
 - Students need a 2.00 GPA across all certificate courses with no grade lower than a C- for an applicable certificate course.
- **MINOR**
 - STHM students who took six or more courses (18+ credits) can be awarded the Sport Management minor or the Tourism and Hospitality Management minor, if they complete a declaration form.
 - For the minors, two or more courses at minimum should be at the 2000 level or higher (i.e., the student completes STHM 1113, THM 1311, THM 2311, THM 3311, and THM 3312).
 - Students need a 2.00 GPA across all minor courses with no grade lower than a C- for an applicable minor course.

Academic Advising

Dariq Cobb, MEd

dariq.cobb@temple.edu

Advisees:

- Students majoring in Sport & Recreation Management whose last name starts with A through R

Jennifer Valore, MS

jennifer.valore@temple.edu

Advisees:

- All students majoring in Event & Entertainment Management
- All students majoring in Tourism & Hospitality Management
- Students majoring in Sport & Recreation Management whose last name starts with P through Z
- All international students
- All student-athletes

Heather Blackburn, EdD

hblackburn@temple.edu

Advisees:

- Minors, certificates and +1 students

STHM Minors and Certificates

Students interested in any of the minors and certificates in STHM may e-mail sthmcass@temple.edu to meet with an advisor.

Services Provided Through the Center for Student Services

Center for Student Services
Speakman Hall, Suite 108
1810 N. 13th Street
Philadelphia, PA 19122
215-204-8905

The School of Sport, Tourism and Hospitality Management's advising unit, the Center for Student Services (CSS), provides individualized information on placement exams and results, majors, minors, course sequence and load, scheduling, career planning, and academic resources. As a result, students are better equipped to make well-informed decisions regarding their futures.

The CSS encourages a collaborative relationship between advisor and student, ultimately empowering the student to make sound and responsible decisions concerning his or her education. The student takes an active role in the utilization of the services offered by the School, and the University at large, while the academic advisor strives to assist the student with his or her academic, cultural, emotional and pre-professional needs.

Special Advising Policies and Procedures

The school utilizes a variety of advising sessions, such as workshops, asynchronous presentation/quiz format, virtual and walk-in sessions; however, students are encouraged to schedule individualized appointments to cater to their specific academic needs.

Faculty

John Allgood, Assistant Professor of Practice, Department of Sport and Recreation Management, School of Sport, Tourism and Hospitality Management; MS, University of Oklahoma.

Benjamin Altschuler, Associate Professor of Practice, Department of Tourism and Hospitality Management, School of Sport, Tourism and Hospitality Management; PhD, University of Utah.

Bradley J. Baker, Assistant Professor, Department of Sport and Recreation Management, School of Sport, Tourism and Hospitality Management; PhD, Temple University.

Heather A. Blackburn, Assistant Professor of Instruction, Department of Sport and Recreation Management, School of Sport, Tourism and Hospitality Management; EdD, Drexel University.

Debra K. Blair, Associate Professor of Instruction, Department of Sport and Recreation Management, School of Sport, Tourism and Hospitality Management; EdD, Temple University.

Christine Ann Cleaver, Assistant Professor of Practice, Department of Tourism and Hospitality Management, School of Sport, Tourism and Hospitality Management; MEd, Cabrini College.

George Diemer, Associate Professor of Instruction, Department of Sport and Recreation Management, School of Sport, Tourism and Hospitality Management; PhD, Temple University.

Daniel C. Funk, Professor, Department of Sport and Recreation Management, School of Sport, Tourism and Hospitality Management; PhD, The Ohio State University.

Ashley Gardner, Assistant Professor of Instruction, Department of Sport and Recreation Management, School of Sport, Tourism and Hospitality Management; PhD, University of Tennessee.

Amy Giddings, Professor of Instruction, Department of Sport and Recreation Management, School of Sport, Tourism and Hospitality Management; PhD, Temple University.

Caroline Heffernan, Assistant Professor of Instruction, Department of Sport and Recreation Management, School of Sport, Tourism and Hospitality Management; PhD, University of Minnesota.

Jonathan E. Howe, Assistant Professor of Instruction, Department of Sport and Recreation Management, School of Sport, Tourism and Hospitality Management; PhD, The Ohio State University.

Gareth J. Jones, Assistant Professor, Department of Sport and Recreation Management, School of Sport, Tourism and Hospitality Management; PhD, North Carolina State University.

Jeremy S. Jordan, Professor, Department of Sport and Recreation Management, School of Sport, Tourism and Hospitality Management; PhD, The Ohio State University.

R. Aubrey Kent, Professor, Department of Sport and Recreation Management, School of Sport, Tourism and Hospitality Management; PhD, The Ohio State University.

Thilo Kunkel, Associate Professor, Department of Sport and Recreation Management, School of Sport, Tourism and Hospitality Management; PhD, Griffith University.

Lindsey Lee, Assistant Professor, Department of Tourism and Hospitality Management, School of Sport, Tourism and Hospitality Management; PhD, University of Houston.

Xiang Li, Professor, Department of Tourism and Hospitality Management, School of Sport, Tourism and Hospitality Management; PhD, Texas A and M University.

Lu Lu, Associate Professor, Department of Tourism and Hospitality Management, School of Sport, Tourism and Hospitality Management; PhD, University of Washington.

Joseph Mahan III, Associate Professor of Instruction, Department of Sport and Recreation Management, School of Sport, Tourism and Hospitality Management; PhD, University of Maryland College Park.

Chihyung Michael Ok, Associate Professor, Department of Tourism and Hospitality Management, School of Sport, Tourism and Hospitality Management; PhD, Kansas State University.

Richard Ridall, Associate Professor of Instruction, Department of Sport and Recreation Management, School of Sport, Tourism and Hospitality Management; MEd, Temple University.

Wesley S. Roehl, Professor, Department of Tourism and Hospitality Management, School of Sport, Tourism and Hospitality Management; PhD, Texas A and M University.

Ira L. Rosen, Associate Professor of Practice, Department of Tourism and Hospitality Management, School of Sport, Tourism and Hospitality Management; MA, Montclair State University.

Michael F. Sheridan, Associate Professor of Practice, Department of Tourism and Hospitality Management, School of Sport, Tourism and Hospitality Management; EdD, Temple University.

Elizabeth Taylor, Assistant Professor, Department of Sport and Recreation Management, School of Sport, Tourism and Hospitality Management; PhD, University of Tennessee.

Luorong Wu, Associate Professor, Department of Tourism and Hospitality Management, School of Sport, Tourism and Hospitality Management; PhD, The Pennsylvania State University.

Yang Yang, Associate Professor, Department of Tourism and Hospitality Management, School of Sport, Tourism and Hospitality Management; PhD, University of Florida.

Esports Certificate

Overview

Consumer demand for esports and the growth of organized video game competitions has generated considerable attention from sport, event and entertainment industries. Esports has grown from a fringe activity to a popular sport entertainment product fueled both by participants and spectators with competitions involving both professional and amateur participants. Esports represents a sport entertainment product requiring management expertise related to events, merchandise, sponsorship, endorsements, marketing, technology, human resources, social media, governance, legal issues, celebrity culture and athlete well-being.

The four courses within the **Certificate of Esports** serve as the foundation for understanding business and managerial elements of esports. Esports courses are taught by industry professionals and faculty with knowledge of esports. Each of the four courses involve synchronous and asynchronous learning delivered in seven-week online intensive formats.

The Esports certificate is open to all undergraduate majors except students in the Sport and Recreation Management (SRM) major. SRM students may declare Esports as a concentration as an alternative pathway.

Campus Location: Main and Japan

Program Code: TH-ESPT-CERT

Declare Your Certificate

Students interested in declaring this certificate in the School of Sport, Tourism and Hospitality Management (STHM) should follow these steps:

1. First, meet with your home academic advisor to confirm the minor will fit into your present academic and graduation plan. After confirming plan fit, please e-mail sthmcss@temple.edu to meet with an academic advisor or attend our peer advising hours in 108 Speakman Hall.
2. Submit a Change of Program Request form to officially add the certificate.
3. Once approved, the form will be submitted electronically to the Office of the University Registrar (O.U.R). In 3-5 business days, the request will be processed and then visible within Self-Service Banner (Student Information tab).

Contact Information

Questions? Contact us at sthmcss@temple.edu or at 215-204-8701.

Requirements

Code	Title	Credit Hours
Required Courses		
SRM 3233	Esports Management and Industry Trends	3
SRM 3234	Esports: Legal and Ethical Challenges	3

Elective Courses

Select two from the following courses:

6

SRM 3220	Special Topics in Sport and Recreation Management ^{1,2}
SRM 3235	Esports Social Media Management and Fan Engagement
SRM 3236	Esports Revenue Production

Total Credit Hours**12**

1

As approved by the SRM department.

2

Course may only be applied once toward the certificate.

A grade point average of 2.0 in the certificate is required as well as a minimum grade of C- in each course.

Event and Entertainment Management BS

Overview

The **Bachelor of Science in Event and Entertainment Management** provides students with the theoretical and practical knowledge, skills and tools to become leaders in the event and entertainment industries. Graduates will be able to pursue careers in a variety of areas related to the event and entertainment industries, including fairs, festivals, meetings, trade shows, live performances within events, historical/cultural/educational exhibits, online events, hybrid events, digital media events, film events, weddings, social events and special events.

Students may complete one of the following **optional concentrations**:

- Live Entertainment
- Tourism and Hospitality Management

Campus Location: Main**Program Code:** TH-EVEM-BS

Leadership and Contact Information

Daniel Funk, PhD, Associate Dean
215-204-1972
dfunk@temple.edu

Heather A. Blackburn, EdD, Assistant Dean
215-204-4503
heather.blackburn@temple.edu

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

University Requirements

All new students are required to complete the University's General Education (GenEd (p. 83)) curriculum (35-36 credits).

School of Sport, Tourism & Hospitality Management Foundation Requirements

Code	Title	Credit Hours
STHM 1113	Foundations of Experience Design and Management	3
STHM 2114	Leisure and Tourism for a Diverse Society	3
STHM 2001	Career Exploration and Development Seminar	1
STHM 3185	Internship I	3
STHM 4185	Internship II	6 to 12
One of the following Approved Professional Development Electives (if STHM 4185 is taken for 6 credits):		0-3
CSI 1111	Introduction to Public Speaking	
PR 1552	Introduction to Public Relations	

ADV 2104	Personal Branding
SGM 3501	Entrepreneurial and Innovative Thinking

All students must earn a C- or higher in all courses required in the School of Sport, Tourism, and Hospitality Management (STHM) curriculum.

Designated Writing Intensive Courses

All Temple students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are as follows:

Code	Title	Credit Hours
THM 3396	Marketing in Tourism and Hospitality	3
THM 4398	Contemporary Issues in Tourism, Hospitality and Event Management	3

Major Requirements

Code	Title	Credit Hours
STHM 2401	Foundations of Event and Entertainment Management	3
STHM 3425	Event and Entertainment Operations	3
STHM 3428	Event and Entertainment Revenues	3
THM 2312	Tourism and Hospitality Sales	3
THM 2313	Financial Issues in Tourism and Hospitality	3
THM 3311	Organization Management in Tourism and Hospitality	3
THM 3314	Legal Issues in Tourism and Hospitality	3
THM 3325	Food and Beverage Management	3
STHM 3429	Entertainment Management	3
STHM 4401	Digital Portfolio Creation	3
STHM 4415	The Event Experience	3

Major Electives (12 Credits Required)

Students are required to take 12 Major Elective credits. They may take any 12 credits from the below optional concentrations or 12 credits of approved courses within the School of Sport, Tourism, and Hospitality Management.

Optional Concentrations (12 Credits Required)

Tourism and Hospitality Management Concentration Requirements

Code	Title	Credit Hours
Select 4 of the following:		12
STHM 3424	Business of Social Events and Weddings	
THM 3321	Tourism Planning and Development	
THM 3322	Destination Management Organizations	
THM 3324	Hospitality Operations	
THM 3328	Gaming and Casino Management	
THM 3329	Revenue Management in Tourism and Hospitality Management	
THM 4322	Designing Tourism Experiences	

Live Entertainment Concentration Requirements

Code	Title	Credit Hours
Select 4 of the following:		12
THTR 2441	Stage Management I	
THTR 3442	Theater Management I	
THTR 2721	Scene Design I	
THTR 2512	Lighting Design I	
THTR 3031	Lighting, Sound and Video Technology	

THTR 2501 Theater Safety and Management

THTR 2713 Design Drafting

Fox School of Business & Management Requirements

Code	Title	Credit Hours
Select one of the following:		
STHM 1115	Foundations of Excel for Sport and Tourism	1
BA 2104	Excel for Business Applications	
MKTG 2101	Marketing Management	3
HRM 1101	Leadership and Organizational Management	3
ACCT 2501	Survey of Accounting	3
ECON 1101	Macroeconomic Principles	3

School of Sport, Tourism & Hospitality Management Non-Credit Requirements

Industry-Related Experience (Minimum 250 hours of participation prior to STHM 4415).

Students must join one student professional organizations (SPOs) and one Professional Organization. Students are expected to be actively involved with his/her SPO and Professional Organization.

Free Electives (6 Credits)

Students must take 6 credits of Free Electives. In some cases, this number may vary to meet the 124 credits required for graduation. Students can use these Free Elective credits to take any courses at Temple University. (Please contact the STHM Center for Student Services [CSS] for additional information.)

Suggested Academic Plan

Bachelor of Science in Event and Entertainment Management

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		
Fall		Credit Hours
STHM 1113	Foundations of Experience Design and Management	3
HRM 1101	Leadership and Organizational Management	3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		14
Spring		
STHM 2401	Foundations of Event and Entertainment Management	3
Select one of the following:		
STHM 1115	Foundations of Excel for Sport and Tourism	1
BA 2104	Excel for Business Applications	
ECON 1101	Macroeconomic Principles	3
IH 0851	Intellectual Heritage I: The Good Life	3
or IH 0951	or Honors Intellectual Heritage I: The Good Life	
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
STHM 2114	Leisure and Tourism for a Diverse Society	3
STHM 3425	Event and Entertainment Operations	3
ACCT 2501	Survey of Accounting	3

STHM 2001	Career Exploration and Development Seminar	1
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
Credit Hours		16
Spring		
THM 2312	Tourism and Hospitality Sales	3
THM 2313	Financial Issues in Tourism and Hospitality	3
MKTG 2101	Marketing Management	3
Concentration Elective or Approved Elective		3
GenEd Breadth Course		3
Credit Hours		15
Year 3		
Fall		
STHM 3185	Internship I	3
THM 3311	Organization Management in Tourism and Hospitality	3
THM 3396	Marketing in Tourism and Hospitality	3
STHM 3428	Event and Entertainment Revenues	3
Concentration Elective or Approved Elective		3
Concentration Elective or Approved Elective		3
Credit Hours		18
Spring		
THM 3325	Food and Beverage Management	3
STHM 3429	Entertainment Management	3
Concentration Elective or Approved Elective		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Free Elective		3
Credit Hours		18
Year 4		
Fall		
STHM 4415	The Event Experience	3
THM 4398	Contemporary Issues in Tourism, Hospitality and Event Management	3
GenEd Breadth Course		3
Free Elective ³		3
Approved Professional Development Elective ¹		3-0
Credit Hours		15-12
Spring		
STHM 4401	Digital Portfolio Creation	3
THM 3314	Legal Issues in Tourism and Hospitality	3
STHM 4185	Internship II ^{1,2}	6 to 12
Credit Hours		12-18
Total Credit Hours		124-127

1

If the student selects 6 credits of STHM 4185 for their Senior Internship, the student must select one of the following approved Professional Development courses for 3 credits and also take a total of 5-6 credits of free elective (5 credits if 4-credit GenEd Arts is done). The approved Professional Development courses are: CSI 1111, PR 1552, ADV 2104, SGM 3501.

2

Students only need 6 senior internship credits (STHM 4185), but they are allowed to take up to 12 senior internship credits.

3

If students select the 12-credit STHM 4185 Internship II version they do not need to complete a second free elective. The free elective in senior year is only if a student pursues the 6-credit option of STHM 4185 and needs to reach the minimum 124 degree credits.

4

If a student takes a 4-credit GenEd Arts course, they will be 1 credit over the required 124 total needed to graduate. This total number would then equal 125 credits.

This additional credit will be applied to the Free Elective area, thus reducing the needed Free Electives from 6 to 5 credits.

Event and Entertainment Management Certificate

Overview

The **Certificate in Event and Entertainment Management** allows students across Temple University to augment their major degrees with exposure to a program that prepares students to lead and succeed in the event management industry. This program is based on the "Pinnacle" award-winning, comprehensive events planning program in our Continuing Education program and it is designed to increase student's marketable skills in their events career, and will prepare students for future success in the event planning business.

The Event and Entertainment Management certificate is open to all undergraduate majors at Temple except for School of Sport, Tourism and Hospitality Management (STHM) students. STHM students may declare a concentration instead of the certificate option.

The certificate provides a good foundation for students who wish to apply to the School of Sport, Tourism and Hospitality Management's Master of Science in Sport Business or specialize their expertise in management events. The certificate consists of a total of four required courses (12 credits).

Campus Location: Main

Program Code: TH-EVEM-CERT

Declare Your Certificate

Students interested in declaring this certificate in the School of Sport, Tourism and Hospitality Management (STHM) should follow these steps:

1. First, meet with your home academic advisor to confirm the certificate will fit into your present academic and graduation plan. After confirming plan fit, please e-mail sthmcss@temple.edu to meet with an academic advisor or attend our peer advising hours in 108 Speakman Hall.
2. Submit a [Change of Program Request form](#) to officially add the certificate.
3. Once approved, the form will be submitted electronically to the Office of the University Registrar (O.U.R.). In 3-5 business days, the request will be processed and then visible within Self-Service Banner (Student Information tab).

Please note that STHM offers both a certificate and a minor in Event and Entertainment Management. Students may pursue one or the other, but not both credentials. Students in the certificate program who wish to upgrade to the minor will need to rescind the certificate. Students who are in the minor, but unable to complete it may be eligible for the certificate if all four courses and 12 credits are completed.

Contact Information

Questions? Contact us at sthmcss@temple.edu or at 215-204-8701.

Requirements

Code	Title	Credit Hours
Required Courses		
STHM 2401	Foundations of Event and Entertainment Management	3
STHM 3425	Event and Entertainment Operations	3
STHM 3428	Event and Entertainment Revenues	3
STHM 4415	The Event Experience	3
Total Credit Hours		12

A grade point average of 2.0 in the certificate is required as well as a minimum grade of C- in each course.

Note: This is designed so that any student doing a Certificate in Event and Entertainment Management would only need to declare and take two additional courses to earn the Minor in Tourism and Hospitality Management.

Event and Entertainment Management Minor

Overview

The **Minor in Event and Entertainment Management** provides students with the theoretical and practical knowledge, skills and tools to become leaders in the event and entertainment industries. The minor prepares students to pursue careers in a variety of areas related to the event and entertainment industries, including fairs, festivals, meetings, trade shows, live performances within events, historical/cultural/educational exhibits, online events, hybrid events, digital media events, film events, weddings, social events and special events.

The Event and Entertainment Management minor is open to all undergraduate students at Temple, including School of Sport, Tourism and Hospitality Management (STHM) students. However, STHM students may not do both a concentration and a minor in Event and Entertainment Management. STHM students may double count three major electives toward the minor. The other minor courses must come from free electives.

Campus Location: Main

Declare Your Minor

Students interested in declaring this minor in the School of Sport, Tourism and Hospitality Management (STHM) should follow these steps:

1. First, meet with your home academic advisor to confirm the minor will fit into your present academic and graduation plan. After confirming plan fit, please e-mail sthmcss@temple.edu to meet with an academic advisor or attend our peer advising hours in 108 Speakman Hall.
2. Submit a Change of Program Request form to officially add the minor.
3. Once approved, the form will be submitted electronically to the Office of the University Registrar (O.U.R). In 3-5 business days, the request will be processed and then visible within Self-Service Banner (Student Information tab).

Contact Information

Questions? Contact us at sthmcss@temple.edu or at 215-204-8701.

Requirements

Code	Title	Credit Hours
STHM 2401	Foundations of Event and Entertainment Management	3
STHM 3424	Business of Social Events and Weddings	3
STHM 3425	Event and Entertainment Operations	3
STHM 3428	Event and Entertainment Revenues	3
STHM 3429	Entertainment Management	3
STHM 4415	The Event Experience	3
Total Credit Hours		18

A grade point average of 2.0 in the minor is required as well as a minimum grade of C- in each course.

Sport and Recreation Management BS

Overview

The **Bachelor of Science in Sport and Recreation Management** prepares students interested in sport and recreation careers in the private/commercial sector, public recreation and park agencies, professional sports, interscholastic/intercollegiate athletics, youth sport agencies, voluntary agencies, campus services, armed forces, and corporate/industrial settings.

Students may complete one of the following **optional concentrations**:

- Esports
- Event Management
- Governance and Policy
- Sport and Recreation Promotion

Campus Location: Main

Program Code: TH-SPRM-BS

Accelerated Program

B.S. in Sport and Recreation Management/M.S. in Sport Business

Leadership and Contact Information

Daniel Funk, PhD, Associate Dean
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These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

University Requirements

All new students are required to complete the University's General Education (GenEd (p. 83)) curriculum (35-36 credits).

School of Sport, Tourism & Hospitality Management Foundation Requirements

All students must earn a C- or higher in all courses required in the School of Sport, Tourism and Hospitality Management (STHM) curriculum.

Code	Title	Credit Hours
STHM 1113	Foundations of Experience Design and Management	3
STHM 2001	Career Exploration and Development Seminar	1
STHM 2114	Leisure and Tourism for a Diverse Society	3
STHM 3185	Internship I (180 Hours)	3
STHM 4112	Senior Professional Development Seminar	3
STHM 4185	Internship II (600 Hours) ¹	6-12
Total Credit Hours		19-25

1

Students selecting the six-credit version of STHM 4185 Internship II must also take six credits of major electives at the 3000 level or higher or may repeat STHM 4185 for six credits in a final term. CSS and CSPD approval are required if students want to repeat STHM 4185.

Designated Writing Intensive Courses

All Temple students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are as follows:

Code	Title	Credit Hours
SRM 3296	Marketing Management in Sport and Recreation	3
SRM 4296	Current and Ethical Issues in Sport and Recreation Management	3

Major Requirements

Code	Title	Credit Hours
SRM 1211	Sport, Entertainment and Society	3
SRM 2212	Law and Ethics in Sport and Recreation	3
SRM 2213	Budget and Finance Systems in Sport and Recreation	3
SRM 2217	Research in Sport and Recreation	3

SRM 3211	Management in Sport and Recreation	3
SRM 3216	Economics of Sport and Recreation	3
SRM 3218	Organizational Strategy in Sport and Recreation	3
SRM 3296	Marketing Management in Sport and Recreation	3
SRM 4296	Current and Ethical Issues in Sport and Recreation Management	3
Total Credit Hours		27

Major Management Electives (12 Credits Required)

All students are required to take a minimum of 12 Major Management Elective (MME) credits from SRM or STHM subject codes. As part of the 12 credit MME requirement, students may opt to earn a concentration from the offerings below. To have a **Concentration designation** on a transcript, students must **declare the concentration through the STHM Center for Student Services (CSS) process** and follow the requirements below.

Two concentrations, Governance & Policy and Sport & Recreation Promotion, require 9 credits of specified coursework with one additional MME course of the students choosing, for a total of 12 credits. The Event Management and the Esports concentrations both require all four courses/12 credits specified below.

Note: If students select the six-credit option for STHM 4185 Internship II, then they must take an additional six credits of major coursework at the 3000 level or above or repeat STHM 4185 for an additional six credits (CSS and CSPD approvals required).

Optional Sport and Recreation Management Concentrations (9 Credits Required)

Governance and Policy Concentration Requirements

Code	Title	Credit Hours
Select three of the following:		9
SRM 3215	Stadium/Arena Design and Management	
SRM 3221	Athletics Administration	
SRM 3222	Global Sport Management	
SRM 3225	Recreation and Leisure Service Management	
SRM 3233	Esports Management and Industry Trends	

Sport and Recreation Promotion Concentration Requirements

Code	Title	Credit Hours
Select three of the following:		9
SRM 3224	Media and Communications in Sport and Recreation	
SRM 3226	Consumer Behavior in Sport and Recreation	
SRM 3227	Advanced Marketing for Sport and Recreation	
SRM 3228	Sales Management in Sport and Recreation	
SRM 3233	Esports Management and Industry Trends	

Event Management Concentration Requirements - All Four Courses Required

Code	Title	Credit Hours
STHM 2401	Foundations of Event and Entertainment Management	3
STHM 3425	Event and Entertainment Operations	3
STHM 3428	Event and Entertainment Revenues	3
STHM 4415	The Event Experience	3

Esports Concentration Requirements - All Four Courses Required

Code	Title	Credit Hours
SRM 3233	Esports Management and Industry Trends	3
SRM 3234	Esports: Legal and Ethical Challenges	3

SRM 3235	Esports Social Media Management and Fan Engagement	3
SRM 3236	Esports Revenue Production	3

Fox School of Business & Management Requirements

Code	Title	Credit Hours
ACCT 2501	Survey of Accounting	3
Select one of the following:		1
STHM 1115	Foundations of Excel for Sport and Tourism	
BA 2104	Excel for Business Applications	
ECON 1101	Macroeconomic Principles	3
MKTG 2101	Marketing Management	3
HRM 1101	Leadership and Organizational Management	3
Total Credit Hours		13

These four classes, with the exception of BA 2104, complete the required lower-division courses of the Business Minor.

School of Sport, Tourism & Hospitality Management Non-Credit Requirements

Code	Title	Credit Hours
Industry-Related Experience (Minimum 250 hours of participation required prior to STHM 4112).		
Students are encouraged to join an STHM student professional organizations (SPOs) and maintain active membership in the organization.		

Free Electives (12 Credits)

Students must take 12 credits of Free Electives. In some cases, this number may vary to meet the 124 credits required for graduation. Students can use these Free Elective credits to take any courses at Temple University. (Please contact the STHM Center for Student Services [CSS] for additional information.)

Options

Fox School of Business and Management Minors and Certificates

Go to Fox School of Business and Management's Programs list (p. 792) to find Business minors and certificates. See Fox School of Business Academic Advisor.

Suggested Academic Plan

Bachelor of Science in Sport and Recreation Management

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
STHM 1113	Foundations of Experience Design and Management	3
HRM 1101	Leadership and Organizational Management	3
ENG 0802	Analytical Reading and Writing	4
or ENG 0812	or Analytical Reading and Writing: ESL	
or ENG 0902	or Honors Writing About Literature	
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		14
Spring		
SRM 1211	Sport, Entertainment and Society	3
ECON 1101	Macroeconomic Principles	3
Select one of the following:		1
STHM 1115	Foundations of Excel for Sport and Tourism	
BA 2104	Excel for Business Applications	

IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
SRM 2217	Research in Sport and Recreation	3
STHM 2114	Leisure and Tourism for a Diverse Society	3
ACCT 2501	Survey of Accounting	3
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		18
Spring		
SRM 2212	Law and Ethics in Sport and Recreation	3
SRM 2213	Budget and Finance Systems in Sport and Recreation	3
MKTG 2101	Marketing Management	3
STHM 2001	Career Exploration and Development Seminar	1
GenEd Breadth Course		3
Free Elective 1		3
Credit Hours		16
Year 3		
Fall		
STHM 3185	Internship I	3
SRM 3211	Management in Sport and Recreation	3
SRM 3216	Economics of Sport and Recreation	3
GenEd Breadth Course		3
Free Elective 2		3
Credit Hours		15
Spring		
SRM 3296	Marketing Management in Sport and Recreation	3
SRM 3218	Organizational Strategy in Sport and Recreation	3
SRM Major Management Elective 1		3
GenEd Breadth Course		3
Free Elective 3		3
Credit Hours		15
Year 4		
Fall		
STHM 4112	Senior Professional Development Seminar	3
SRM 4296	Current and Ethical Issues in Sport and Recreation Management	3
SRM Major Management Elective 2		3
SRM Major Management Elective 3		3
SRM Major Management Elective 4		3
Credit Hours		15
Spring		
STHM 4185	Internship II ¹	6-12
Free Elective 4 ²		3
SRM Major Management Elective 5 ¹		3-0

SRM Major Management Elective 6 ¹	3-0
Credit Hours	15
Total Credit Hours	124

1

If students select the 6-credit option of STHM 4185, then they must select an additional six credits of major electives at the 3000 level or above or repeat STHM 4185 for an additional six credits (CSS and CSPD permission required).

2

If a student takes a 4-credit GenEd Arts course, s/he will be 1 credit over the required 124 total needed to graduate. This total number would then equal 125 credits.

This additional credit will be applied to the Free Elective area, thus reducing the needed Free Electives from 12 to 11 credits.

Please consult your assigned STHM academic advisor.

Sport Management Certificate

Overview

The **Certificate in Sport Management** allows students across Temple University to augment their major degrees with exposure to a program that prepares students to lead and succeed in the fast-paced world of sport, recreation and leisure management. The sport management program integrates foundational business principles with innovative concepts related directly to the distinct industry of sport. Temple's Sport and Recreation Management program is one of the oldest and most distinguished programs of its kind in the country.

The Sport Management certificate is open to all Temple undergraduate majors except for Sport and Recreation Management majors.

The certificate consists of four courses in total (12 credits), with three required courses and one elective option. Students who desire additional sport and recreation courses should consider the Sport Management minor. The Sport Management minor requires students to complete six courses.

Campus Location: Main

Program Code: TH-SM-CERT

Declare Your Certificate

Students interested in declaring this certificate in the School of Sport, Tourism and Hospitality Management (STHM) should follow these steps:

1. First, meet with your home academic advisor to confirm the certificate will fit into your present academic and graduation plan. After confirming plan fit, please e-mail sthmcass@temple.edu to meet with an academic advisor or attend our peer advising hours in 108 Speakman Hall.
2. Submit a Change of Program Request form to officially declare the certificate.
3. Once approved, the form will be submitted electronically to the Office of the University Registrar (O.U.R.). In 3-5 business days, the request will be processed and then visible within Self-Service Banner (Student Information tab).

Please note that STHM offers both a certificate and a minor in Sport Management. Students may pursue one or the other, but not both credentials. Students in the certificate program who wish to upgrade to the minor will need to rescind the certificate. Students who are in the minor, but unable to complete it may be eligible for the certificate if all four courses and 12 credits are completed.

Contact Information

Questions? Contact us at sthmcass@temple.edu or at 215-204-8701.

Requirements

Code	Title	Credit Hours
Required Courses		
Take the following 3 courses in consultation with an STHM advisor:		
SRM 3221	Athletics Administration	3
SRM 3222	Global Sport Management	3
SRM 3225	Recreation and Leisure Service Management	3
Elective Course		
Select one from the following in consultation with an STHM advisor:		
STHM 0857	Sport & Leisure in American Society ¹	3
SRM 1211	Sport, Entertainment and Society	

SRM 3214	Marketing Management in Sport and Recreation ²
SRM 3215	Stadium/Arena Design and Management
SRM 3220	Special Topics in Sport and Recreation Management ³
SRM 3223	Applied Sport Analytics
SRM 3224	Media and Communications in Sport and Recreation
SRM 3226	Consumer Behavior in Sport and Recreation
SRM 3227	Advanced Marketing for Sport and Recreation
SRM 3228	Sales Management in Sport and Recreation
SRM 3231	Leadership in Sport and Recreation
SRM 3233	Esports Management and Industry Trends
SRM 3237	Personal Branding of Athletes: Name, Image, and Likeness

Total Credit Hours**12**

1

Sections of this course offered by other Temple departments may be substituted.

2

Offered online.

3

Course may only be applied once toward the certificate.

Note: This is designed so that any student doing a Certificate in Sport Management would only need to declare and take two additional courses to earn the Minor in Sport Management. However, students may not receive both the certificate and the minor. If a student pursues the minor, they would need to rescind the certificate.

A grade point average of 2.0 in the certificate is required as well as a minimum grade of C- in each course.

Sport Management Minor

Overview

The **Minor in Sport Management** allows students across Temple University to augment their major degrees with exposure to a program that prepares students to lead and succeed in the fast-paced world of sport, recreation and leisure management. The sport management program integrates foundational business principles with innovative concepts related directly to the distinct industry of sport. Temple's Sport and Recreation Management program is one of the oldest and most distinguished programs of its kind in the country. The required courses serve to provide students an overview of different sectors of the sport industry; elective courses offer more in-depth exploration of the support segments across multiple industry sectors.

The Sport Management minor is open to all undergraduate majors at Temple except for Sport and Recreation Management majors. It provides a good foundation for students who wish to apply to the School of Sport, Tourism and Hospitality Management's Master of Science in Sport Business program.

Campus Location: Main

Declare Your Minor

Students interested in declaring this minor in the School of Sport, Tourism and Hospitality Management (STHM) should follow these steps:

1. First, meet with your home academic advisor to confirm the minor will fit into your present academic and graduation plan. After confirming plan fit, please e-mail sthmcss@temple.edu to meet with an academic advisor or attend our peer advising hours in 108 Speakman Hall.
2. Submit a Change of Program Request form to officially add the minor.
3. Once approved, the form will be submitted electronically to the Office of the University Registrar (O.U.R.). In 3-5 business days, the request will be processed and then visible within Self-Service Banner (Student Information tab).

Contact Information

Questions? Contact us at sthmcss@temple.edu or at 215-204-8701.

Requirements

Code	Title	Credit Hours
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Required Courses

Take the following 3 courses in consultation with an STHM advisor:

SRM 3221	Athletics Administration	3
SRM 3222	Global Sport Management	3
SRM 3225	Recreation and Leisure Service Management	3

Elective Courses

Select 3 courses from the following list in consultation with an STHM advisor: 9

STHM 0857	Sport & Leisure in American Society ¹
STHM 2401	Foundations of Event and Entertainment Management
SRM 1211	Sport, Entertainment and Society
SRM 3214	Marketing Management in Sport and Recreation ²
SRM 3215	Stadium/Arena Design and Management
SRM 3220	Special Topics in Sport and Recreation Management ³
SRM 3224	Media and Communications in Sport and Recreation
SRM 3226	Consumer Behavior in Sport and Recreation
SRM 3227	Advanced Marketing for Sport and Recreation
SRM 3228	Sales Management in Sport and Recreation
SRM 3223	Applied Sport Analytics
SRM 3231	Leadership in Sport and Recreation
SRM 3233	Esports Management and Industry Trends
SRM 3237	Personal Branding of Athletes: Name, Image, and Likeness

Total Credit Hours**18**

1

Sections of this course offered by other Temple departments may be substituted.

2

Offered online.

3

Course may only be applied once toward the minor.

A grade point average of 2.0 in the minor is required as well as a minimum grade of C- in each course.

Sport Marketing Certificate

Overview

The **Certificate in Sport Marketing** allows students across Temple University to augment their major degrees with exposure to a program that prepares students to lead and succeed in the fast-paced world of sport, recreation and leisure management. The sport management program integrates foundational business principles with innovative concepts related directly to the distinct industry of sport. Temple's Sport and Recreation Management program is one of the oldest and most distinguished programs of its kind in the country.

The Sport Marketing certificate is open to all Temple undergraduate majors except for Sport and Recreation Management majors.

The certificate consists of four courses in total (12 credits).

Campus Location: Main

Program Code: TH-SPMK-CERT

Declare Your Certificate

Students interested in declaring this certificate in the School of Sport, Tourism and Hospitality Management (STHM) should follow these steps:

1. First, meet with your home academic advisor to confirm the certificate will fit into your present academic and graduation plan. After confirming plan fit, please e-mail sthmcss@temple.edu to meet with an academic advisor or attend our peer advising hours in 108 Speakman Hall.
2. Submit a Change of Program Request form to officially add the certificate.
3. Once approved, the form will be submitted electronically to the Office of the University Registrar (O.U.R). In 3-5 business days, the request will be processed and then visible within Self-Service Banner (Student Information tab).

Contact Information

Questions? Contact us at sthmcss@temple.edu or at 215-204-8701.

Requirements

Code	Title	Credit Hours
Elective Courses		
Select four of the following in consultation with an STHM advisor:		12
SRM 3220	Special Topics in Sport and Recreation Management ¹	
SRM 3224	Media and Communications in Sport and Recreation	
SRM 3226	Consumer Behavior in Sport and Recreation	
SRM 3227	Advanced Marketing for Sport and Recreation	
SRM 3228	Sales Management in Sport and Recreation	
STHM 3428	Event and Entertainment Revenues	
Total Credit Hours		12

1

As approved by the SRM department; repeatable; current list of approved special topics courses are: Personal Branding of Athletes: Name, Image and Likeness; Esports Social Media Management and Engagement; and Emerging Multimedia Roles in the Sport Industry.

Note: This is designed so that any student doing a Certificate in Sport Marketing would only need to declare and take two additional courses to earn the Minor in Sport Management. However, students may only do either the certificate or minor. If a student enrolls in the minor, they would need to rescind the certificate.

A grade point average of 2.0 in the certificate is required as well as a minimum grade of C- in each course.

Tourism and Hospitality Management BS

Overview

The **Bachelor of Science in Tourism and Hospitality Management** prepares students for entry-level to mid-level positions in tourism, hospitality and event management. The program prepares students for careers in tourism and destination management, hospitality operations, food and beverage, gaming and event leadership and other professional opportunities in the experience economy.

Students may complete one of the following **optional concentrations**:

- Destination Management
- Event Management
- Hospitality Operations

Campus Location: Main and Japan

Program Code: TH-STHM-BS

Leadership and Contact Information

Daniel Funk, PhD, Associate Dean
215-204-1972
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Heather A. Blackburn, EdD, Assistant Dean
215-204-4503
heather.blackburn@temple.edu

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

University Requirements

All new students are required to complete the University's General Education (GenEd (p. 83)) curriculum (35-36 credits).

School of Sport, Tourism & Hospitality Management Foundation Requirements

All students must earn a C- or higher in all courses required in the School of Sport, Tourism and Hospitality Management (STHM) curriculum.

Code	Title	Credit Hours
STHM 1113	Foundations of Experience Design and Management	3
STHM 2001	Career Exploration and Development Seminar	1
STHM 2114	Leisure and Tourism for a Diverse Society	3
STHM 3185	Internship I (180 Hours)	3
STHM 4112	Senior Professional Development Seminar	3
STHM 4185	Internship II (600 Hours) ¹	6-12
Total Credit Hours		19-25

1

Students selecting the six-credit version of STHM 4185 Internship II must also take six credits of major electives at the 3000 level or higher or may repeat STHM 4185 for six credits in a final term. CSS and Center for Industry Engagement (CIE) approvals are required if students want to repeat STHM 4185.

Designated Writing Intensive Courses

All Temple students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are as follows:

Code	Title	Credit Hours
THM 3396	Marketing in Tourism and Hospitality	3
THM 4398	Contemporary Issues in Tourism, Hospitality and Event Management	3

Major Requirements

Code	Title	Credit Hours
THM 1311	The Business of Tourism and Hospitality	3
THM 2311	Global Issues in Travel	3
THM 2312	Tourism and Hospitality Sales	3
THM 2313	Financial Issues in Tourism and Hospitality	3
THM 3311	Organization Management in Tourism and Hospitality	3
THM 3312	Strategic Decision Making in Tourism and Hospitality Management	3
THM 3314	Legal Issues in Tourism and Hospitality	3
THM 3396	Marketing in Tourism and Hospitality	3
THM 4398	Contemporary Issues in Tourism, Hospitality and Event Management	3
Total Credit Hours		27

Major Management Electives (12 Credits Required)

All students are required to take a minimum of 12 Major Management Elective (MME) credits in STHM or THM subject codes. As part of the 12 credit MME requirement, students may opt to earn a concentration from the offerings below. To have a **Concentration designation** on a transcript, students must **declare the concentration through the STHM Center for Student Services (CSS) process** and follow the requirements below.

Two concentrations, Hospitality Operations and Destination Management, require 9 credits of specified coursework with one additional MME course of the students choosing, for a total of 12 credits. The Event Management concentration requires all four courses/12 credits specified with no elective options.

Note: If students select the six-credit option for senior internship, STHM 4185 Internship II, then they must take an additional six credits of major coursework at the 3000 level or above or repeat STHM 4185 for an additional six credits (CSS and Center for Industry Engagement approvals required).

Optional Tourism and Hospitality Management Concentrations (9 Credits Required)

Hospitality Operations Concentration Requirements

Code	Title	Credit Hours
Select three of the following:		9
THM 3320	Special Topics in Hospitality Management	
THM 3324	Hospitality Operations	
THM 3325	Food and Beverage Management	
THM 3328	Gaming and Casino Management	
THM 3329	Revenue Management in Tourism and Hospitality Management	
STHM 3425	Event and Entertainment Operations	

Destination Management Concentration Requirements

Code	Title	Credit Hours
Select three of the following:		9
THM 3321	Tourism Planning and Development	
THM 3322	Destination Management Organizations	
THM 3327	Advanced Destination Marketing Systems	
THM 3330	Special Topics in Destination and Event Management	

Event Management Concentration Requirements

Code	Title	Credit Hours
STHM 2401	Foundations of Event and Entertainment Management	3
STHM 3425	Event and Entertainment Operations	3
STHM 3428	Event and Entertainment Revenues	3
STHM 4415	The Event Experience	3

Fox School of Business & Management Requirements

Code	Title	Credit Hours
ACCT 2501	Survey of Accounting	3
Select one of the following:		1
STHM 1115	Foundations of Excel for Sport and Tourism	
BA 2104	Excel for Business Applications	
ECON 1101	Macroeconomic Principles	3
MKTG 2101	Marketing Management	3
HRM 1101	Leadership and Organizational Management	3
Total Credit Hours		13

These four classes, with the exception of BA 2104, complete the required lower-division courses of the Business Minor.

School of Sport, Tourism & Hospitality Management Non-Credit Requirements

Code	Title	Credit Hours
Industry-Related Experience (Minimum 250 hours of participation required prior to STHM 4112).		
Students are encouraged to join an STHM student professional organization (SPO) and maintain active membership.		

Free Electives (12 Credits)

Students must take 12 credits of Free Electives. In some cases, this number may vary to meet the 124 credits required for graduation. Students can use these Free Elective credits to take any courses at Temple University. (Please contact the STHM Center for Student Services [CSS] for additional information.)

Options

Fox School of Business and Management Minors and Certificates

Go to Fox School of Business and Management's Programs list (p. 792) to find Business minors and certificates. See Fox School of Business Academic Advisor.

Suggested Academic Plan

Bachelor of Science in Tourism and Hospitality Management

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
STHM 1113	Foundations of Experience Design and Management	3
HRM 1101	Leadership and Organizational Management	3
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy Course ^{GQ}		4
Credit Hours		14
Spring		
THM 1311	The Business of Tourism and Hospitality	3
ECON 1101	Macroeconomic Principles	3
Select one of the following:		1
STHM 1115	Foundations of Excel for Sport and Tourism	
BA 2104	Excel for Business Applications	
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
GenEd Breadth Course		3
Credit Hours		16
Year 2		
Fall		
STHM 2114	Leisure and Tourism for a Diverse Society	3
THM 2311	Global Issues in Travel	3
ACCT 2501	Survey of Accounting	3
GenEd Breadth Course ¹		3
STHM 2001	Career Exploration and Development Seminar	1
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
Credit Hours		16
Spring		
MKTG 2101	Marketing Management	3
THM 2312	Tourism and Hospitality Sales	3
THM 2313	Financial Issues in Tourism and Hospitality	3
THM Major Management Elective		3
GenEd Breadth Course		3
Free Elective 1		3
Credit Hours		18

Year 3**Fall**

STHM 3185	Internship I	3
THM 3311	Organization Management in Tourism and Hospitality	3
THM 3396	Marketing in Tourism and Hospitality	3
Free Elective 2		3
Free Elective 3 ¹		3
Credit Hours		15

Spring

THM 3312	Strategic Decision Making in Tourism and Hospitality Management	3
THM 3314	Legal Issues in Tourism and Hospitality	3
THM Major Management Elective		3
GenEd Breadth Course		3
Free Elective 4		3
Credit Hours		15

Year 4**Fall**

STHM 4112	Senior Professional Development Seminar	3
THM 4398	Contemporary Issues in Tourism, Hospitality and Event Management	3
THM Major Management Elective		3
THM Major Management Elective		3
GenEd Breadth Course		3
Credit Hours		15

Spring

STHM 4185	Internship II ²	6-12
GenEd Breadth Course		3
THM Major Management Elective ²		3-0
THM Major Management Elective ²		3-0
Credit Hours		15

Total Credit Hours **124**

¹

If a student takes a 4-credit GenEd Arts course, s/he will be 1 credit over the required 124 total needed to graduate. This total number would then equal 125 credits.

This additional credit will be applied to the Free Elective area, thus reducing the needed Free Electives from 12 to 11 credits.

Please consult your assigned STHM academic advisor.

²

Students selecting the six-credit version of STHM 4185 Internship II must also take six credits of major electives at the 3000 level or higher or may repeat STHM 4185 for six credits in a final term. CSS and Center for Industry Engagement (CIE) approvals are required if students want to repeat STHM 4185.

Tourism and Hospitality Management Certificate

Overview

The **Certificate in Tourism and Hospitality Management** allows students across Temple University to enhance their major degrees with exposure to a program that prepares students for success in the hospitality industry as well as the realm of tourism. The Tourism and Hospitality Management certificate integrates foundational business principles, tourism and destination specific knowledge as well as innovative concepts relevant to success within hospitality operations, food and beverage, gaming and event leadership.

The Tourism and Hospitality Management certificate is open to all undergraduate majors at Temple except for students in the Tourism and Hospitality Management major.

The certificate consists of four courses (12 credits); one required course with three additional courses to be selected from the list of electives.

Campus Location: Main

Program Code: TH-STHM-CERT

Declare Your Certificate

Students interested in declaring this certificate in the School of Sport, Tourism and Hospitality Management (STHM) should follow these steps:

1. First, meet with your home academic advisor to confirm the certificate will fit into your present academic and graduation plan. After confirming plan fit, please e-mail sthmcss@temple.edu to meet with an academic advisor or attend our peer advising hours in 108 Speakman Hall.
2. Submit a Change of Program Request form to officially add the certificate.
3. Once approved, the form will be submitted electronically to the Office of the University Registrar (O.U.R.). In 3-5 business days, the request will be processed and then visible within Self-Service Banner (Student Information tab).

Please note that STHM offers both a certificate and a minor in Tourism and Hospitality Management. Students may pursue one or the other, but not both credentials. Students in the certificate program who wish to upgrade to the minor will need to rescind the certificate. Students who are in the minor, but unable to complete it may be eligible for the certificate if all four courses and 12 credits are completed.

Contact Information

Questions? Contact us at sthmcss@temple.edu or at 215-204-8701.

Requirements

Students should select courses in consultation with an STHM advisor.

Code	Title	Credit Hours
Required Course		
THM 2311	Global Issues in Travel	3
Electives		
Select 3 of the following:		9
STHM 2401	Foundations of Event and Entertainment Management	
THM 3321	Tourism Planning and Development	
THM 3324	Hospitality Operations	
THM 3325	Food and Beverage Management	
THM 3328	Gaming and Casino Management	
Total Credit Hours		12

Note: This is designed so that any student doing a Certificate in Tourism and Hospitality Management would only need to declare and take two additional courses to earn the Minor in Tourism and Hospitality Management. However, students may not receive both the minor and certificate. Students would need to rescind the certificate to upgrade to the minor.

A grade point average of 2.0 in the certificate is required as well as a minimum grade of C- in each course.

Tourism and Hospitality Management Minor

Overview

The **Minor in Tourism and Hospitality Management** allows students across Temple University to enhance their major degrees with additional exposure to a program that prepares students to lead and succeed in one of the world's largest and most exciting industries. The tourism and hospitality management program integrates foundational business principles with innovative concepts related directly to the distinct industry of tourism and hospitality. Temple University's Tourism and Hospitality Management program is one of the most established and distinguished programs of its kind in the country. The required courses serve to provide students an overview of different foundational elements of the industry, while elective courses offer more in-depth exposure of the support segments across a number of sectors within the industry.

The Tourism and Hospitality Management minor is open to all undergraduate majors at Temple except for Tourism and Hospitality Management majors.

Campus Location: Main

Declare Your Minor

Students interested in declaring this minor in the School of Sport, Tourism and Hospitality Management (STHM) should follow these steps:

1. First, meet with your home academic advisor to confirm the minor will fit into your present academic and graduation plan. After confirming plan fit, please e-mail sthmcss@temple.edu to meet with an academic advisor or attend our peer advising hours in 108 Speakman Hall.

2. Submit a Change of Program Request form to officially add the minor.
3. Once approved, the form will be submitted electronically to the Office of the University Registrar (O.U.R). In 3-5 business days, the request will be processed and then visible within Self-Service Banner (Student Information tab).

Contact Information

Questions? Contact us at sthmcss@temple.edu or at 215-204-8701.

Requirements

Students should select courses in consultation with an STHM advisor.

Code	Title	Credit Hours
Required Courses		
THM 2311	Global Issues in Travel	3
THM 3324 or THM 3322	Hospitality Operations Destination Management Organizations	3
Electives		
Select 4 of the following:		12
STHM 2401	Foundations of Event and Entertainment Management	
THM 3321	Tourism Planning and Development	
THM 3322	Destination Management Organizations	
THM 3324	Hospitality Operations (if not taken as a required course)	
THM 3325	Food and Beverage Management	
THM 3328	Gaming and Casino Management	
Total Credit Hours		18

A grade point average of 2.0 in the minor is required as well as a minimum grade of C- in each course.

University College

Overview

The University College offers the following programs and certificates:

- Bachelor of General Studies in General Studies (p. 1779)
- Certificate in Sustainability (p. 1783)
- Temple Science and Mathematics Scholars Program's Certificate in Specialized Studies in Science and Mathematics (p. 1782)

For information about the University College, go to <https://universitycollege.temple.edu/>.

Contact Information

Vicki Lewis McGarvey, EdD, Vice Provost for University College
1330 Polett Walk
Sullivan Hall, Garden Level
Philadelphia, PA 19122
215-204-8873
mccgarvey@temple.edu

General Studies BGS

Overview

University College offers an undergraduate **Bachelor of General Studies** (BGS) for adult learners who have earned previous college credits and have some work/life experience.

The BGS is an interdisciplinary program which consists of major coursework offered by Temple's highly esteemed schools and colleges. Students can customize their degree by choosing either an academic grouping, or by completing a minimum of 2 minors and/or credit certificates.

Academic groupings include:

- Arts and Architecture;
- Business, Sports and Communications;
- Health and Human Services;
- Humanities, Education and Social Sciences;
- Science, Technology, Engineering and Mathematics; and
- Interdisciplinary (complete at least 2 existing minors and/or credit certificates).

A combination of major coursework (including 2 writing-intensive (WI) courses), General Education courses and electives will prepare students with the critical thinking skills, effective communication abilities, and interdisciplinary knowledge necessary for achieving both academic and professional goals. The final writing-intensive (WI) course taken is a capstone (UC 4096) that provides students with opportunities to reflect on their development as learners, integrate learned knowledge, skills, and experiences, and communicate effectively by way of an original research-based project aligned with their career goals. This course must be taken in a student's last semester of study and requires advisor approval. In addition, students must have successfully completed a minimum of 27 credits in the major coursework prior to enrolling in the UC 4096.

Campus Location: Courses are offered in the day and evening at Temple's Main, Ambler and Center City campuses plus online, providing adult learners with the flexibility needed while balancing work and life priorities.

Program Code: UC-GS-BGS

Contact Information

For more information, contact a University College advisor at BGSadvising@temple.edu or Schedule an Appointment.

Learn more about the Bachelor of General Studies.

These requirements are for students who matriculated in academic year 2023-2024. Students who matriculated prior to fall 2023 should refer to the Archives to view the requirements for their Bulletin year.

Summary of Requirements

University Requirements

MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.

All Temple students must take a minimum of two writing-intensive (WI) courses as part of the major. The writing-intensive courses required for this major are CLA 2096 and UC 4096. CLA 2096 is a prerequisite course for UC 4096.

Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 83) section of the *Undergraduate Bulletin* for more details.

University College (UC) Program Requirements

Completion of a minimum of 120 credits.

A minimum of 30 credits must be at the upper level (numbered 2000-4999).

A minimum GPA of 2.0, cumulative, and in the major.

Unless otherwise specified within the program requirements of a minor or certificate, a grade of C- or higher is required for all major coursework. Please consult with your advisor for additional information.

Major Requirements

Students fulfill the academic requirements by completing a minimum of 36 credits. Choose one of two options:

- Complete two minors and/or certificates offered by Temple's Schools and Colleges.
Note: Students will adhere to the School/College academic policies and requirements for the chosen minors and certificates.

OR

- Complete coursework from academic groupings such as: arts and architecture; business, sports and communications; health and human services; humanities, education and social sciences; science, technology, engineering and mathematics.
Note: A minimum of 18 credits within one academic discipline must be completed. Students should consult with an academic advisor regarding the academic discipline options.

The following applies to all BGS students:

- A minimum of 12 credits in the major must be at the upper level (2000-4999).
- A minimum of 12 credits in the major must be completed at Temple University.
- With academic advisor approval, courses at the 0800 level may be counted toward the major if not used to satisfy a General Education (GenEd) requirement.
- Alternative WI courses taken at Temple University may be considered for substitution of CLA 2096 with academic advisor approval.
- Credits for the 2 WI courses will count toward the 36 credits in the major.
- The final capstone course (UC 4096) may only be taken in the final semester of the BGS program. Advisor approval is required.
- A minimum of 27 credits in the major coursework must be taken prior to enrolling in UC 4096.

Note: The academic plan reflects a traditional 8-semester format; however, individualized academic plans are developed for each student based on transfer credits and academic/professional goals. See an academic advisor for assistance in developing a plan for all courses.

Suggested Academic Plan

Bachelor of General Studies in General Studies

Suggested Plan for New Students Starting in the 2023-2024 Academic Year

Year 1		Credit Hours
Fall		
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Quantitative Literacy Course	^{GQ}	4

Major Course		3
Credit Hours		17
Spring		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course		3
GenEd Breadth Course		3
GenEd Breadth Course		3
Major Course		3
Credit Hours		15
Year 2		
Fall		
IH 0852 or IH 0952	Intellectual Heritage II: The Common Good or Honors Intellectual Heritage II: The Common Good	3
CLA 2096	Approaches to Liberal Studies	3
Major Course		3
Major Course		3
Major Course		3
Credit Hours		15
Spring		
GenEd Breadth Course		3
Major Course		3
Major Course		3
Major Course		3
Elective		3
Credit Hours		15
Year 3		
Fall		
GenEd Breadth Course		3
Major Course		3
Major Course		3
Elective		3
Elective		3
Credit Hours		15
Spring		
Major Course		3
Elective		3
Elective		3
Elective		3
Elective		3
Credit Hours		15
Year 4		
Fall		
Elective		3
Elective		3
Elective		3
Elective		3
Elective		3
Credit Hours		15
Spring		
UC 4096	General Studies Integrative Seminar	3
Elective		3

Elective	3
Elective	2
Elective	2
Credit Hours	13
Total Credit Hours	120

NOTE: A minimum of 30 credits must be at the upper level (numbered 2000-4999) and can be fulfilled with a combination of major and/or elective courses.

Specialized Studies in Science and Mathematics Certificate

Overview

The Temple Science and Mathematics Scholars Program is a 12-credit certificate program designed for college-bound high school juniors and seniors who have an interest in science or mathematics. All courses taken are offered through the College of Science and Technology (CST) and taught by CST faculty at Temple's Ambler Campus. This program allows high school students to take college-level courses in a small campus environment that will provide academic support, mentoring and advising to help foster success.

Once accepted into the program, students are required to take a math placement exam that will help determine appropriate courses. Students will engage in lectures and hands-on laboratories to earn college credit which may be eligible for transfer credit to a variety of two- and four-year colleges and universities, including bachelor's degrees at Temple from the College of Science and Technology. Courses will typically be offered in the afternoon or early evening to allow students to attend classes at their high school in the morning.

Once all courses/12 credits are successfully completed, students earn a **Certificate in Specialized Studies in Science and Mathematics**. Students may then continue to take higher level courses and are encouraged to apply to Temple University as an undergraduate student.

This program prepares students for future employment in fields such as health sciences, legal professions, science education, science-related business and technology, and research, and prepares students for graduate school.

Program Highlights

- A minimum of 12 credits must be earned to receive the certificate
- High school tuition rate offered
- Classes will be offered in cohorts of approximately 15-20 students
- Prepares students for a variety of majors within the College of Science and Technology
- Opportunity to work closely with faculty mentors and academic success staff
- Spend time on a college campus

Program Criteria

- Current 11th or 12th grade student
- GPA of 3.0 or better
- Strong attendance record
- Students must successfully complete all required courses to earn the certificate
- Permission from parent/guardian required for all minors
- Recommendation letter from high school guidance counselor or science/math faculty member
- Approval of a modified roster from current high school (if pursuing as dual enrollment)

Student Expectations

- Attendance
- Communication and participation
- Professional and ethical behavior
- Willingness to learn and work hard
- Positive outlook and attitude
- Interest in the fields of science and math

Campus Location: Ambler

Program Code: UC-SSSM-CRHS

Contact Information

Academic and Student Services
 Ambler Campus
 267-468-8100
 ambler@temple.edu (amblerreg@temple.edu)

Requirements

The Certificate in Specialized Studies in Science and Mathematics requires four (4) courses and a minimum of twelve (12) credit hours.

Math and science courses are dependent upon how a student scores on the Temple University math placement exam.

Code	Title	Credit Hours
SCTC 1001	CST First Year Seminar	1
SCTC 1013	Elements of Data Science for the Physical and Life Sciences	3
Select one of the following:		4
MATH 0702	Intermediate Algebra	
MATH 1021	College Algebra	
MATH 1022	Precalculus	
Select one of the following:		4
SCTC 1501	STEM Challenge: The World Around Us	
SCTC 1502	STEM Challenge: The World Within	
CHEM 1027	Applications of Chemistry	
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
Total Credit Hours		12

Sustainability Certificate

Overview

University College offers a twelve-credit, four-course interdisciplinary **Certificate in Sustainability**. This undergraduate certificate provides an opportunity for students to advance their knowledge of sustainability from the orientation of different disciplines, to introduce them to concepts of systems thinking to make them more competitive in a job market that increasingly is requiring sustainability expertise and skills.

Students will select from an existing array of courses in various disciplines. A faculty committee will regularly review new courses proposed by the schools and colleges to be included in available offerings for the certificate.

The certificate is available to all undergraduate degree-seeking students to complete as part of their studies. Consult a school academic advisor about how the required classes fit into academic and career plans.

This certificate may be conferred upon a student upon satisfactory completion of the required credits with a minimum cumulative GPA of 2.0.

Program Code: UC-SUST-CERT

Contact Information

For questions about the Certificate in Sustainability contact sustainabilitycertificate@temple.edu.

Certificate Requirements

- The undergraduate Certificate in Sustainability will require four (4) courses and a minimum of twelve (12) credit hours.
- The four courses will be selected as follows:
 - One course (or 3 credits) from the Sustainable Environment category (SE).
 - One course (or 3 credits) from the Sustainable Social and Culture category (SS).
 - One course (or 3 credits) from the Sustainable Economics and Politics category (SP).
 - The final course taken will be Sustainability in Action (UC 3101).
- One course may be from the student's major department if it is not fulfilling a requirement within that major.

4. General Education courses can be included in the array of courses, but can constitute no more than one of the four courses toward the certificate.
5. The certificate courses in sustainability can satisfy other minors and/or certificates.

Approved Courses

Students will select from an existing array of courses in various disciplines (see course list below). The three categories (Sustainable Environment (SE), Sustainable Social and Culture (SS), and Sustainable Economics and Politics (SP)) within the Certificate of Sustainability have a list of courses that satisfy the requirements for that area. To find courses offered in a specific term, see the "Finding Courses" instructions below. The codes (SE, SS, and SP) indicate which categories the course will fulfill. Please note that some courses may be offered only once a year.

Finding Courses

To find the Certificate in Sustainability courses offered in a semester within each area, students may locate the information in two primary ways:

- Go directly to the Class Schedule Search page on the university's web site. Select a semester, click Continue and click Advanced Search. Use the Attribute filter to find courses that are available in any of the following areas: Sustainable Environment (SE), Sustainable Social and Culture (SS), and/or Sustainable Economics and Politics (SP).
- Go to the TUportal. Students must log into TUportal with their username and password. Select the **Student** tab. Select **Browse Class Schedule** in the Registration channel. Select a semester and click Advanced Search. Use the Attribute filter to find courses that are available in either Sustainable Environment (SE), Sustainable Social and Culture (SS), and/or Sustainable Economics and Politics (SP).

Code	Title	Credit Hours
Art and Architecture, Tyler School of		
ARCH 1001	Introduction to Design and the Environment (SE, SS)	3
ARCH 2124	Facility Management Foundation II (SE, SP)	3
ARCH 2151	Architecture, Technology, and the Environment (SE, SS)	3
ARCH 3111	Introduction to Historic Preservation (SS, SP)	3
ARCH 3354	Sustainability and Architecture (SE, SP)	3
ARTH 2005	Cultural Heritage Preservation (SE, SS)	4
ARTH 2753	Art and Environment in American Culture (SS)	4
BOT 1112	Plant Ecology (SE)	3
CDEV 1113	Introduction to Community Development (SE, SS, SP)	3
CDEV 2255	Environmental Justice in Communities (SS)	3
CDEV 2354	Cooperatives (SS, SP)	3
CDEV 3155	Healthy Community Design and Development (SE, SS)	3
CDEV 3334	Community Economic Development (SS, SP)	3
CDEV 3455	Community Engagement and Empowerment (SS)	3
CTRP 0807	People, Places, and Environment (SE, SP)	3
CTRP 2114	Urban Form and Design (SS)	3
CTRP 2166	Land Use Planning (SE, SS, SP)	3
CTRP 2213	Environmental Planning (SE)	3
CTRP 2251	Sustainable Food Systems Planning (SE, SS, SP)	3
CTRP 3155	Ecological Planning and Development (SE, SP)	3
CTRP 3255	Sustainability in Suburban Communities (SE, SS, SP)	3
CTRP 3256	Sustainable Community Design and Development (SS, SP)	3
CTRP 3655	Transportation Planning (SE, SS, SP)	3
HORT 2221	Herbaceous Plants I (SE)	3
HORT 2222	Herbaceous Plants II (SE)	3
HORT 2334	Food Crops I (SE)	3
HORT 2353	Food Crops II (SE, SS)	3
HORT 2552	Trees in the Urban Landscape (SE, SS, SP)	2
HORT 2556	Introduction to Beekeeping (SE)	3
HORT 3514	Landscape Restoration (SE)	3
LARC 0841	Sustainable Design (SE)	3
LARC 0852	Green vs. Gray: Improving and Sustaining Urban Ecosystems (SE, SS, SP)	3
LARC 1013	Natural and the Built Environment (SE)	3

LARC 1111	Introduction to Green Careers in Landscape Architecture (SE)	1
LARC 2243	Landscape Engineering II (SE)	3
LARC 2754	Water Design in the City (SE)	2
LARC 2758	Summer Field Ecology (SE)	3
Business and Management, Fox School of		
BA 3531	Sustainability on the Ground (SS)	3
HRM 2511	Corporate Sustainability: People, Profits & Planet (SE, SS, SP)	3
HRM 3505	Sustainable Organizational Leadership (SE, SS, SP)	3
LGLS 3511	Environmental Law and Sustainability (SE, SS, SP)	3
MKTG 2511	Marketing for the Sustainable Enterprise (SE, SS)	3
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact (SE, SS, SP)	3
Education and Human Development, College of		
AOD 3319	Skill Building for Social Entrepreneurship and Community Engagement (SS, SP)	3
Media and Communication, Lew Klein College of		
CSI 3401	Social Activism and Community Organizing (SS)	3
JRN 3253	Health and Environmental Writing (SS)	3
MSP 3473	Media and the Environment (SS)	3
Engineering, College of		
CEE 0845	The Environment (SE)	3
or CEE 0945	Honors: The Environment	
or ENVT 0845	The Environment	
or ENVT 0945	Honors: The Environment	
CEE 1051	Introduction to the Environment (SE, SS)	3
CEE 2711	Environmental Chemistry & Microbiology (SE)	3
CEE 2712	Introduction to Environmental Engineering (SE)	3
CEE 2715	Principles of Sustainable Engineering (SE, SS)	3
CEE 3711	Environmental Engineering (SE)	3
CEE 3712	Environmental Fluids and Contaminant Dynamics (SE)	3
CEE 3715	Microbiological Principles of Environmental Engineering (SE)	3
CEE 3725	Water Quality and Analysis Lab (SE)	1
CEE 3727	Environmental Hydrology and Stormwater Management (SE)	3
CEE 4531	Life Cycle Assessment and Carbon Footprinting (SP)	3
CEE 4631	Environmental Hydrology (SE)	3
CEE 4641	Urban Streams and Stormwater Management (SE)	3
CEE 4711	Air Pollution Control System (SE)	3
CEE 4725	Environmental Systems Design (SE)	3
CEE 4773	Sustainability Aspects of Water Supply and Wastewater Treatment (SE, SS, SP)	3
CMT 3341	Environmental and Safety Aspects of Construction (SE, SS)	2
ENGR 4577	Nanotechnology Solutions for a Sustainable Urban Environment (SE)	3
ENVT 4741	Environmental Modeling (SE)	3
MEE 4506	Energy Conversion Laboratory (SE)	1
MEE 4575	Renewable and Alternative Energy (SE)	3
MEE 4577	Power Generation and Storage Technologies (SE)	3
Public Health, College of		
ENVH 1103	International Health (SS)	3
or ENVH 1903	Honors International Health	
ENVH 2102	Environmental Health (SE, SS)	3
HRPR 1001	Public Health: The Way We Live, Work and Play (SS)	3
SBS 2301	Contemporary Slavery and Public Health (SS)	3
Liberal Arts, College of		
ANTH 0814	Human Ecology (SE, SS)	3
or GUS 0814		

ANTH 2001	Evolution and Human Environments (SE, SS)	3
ASST 3001	Earth Ethics (SS)	3
or ENST 3001	Earth Ethics	
or ENST 3904	Honors Earth Ethics	
or REL 3001	Earth Ethics	
or REL 3904	Honors Earth Ethics	
ASST 3052	Environmental Problems in Asia (SE, SS, SP)	3
or ENST 3052	Environmental Problems in Asia	
or GUS 3052	Environmental Problems in Asia	
ECON 3596	Energy, Ecology, and Economy (SE, SP)	3
or ENST 3596	Energy, Ecology, and Economy	
ENST 0842	Sustainable Environments (SE, SS, SP)	3
or ENST 0942	Honors Sustainable Environments	
or GUS 0842	Sustainable Environments	
or GUS 0942	Honors Sustainable Environments	
ENST 2002	Physical Geography (SE, SS)	4
ENST 2025	Environmental Law and Regulation (SS, SP)	3
ENST 2051	The Urban Environment (SE, SS, SP)	3
or GUS 2051	Urban Environment	
ENST 2157	Environmental Ethics (SS)	3
or ENST 2957	Honors Environmental Ethics	
or PHIL 2157	Environmental Ethics	
or PHIL 2957	Honors Environmental Ethics	
ENST 3004	Geography of Natural Resources (SE, SS, SP)	3
ENST 3023	Police, Prisons, and Pollution (SE, SS)	3
or GUS 3023	Police, Prisons, and Pollution	
ENST 3051	Environmental Policy Issues (SS)	3
or GUS 3051	Environmental Policy Issues	
ENST 3053	Climatology (SE)	3
or GUS 3053	Climatology	
ENST 3054	Energy, Resources and Society (SE)	3
ENST 3056	Political Ecology (SE, SS)	3
or GUS 3056	Political Ecology	
ENST 3057	Sustainable Cities (SE, SS)	3
or GUS 3057	Sustainable Cities	
ENST 3058	Environment and Development (SE, SP)	3
or GUS 3058	Environment and Development	
ENST 3152	U.S. Environmental Policy (SS)	3
or POLS 3152	U.S. Environmental Policy	
ENST 3214	North American Environmental History (SS)	3
or HIST 3214	North American Environmental History	
ENST 3265	International Environmental Policy (SE, SS)	3
or POLS 3265	International Environmental Policy	
ENST 3314	Food Studies: A Geographical Perspective (SS)	3
or GUS 3314	Food Studies: A Geographical Perspective	
ENST 4017	Health and Environment Seminar (SE, SS)	3
or ENST 4917	Honors Health and Environment Seminar	
or GUS 4017	Health and Environment Seminar	
or GUS 4917	Honors: Health and Environment Seminar	
ENST 4066	Environmental GIS (SE)	3
GUS 3016	Contemporary Issues in City Planning (SE, SS)	3
GUS 3307	Transportation & Culture (SS)	3

or ENST 3307	Transportation and Culture	
SOC 3511	Environmental Sociology: The End of the World as We Know It? (SS)	3
Science and Technology, College of		
BIOL 2227	Principles of Ecology (SE)	3
BIOL 3275	Ecology of Invasive Species (SE, SP)	3
BIOL 3307	Conservation Biology (SE, SS, SP)	3
BIOL 3316	Tropical Marine Biology (SE)	4
BIOL 3321	Plant Community Ecology (SE, SS)	3
BIOL 3323	Global Change Science: Analytics with R (SE, SS)	3
BIOL 3335	Life at the Extremes - Polar Biology (SE)	3
BIOL 3336	Freshwater Ecology (SE)	4
BIOL 3389	Field Research in Community Ecology (SE)	4
BIOL 4327	Biological Impacts of Global Climate Change (SE, SS, SP)	3
CHEM 0877	The Chemistry of Global Environmental Issues (SE)	3
EES 0837	Evolution of Earth and Its Life (SE, SS)	3
EES 0842	Sustainable Environments (SE, SS, SP)	3
EES 0854	Geology of the National Parks (SE, SS, SP)	3
or EES 0954	Honors Geology of the National Parks	
EES 0874	Environmental Life Cycle Analysis: Does Buying "Green" Matter? (SE, SS, SP)	4
EES 2002	Energy and Environment (SE, SS)	3
EES 2096	Climate Change: Oceans To Atmosphere (SE)	4
PHYS 0839	Powering the Future (SE, SP)	3
or PHYS 0939	Honors Powering the Future	

Division of University Studies

Overview

Recognizing that not all students can or should declare an academic major upon entering college, University Studies is the academic home for students who have not yet decided on a major and students in transition between majors.

Goals and Objectives

University Studies, formed in 1998, serves any Temple student who has not chosen a collegiate home or declared a major or who needs assistance while changing from one college to another. University Studies is not a degree-granting college. Rather it is an academic unit that exists to help students explore academic options and to gain admission to a degree-granting school or college at Temple. Students can remain in University Studies until completion of 60 credits, or approximately their first two years at the university.

Admissions

Transfer students with more than 60 credits cannot be admitted to Temple as an undeclared student in the Division of University Studies. Students admitted to Temple as a University Studies student can remain in the division until they select a school/college major or upon completion of 60 credits.

Financial Aid and Scholarships

Division of University Studies Sophomore Scholarship - The DUS Sophomore Scholarship is awarded each fall to a current or former University Studies student who will be entering the sophomore year with a declared major. Students should be rising sophomores with a cumulative GPA of 3.5 or higher and a minimum of 30 completed credits. For more information and for an application, go to <https://undergradstudies.temple.edu/arc>.

Special Programs

The **Peer Mentor program** is an exciting program whose purpose is to create a community for undeclared students. It's an opportunity for current undeclared students to meet with former undeclared students with the goal of sharing their major declaration story. This includes what worked for them, what didn't work, challenges, and successes. The idea is that there is hope that every University Studies student will declare a major that's a good fit for them. Furthermore, by hearing someone else's story, each student will feel empowered and motivated to actively participate in their own journey.

Peer Mentors participate in an intense training where they learn communication skills, policies, resource referral, and understand the resources available to undeclared students. They are a guide, a non-judgmental listener, a supporter, an encourager, and a resource.

The **Major Exploration Academy** or MEA is a non-credit program aimed at guiding students toward developing a clearer picture of the major that is right for them. Students are invited to apply each spring semester. The program includes a series of four progressively focused advising sessions, with assigned exercises in between.

The Major Exploration **First Year Seminar** is an academic course designed to support student learning and development in the critical first semester of college. The course has a focus on academic and career exploration. University Studies students take the course together with members of their cohort, with shared goals of exploring major options.

Academic Distinctions

Eligibility for the University Studies' Distinguished Honors list is determined by the semester grade point average (GPA) corresponding to cut-off points that will yield the top 16% of GPAs based on the five previous fall and spring semesters for each school or college. Students must have 12 graded credits (A to F grades) in order to be eligible for dean's list for the fall or the spring semesters.

Students who begin in the fall as part-time (i.e., registered for fewer than 12 credits) and continue as part-time in the spring will be eligible for dean's list in the spring if they accumulate at least 12 graded credits (A to F grades) over the fall and spring semesters and meet the GPA criteria listed on the chart for the school or college. If a student is enrolled part-time in the fall but full-time in the spring, eligibility for dean's list will be based on spring semester grades.

The dean's list cut-offs for this academic year are calculated and published in the section on Academic Policies (p. 1849).

Contact Information

Neal Conley, Director, Academic Advising
Mitten Hall, Suite 110
Philadelphia, PA 19122-6029
215-204-2500
dus@temple.edu
<https://undergradstudies.temple.edu/arc>

Academic Policies and Regulations

Please see the *Undergraduate Bulletin's* Academic Policies (p. 1835) section. Students are responsible for complying with all University-wide academic policies that apply to their individual academic status. Additional and unique policies or exceptions for the Division of University Studies appear below.

Academic Course Load

Academic overloads during the fall and spring semesters, students who want to take 19 or more semester hours, need special approval of the Director of Academic Advising.

Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria are placed on the Distinguished Honors list. See the Dean's List (p. 1849) policy for specific GPA and credit-hour requirements.

Program Performance

Students who are placed on Academic Warning or Academic Probation will be required to meet with their advisor to discuss and develop alternative academic plans as well as discuss strategies for improving their academic performance. (See Academic Standing, Policy # 02.10.11)

Transfer between Colleges within the University: Change of Program into the Division of University Studies

Students who have earned fewer than 60 credits currently enrolled in other schools or colleges who are reconsidering their choice of major or who wish to explore other academic options may process a change of program request to enter University Studies as an undeclared major. All students interested in transferring into the Division of University Studies must meet with an academic advisor to discuss this transfer.

Students who are compelled to change their major for exhausting the permitted number of attempts in a required course (See Repeating a Course, Policy # 02.10.12) are permitted to enter University Studies as an undeclared major, regardless of the number of credits earned. Division of University Studies students who have earned 60 or more credits must consult with an advisor each term until they declare a degree-bearing major.

Grievances

Students can bring grievances to the Director of Academic Advising. Grievances regarding instructors and grades are referred to the grievance protocol for the school/college offering the course.

General Requirements

The Division of University Studies is not a degree-granting college. It is an academic unit which exists to help students explore academic programs.

Individual Program Requirements

- The total number of credit hours needed to graduate may be greater for some students based on initial placement exams, transfer evaluations, individual curricular choices (including declaration of major and student's credit totals at time major is declared), and academic progress.
- Certain courses fulfill multiple requirements. Consult your advisor to plan your curriculum more effectively.
- Students must fulfill the necessary prerequisites for any given course or course sequence. See the Prerequisites and Co-requisites Policy (p. 1860) in the University-wide Academic Policies section of this *Bulletin*.

Division of University Studies: Undeclared Option

Recognizing that not all students can or should declare an academic major upon entering college, Temple University established University Studies—the academic home for students who have not yet decided on a school/college or major. University Studies is not a degree-granting college. Rather, it is an academic unit that exists to help students explore academic options. All students must declare a major in one of Temple's degree-granting undergraduate schools and colleges upon completion of 60 credits, including any credits transferred from other institutions.

University Studies offers undeclared students a variety of services and programs to help them select an appropriate major. Students can use online resources in our Academic Information Center to research majors and careers and can participate in student success and academic exploration workshops held throughout the year. Upon declaring a major, students are required to fulfill the school/college and department requirements of that program.

University Studies does not grant degrees and students cannot graduate with an "undeclared" curriculum designation.

Suggested First-Year Academic Plan for the Undecided Student

This sample academic plan allows students to satisfy General Education requirements while exploring academic interests and majors. (Note: Entering students, particularly freshmen, are encouraged to enroll in a learning community. See Learning Communities (p. 49) and University Seminars (p. 48) for more information.)

Course	Title	Credit Hours
Year 1		
Fall		
ENG 0802 or ENG 0812 or ENG 0902	Analytical Reading and Writing ¹ or Analytical Reading and Writing: ESL or Honors Writing About Literature	4
GenEd Quantitative Literacy course ^{GQ} or Major Math Course ²		4
GenEd Breadth Course or Major Exploration Course ³		3-4
GenEd Breadth Course or Major Exploration Course ³		3
UNVS 1001	First Year Seminar I	1
Credit Hours		15-16
Spring		
IH 0851 or IH 0951	Intellectual Heritage I: The Good Life ⁴ or Honors Intellectual Heritage I: The Good Life	3
GenEd Breadth Course or Major Exploration Course ³		3-4
GenEd Breadth Course or Major Exploration Course ³		3
GenEd Breadth Course or Major Exploration Course ³		3
GenEd Breadth Course or Major Exploration Course ³		3
Credit Hours		15-16
Total Credit Hours		30-32

1

Depends on placement exam; some students may be required to take ENG 0701 or ENG 0711.

2

Depends on placement exam and potential choice of major.

3

Select an appropriate GenEd course or a class in potential choice of major in consultation with an academic advisor.

4

Note: Non-native speakers can opt for an ESL version of this course.

Academic Advising

The Academic Resource Center
Mitten Hall, Suite 110
215-204-2500
dus@temple.edu

Goal and Objectives

Students enrolled in University Studies use the advising services of the Academic Resource Center, an academic support program established in 1997 to meet the needs of deciding students. Any student at Temple, whether enrolled in University Studies or not, is welcome and encouraged to use the services of the Academic Resource Center.

Academic advisors are important sources of information on University policies and procedures, the General Education curriculum (GenEd (p. 83)) requirements, and degree programs. While students must assume primary responsibility for knowing the requirements for their degree and for acquiring information about their academic status, academic advisors are a valuable resource. Advisors introduce students to the various sources of information available on academic programs, enabling students to be well-informed partners in their own education.

At the Academic Resource Center, a staff of professional and peer advisors works closely with students from the time they arrive at Temple through their successful transitions into schools/colleges and declared majors. Advisors meet with students on walk-in and appointment bases in both individual and group advising sessions.

Students are strongly encouraged to meet regularly with academic advisors to discuss academic plans, course selection, and registration. Students not eligible for online registration are required to see an advisor for course selection and registration.

Academic advisors attempt to avoid errors when advising students about their program requirements, but schools and colleges cannot assume liability for errors in advising. Therefore, students must assume primary responsibility for knowing the requirements for their degree and for acquiring current information about their academic status.

Services Provided through the Advising Office

- Individualized advising geared towards helping students declare majors and complete the intra-university transfer process (transferring from one Temple school/college to another)
- The *Major Exploration Academy*, a four-step, non-credit program in which a dedicated academic advisor helps guide students toward selecting a major through self-reflection activities, the completion of major and career worksheets, and investigating career options
- UNVS 1002 First Year Seminar II, a one-credit course designed to help undeclared students explore possible career and major paths at Temple
- Workshops on academic planning and choosing a major
- Assistance with accessing online information regarding Temple schools/colleges and majors

Special Advising Policies and Procedures

Enrollment in the Division of University Studies: Beginning fall 2002 and after, undergraduates matriculated in the Division of University Studies as undeclared majors and who entered University Studies as either freshmen, transfer students, or intra-university transfers from another Temple school or college prior to the completion of 45 credits, can remain in University Studies up to the completion of 60 credits. Students entering University Studies having completed between 45-59 credits can remain in University Studies up to two academic-year semesters if enrolled full-time or until completion of 60 credits if attending part-time.

University Studies students can declare majors throughout the year in accordance with the declaration of major standards set forth by the individual schools and colleges and the intra-university transfer guidelines established by the University. University Studies students can also request a change in status from undecided to an academic program within a college during their New Student Orientation visit.

Note: University Studies students must meet the University's minimum standard for academic progress to remain enrolled in the Division of University Studies.

Accelerated Degree Programs

Temple University offers several Accelerated Degree Programs arranged between undergraduate and graduate or professional schools and colleges. These programs enable academically qualified students to earn a bachelor's and an advance degree—graduating sooner than they would have completing two distinct programs.

+1 Undergraduate/Graduate Accelerated Programs

Eligible undergraduate students use up to 12 specified graduate credits approved by the school/college to fulfill requirements for their undergraduate degree. Upon graduation from their undergraduate program, students move seamlessly into their graduate program, which they complete, in most cases, in one additional year. Students should meet with their advisor as soon as possible to discuss requirements for eligibility and the application process.

Fox School of Business and Management

BBA or BS / MS in Actuarial Science
BBA or BS / MS in Business Analytics
BBA or BS / MS in Information Technology Auditing and Cyber Security
BBA or BS / MS in Innovation Management and Entrepreneurship

College of Education and Human Development

Master of Education in Advocacy and Organizational Development

Any Baccalaureate degree / MEd in Advocacy and Organizational Development

Master of Education in Career and Technical Education

BBA in Business Management / MEd in Career and Technical Education (with optional concentration in Business, Computer and Information Technology or Marketing Education)
BBA in Marketing / MEd in Career and Technical Education with (with optional concentration in Business, Computer and Information Technology or Marketing Education)

Master of Education in Higher Education

Any Baccalaureate degree / MEd in Higher Education

Master of Education in Special Education

BSEd in Early Childhood-Elementary Education (PreK-4) / MEd in Special Education

Master of Science in Education

BS in Human Development and Community Engagement / MEd in Applied Behavior Analysis
Any Baccalaureate degree / MEd in Teaching English to Speakers of Other Languages

Master of Education in Secondary Education, English Education

BA in English / MEd in Secondary Education, English Education
BA in Theater / MEd in Secondary Education, English Education

Master of Education in Secondary Education, Social Studies Education

BA in Geography and Urban Studies / MEd in Secondary Education, Social Studies Education
BA in History / MEd in Secondary Education, Social Studies Education
BA in Political Science / MEd in Secondary Education, Social Studies Education
BA in Sociology / MEd in Secondary Education, Social Studies Education
BA in Economics / MEd in Secondary Education, Social Studies Education

Master of Education in Secondary Education, World/Foreign Languages Education

BA in Classics with a Concentration in Classical Languages and Literature / MEd in Secondary Education, World/Foreign Languages Education
BA in French / MEd in Secondary Education, World/Foreign Languages Education
BA in German / MEd in Secondary Education, World/Foreign Languages Education
BA in Italian / MEd in Secondary Education, World/Foreign Languages Education

BA in Spanish / MEd in Secondary Education, World/Foreign Languages Education
 BA in Chinese / MEd in Secondary Education, World/Foreign Languages Education

Master of Education in Secondary Education, Mathematics Education

BA in Mathematics / MEd in Secondary Education, Mathematics Education
 BS in Mathematics / MEd in Secondary Education, Mathematics Education

Master of Education in Secondary Education, Science Education

BA or BS in Biology / MEd in Secondary Education, Science Education
 BA or BS in Chemistry / MEd in Secondary Education, Science Education
 BA or BS in Geology / MEd in Secondary Education, Science Education
 BA in Natural Sciences / MEd in Secondary Education, Science Education
 BA or BS in Physics / MEd in Secondary Education, Science Education

College of Engineering

BS in Bioengineering / MS in Bioengineering
 BS in Civil Engineering / MS in Civil Engineering
 BS in Civil Engineering / MS in Environmental Engineering
 BS in Electrical Engineering / MS in Electrical Engineering
 BS in Electrical Engineering with Computer Engineering Concentration / MS in Electrical Engineering
 BS in Environmental Engineering / MS in Environmental Engineering
 BS in Mechanical Engineering / MS in Mechanical Engineering
 BSCET in Construction Engineering Technology / MS in Civil Engineering

College of Public Health

BS in Recreational Therapy / MS in Recreational Therapy
 BS in Public Health / MPH in Applied Biostatistics
 BS in Public Health / MPH in Epidemiology
 BS in Public Health / MPH in Health Policy and Management
 BS in Public Health / MPH in Social and Behavioral Sciences
 BS in Health Professions / MS in Athletic Training

Lew Klein College of Media and Communication

BS or BA in any program that has 6 free elective credits / Master of Journalism
 BA in Media Studies and Production / MA in Media Studies and Production
 BA in Communication Studies / MA in Media Studies and Production

College of Liberal Arts

BA in Criminal Justice / MA in Criminal Justice
 BA in Economics / MA in Economics
 BA in English / MA in English
 BA in Environmental Studies / MA in Geography and Urban Studies
 BA in Gender, Sexuality and Women's Studies / MA in Sociology
 BA or BS / PSM in Geographic Information Systems
 BA in Geography and Urban Studies / MA in Geography and Urban Studies
 BS in Neuroscience: Systems, Behavior and Plasticity / MS in Neuroscience: Systems, Behavior and Plasticity
 BA in Philosophy / MA in Philosophy
 BA in Political Science / MA in Political Science
 BA in Psychology / MS in Psychological Research
 BA or BS / MPP in Public Policy
 BA in Sociology / MA in Sociology
 BA in Spanish / MA in Spanish

College of Science and Technology

BA or BS in Biology / PSM in Scientific Writing
 BA or BS in Biology / PSM in Bioinformatics and Biological Data Science
 BA or BS in Biology / PSM in Bioinnovation
 BA or BS in Biology / PSM in Biotechnology
 BS in Biochemistry / PSM in Bioinformatics and Biological Data Science

BS in Biochemistry / PSM in Bioinnovation
BS in Biochemistry / PSM in Biotechnology
BS in Biochemistry / PSM in Forensic Chemistry
BS in Chemistry / MS in Chemistry
BA or BS in Chemistry / PSM in Forensic Chemistry
BS in Computer Science / MS in Computer Science (p. 1437)
BS in Computer Science / MS in Computational Data Science
BS in Data Science / MS in Computational Data Science
BA in Mathematics / MS in Mathematics (p. 1441)
BS in Mathematics / MS in Mathematics (p. 1442)
BS in Mathematics and Computer Science / MS in Computational Data Science
BA or BS in Natural Sciences / PSM in Scientific Writing
BA or BS in Natural Sciences / PSM in Bioinnovation
BA or BS in Natural Sciences / PSM in Biotechnology
BS in Neuroscience: Cellular and Molecular / PSM in Biotechnology
BS in Neuroscience: Cellular and Molecular / PSM in Bioinformatics and Biological Data Science
BS in Neuroscience: Cellular and Molecular / PSM in Bioinnovation
BA in Physics / MS in Physics (p. 1446)
BS in Physics / MS in Physics (p. 1447)

School of Sport, Tourism and Hospitality Management

BS in Sport and Recreation Management / MS in Sport Business

Tyler School of Art and Architecture

BS in Architecture / Master of Architecture, Professional Track
BA or BS / MS in City and Regional Planning
BS in Community Development / MS in City and Regional Planning

3+3, 3+4 Undergraduate/Professional Accelerated Programs

Pre-Professional Accelerated Programs allow Pre: Medicine, Dentistry, Pharmacy, and Podiatry (3+4 Tracks) students as well as Physical Therapy (3+3 Track) students the option of earning both their Bachelor's degree and Graduate Degrees in a shorter period of time after successfully passing all courses in the first year of professional school at Temple University.

Students interested in the Pre-Med 3+4 Accelerated Track must be previously accepted to Temple University as a Pre-Med Health Scholar and contact Pre-Professional Health Advising during their first semester to confirm eligibility. Students interested in all other accelerated programs should contact Pre-Professional Health Advising during the first semester of their undergraduate academic career to discuss eligibility, as well as the professional school application process.

Kimberly Buck-Speck
Pre-Professional Health Advising
215-204-2513
healthadvising@temple.edu
<https://undergradstudies.temple.edu/healthadvising>

3+4 Dental Program (BA/DMD) (p. 1438)

- CST Majors: Biology, Chemistry

3+4 Medical Program (BA/MD) (p. 1443)

- CST Majors: Biology, Chemistry

3+4 Pharmacy Program (BA/PharmD) (p. 1444)

- CST Majors: Biology, Chemistry

3+3 Physical Therapy Program (BS/DPT)

- CPH Major: Health Professions

3+3 Physical Therapy Program (BA/DPT) (p. 1445)

- CST Major: Biology

3+4 Podiatry Program (BA/DPM) (p. 1447)

- CST Majors: Biology, Chemistry

Intercollegial Programs

Temple University offers intercollegial and interdisciplinary academic programs that involve students and departments in more than one of the university's schools, colleges and divisions. These programs provide students with opportunities to cross the boundaries of traditional academic disciplines, combine a variety of perspectives, and take advantage of faculty expertise in different departments throughout the University. The programs are designed to accommodate students' interests and prepare students for success in a variety of career fields. The schools, colleges and divisions collaborating in these programs are indicated in each description. Each college's degree requirements are described in the Schools, Colleges, and Divisions section of this *Bulletin*. Students should consult the contact person of an intercollegial program for more information about both collegial policies and requirements, as well as the program itself.

- Digital Media Technologies Minor (p. 1796)
- Environmental Programs (p. 1798)
- Mathematical Economics (p. 1798)

Digital Media Technologies Minor

Overview

The **Minor in Digital Media Technologies** is an interdisciplinary minor offered through the Department of Media Studies and Production (MSP) within the Low Klein College of Media and Communication and the Department of Computer and Information Sciences (CIS) within the College of Science and Technology. This minor is designed to expand students' knowledge of the information age and enable them to share communications over the internet using fast evolving, emerging technologies.

The minor is available to undergraduate students in Media Studies and Production, Computer and Information Science, as well as other departments and colleges. Upon completion of the minor, students should be able to demonstrate the following competencies:

- Use technology to integrate internet content with computers and mobile devices.
- Design and implement content for various digital media, utilizing database technologies.
- Critically analyze decisions made regarding the use of technology, specifically in the social and ethical domains.
- Understand the impact of current and emerging technologies on communications, both locally and globally.
- Create effective written communications make professional presentations.
- Analyze and solve problems efficiently.

Campus Location: Main

Note: Transfer credits are not accepted for credit for the minor.

Contact Information

Sally Kyvernitis, CIS Faculty Advisor
Science Education and Research Center, Room 330
215-204-2030
sallyk@temple.edu

Hector Postigo, MSP Faculty Advisor
Annenberg Hall, Room 115
215-204-7398
hector.postigo@temple.edu

Learn more about the Digital Media Technologies minor.

Minor Requirements

- Students with a GPA of 2.00 or more may declare this minor by contacting either CST advising (215-204-2890) or Klein advising (215-204-5273). See additional Grade Requirements below.
- Three (3) of the Digital Media Technologies minor courses must be distinct from the student's major. Students should see their CST or Klein advisor for course substitutions.
- Students without a CIS background should begin their CIS courses in their Junior year or earlier.

Code	Title	Credit Hours
Two Required MSP Courses:		
Select one of the following:		3-4
MSP 1701	Introduction to Media Production	
MSP 2701	Intermediate Video Production ¹	
MSP 2751	Audio for Media ¹	
MSP 2741	Introduction to Internet Studies and Web Authoring ¹	3
Two Required CIS Courses:		
Select two courses from the following:		8
CIS 1052	Introduction to Web Technology and Programming	
CIS 1056	Advanced Web Technology and Programming	
CIS 2305	Mobile Computing Technologies ¹	
CIS 3308	Web Application Programming ¹	
CIS 3342	Server-Side Web Application Development ¹	
CIS 3344	Client-Side Scripting for the Web ¹	
CIS 3515	Introduction to Mobile Application Development ¹	
Two Electives:		
One CIS elective and one MSP elective are required. However, MSP students may choose two CIS electives instead and CIS students may choose two MSP electives instead.		
Select two courses from the following:		7-9
MSP Elective Options		
MSP 4741	Emergent Media Production	
MSP 4221	Information Technology Policy ¹	
MSP 4252	Law and Ethics of Digital Media	
MSP 4541	Mobile Media	
MSP 4614	Creating a Media Business	
CIS Elective Options		
CIS 2305	Mobile Computing Technologies ^{1,2}	
any other CIS 2000+ level course ¹		
Total Credit Hours		21-24

1

This course requires additional prerequisites outside of the Digital Media Technology Minor coursework.

2

May satisfy a CIS Elective only if CIS 2305 was not taken as a Required CIS Course.

Elective Requirements

- All prerequisites must be completed to enroll in minor courses or permission from both the faculty advisor and instructor must be obtained prior to registration.

Grade Requirements

- Minor credit is not given for grades below C-.
- Students must maintain at least a 2.00 grade point average in the program to successfully complete this minor.

Residency Requirements

At least 4 courses required for the minor must be completed at Temple. At least 2 CIS courses and at least 2 MSP courses must be completed at Temple.

Environmental Programs

Overview

Temple University offers two degrees in the Environmental Program: a Bachelor of Science degree that emphasizes scientific courses needed to understand environmental problems, and a Bachelor of Arts degree that emphasizes policy and societal impacts. The College of Science and Technology offers the Bachelor of Science in Environmental Science and the College of Liberal Arts offers the Bachelor of Arts in Environmental Studies. A minor also is offered through the College of Liberal Arts.

Requirements for the Bachelor of Science in Environmental Science

Please see the following College of Science and Technology *Bulletin* pages for details on the requirements for the Bachelor of Science degree in Environmental Science.

- Environmental Science BS with a concentration in Applied Ecology (p. 1558)
- Environmental Science BS with a concentration in Climate (p. 1564)
- Environmental Science BS with a concentration in Environmental Geochemistry (p. 1569)
- Environmental Science BS with a concentration in Hydrology (p. 1574)

Requirements for the Bachelor of Arts in Environmental Studies

Please see the College of Liberal Arts *Bulletin* page for details on the requirements for the Bachelor of Arts in Environmental Studies (p. 1014).

Requirements for the Minor in Environmental Studies

Please see the College of Liberal Arts *Bulletin* page for details on the requirements for the minor in Environmental Studies (p. 1020).

Contact Information

Christina Rosan, Director of Environmental Studies (CLA)
Gladfelter Hall, Room 320
215-204-9327
cdrosan@temple.edu

Sujith Ravi, Director of Environmental Sciences (CST)
Beury Hall, Room 317
215-204-7122
sravi@temple.edu

Mathematical Economics

Overview

The Department of Economics in the College of Liberal Arts and the Department of Mathematics in the College of Science and Technology offer the **Bachelor of Arts in Mathematical Economics** program as a platform for systematic concentration in the mathematical approach to economics. Economics has progressed in the last several decades by making extensive use of mathematical techniques. As a result, students who wish to pursue graduate study in economics, finance, accounting and other disciplines that make an extensive use of economics need a thorough grounding in both economics and mathematics. The Mathematical Economics curriculum provides this grounding with a broad selection of courses that cover all important areas of economics and the mathematical tools required for a critical, deep mastery of these areas. This program is especially recommended for those students who intend to pursue graduate studies in Economics.

View the requirements and academic plan for the BA in Mathematical Economics in the College of Liberal Arts (p. 1112).

View the requirements and academic plan for the BA in Mathematical Economics in the College of Science and Technology (p. 1635).

Campus Location: Main

Contact Information

Michael Bognanno, Chair, Economics
Ritter Annex, Room 877
215-204-1680
bognanno@temple.edu

Brian Rider, Chair, Mathematics
Wachman Hall, Room 638

215-204-7841
mathematics@temple.edu

Dimitrios Diamantaras, Advisor, Economics
Ritter Annex, Room 883
215-204-8169
dimitrios.diamantaras@temple.edu

Boris Datskovsky, Director Undergraduate Studies, Mathematics
Wachman Hall, Room 632
215-204-7847
mathadvising@temple.edu

Learn more about the Bachelor of Arts in Mathematical Economics.

Cost and Aid

Tuition and Fees

Conrad Muth, Assistant Vice President & Bursar
115 Carnell Hall
215-204-7269
conrad.muth@temple.edu
bursar.temple.edu

Registration for courses is not optional, and students must not attend courses for which they are not registered. Once a student registers for a course—or is registered by an advisor at the student's request—the student remains financially obligated for the course unless and until he or she drops the course by the prescribed deadlines for dropping and adding courses. Prior to registering for the first time each semester, students are required to accept Temple University's Financial Responsibility Agreement, which outlines the financial terms and conditions associated with course registration.

Students may drop courses and otherwise modify their registrations in Self-Service Banner (SSB) or by working with an academic advisor. Please see the Academic Calendars on the Office of the University Registrar's web site for add/drop and withdrawal deadlines for each semester and summer session.

Once registered, students must pay tuition and fees according to the Bursar's Office due date schedule. Failure to satisfy financial obligations may result in withholding of official transcripts and diplomas; denial of the right to register for future sessions; and the assessment of late fees and collection costs.

Students who are not planning to attend the semester must drop their course registration. Students who do not drop classes by the end of the official drop/add period (See Academic Calendar for specific dates) remain financially obligated for the balance due. Instructors are advised to issue letter grades (typically "F") for students who have not been attending but are on their roster of registered students.

Students who drop classes by the end of the drop/add period of a semester or summer session will have their courses dropped. This will relieve them of academic responsibility and in most instances financial responsibility associated with the course.

Students who withdraw from classes after the drop/add period are responsible for full payment of all tuition and fee charges, along with any payment plan fees, and late payment charges. These courses will be recorded on the transcript with the notation of "W," indicating that the student withdrew. Unpaid tuition balances may be referred for collection, and students may be held liable for paying all associated collection costs and/or legal fees.

Students who do not withdraw by the published deadline are responsible for payment of all tuition and fee and/or collection costs. Temple University will first apply all payments received to the oldest outstanding balance, if applicable, then to the current semester charges.

Temple University notifies students via their TUmail account to view their student account balance in TUpay. Students are required to pay the current balance by the due date in TUpay.

Acceptable forms of payment include tuition remission forms, checks (paper and electronic), cash, credit cards and money orders. Checks or money orders should be made payable to Temple University. Credit cards accepted for online payment only through TUpay include Visa, MasterCard, American Express and Discover. Please note that credit card payments are subject to a 2.75% convenience fee by the university's processor.

Payment must be **received** by the due date to assure proper crediting and to remain in good financial standing.

Payment Plans

Students are encouraged to pay the total account balance by the due date. In doing so, students avoid any payment plan fees and late payment fees. However, if students are unable to do so, Temple University offers two payment plans to assist students and their families.

Please note that payment plans are offered for the fall and spring semesters only. Payment plans are not offered in the summer semesters.

For the fall and spring semesters, students that do not pay the total account balance will be automatically enrolled in the University's Deferred Payment Plan. The Deferred Payment Plan provides additional time to pay your balance. Students will be assessed a \$50 non-refundable payment plan fee each semester if the total account balance is not paid by the semester due date. Students do not have to sign up for this payment plan. If students are automatically enrolled in the Deferred Payment Plan for fall and spring, the annual fee is \$100.

The University also offers the Temple Installment Payment Plan (TIPP) for those students who need an extended payment option. The plan allows students to make up to ten regularly scheduled monthly payments starting in May towards their future charges (five payments for fall and five payments for spring). The annual fee to sign up for this payment plan is \$80. For more information about this plan, offered through Nelnet, go to bursar.temple.edu.

Financial Counseling

Students who need assistance financing their education should speak with the Office of Student Financial Services (sfs.temple.edu/about). For more information on financing your education, visit payingforcollege.temple.edu/.

Student Loan Counseling

All students who receive federal student loans are required by federal regulations to complete the Annual Student Loan Acknowledgment, a Master Promissory Note and Entrance Interview, studentaid.gov/. The Office of Student Financial Services can assist all students with their federal loan requirements.

The Credit and Collections unit in the Bursar's Office is responsible for all non-federal student loan entrance and exit counseling, bursar.temple.edu/loan-services/loan-counseling.

Assessing Tuition Charges

Tuition assessment at Temple University is based on full-time or part-time status, student college, student level status (undergraduate, graduate, or professional), student class level for undergraduates and in-state/out-of-state residency status. The level of the courses is not a factor in how students are assessed.

All students are placed into one of the University's schools or colleges, based on their major or program.

Full-Time Status

Undergraduate students are considered full-time students when carrying between 12–18 semester hours (s.h.). Credits in excess of 18 s.h. are additionally assessed at the per semester credit hour tuition rate.

International students, holders of non-immigrant visas, are required to pay out-of-state tuition fees and register as full-time students.

There is no distinction between full-time and part-time graduate tuition rates. All graduate students are assessed at a credit hour rate, regardless of the number of credit hours they are taking.

Part-Time Status

Undergraduates are considered part-time students when taking fewer than 12 s.h. per semester. Tuition is charged by the semester credit hour for part-time undergraduates.

In-State/Out-of-State Residency Status

A student is classified as a Pennsylvania resident for tuition purposes if his or her permanent, legal residence is in Pennsylvania. In-state residency is generally established within the context of the following overall guidelines:

- An individual who has not lived in Pennsylvania for a continuous 12-month period immediately prior to registration as a student at a Pennsylvania college or university is presumed not to be a Pennsylvania resident. A student may rebut this presumption with convincing evidence.
- A student under 22 years of age is presumed to have the residency of his or her parents or legal guardians. A student may rebut this presumption by presenting convincing evidence of emancipation and independent domicile.
- A student who receives financial aid based on residence in a state other than Pennsylvania will not be considered a resident of Pennsylvania.
- A student who is not a United States citizen or does not have an immigrant visa is presumed not to be a resident of Pennsylvania for tuition purposes; however, a student may rebut this presumption with clear and convincing evidence.

Visit the Office of the University Registrar's web site for more information about residency and a copy of the Resident Tuition Eligibility Guidelines.

Tuition Schedule

The Bursar's Office's web site contains the latest tuition schedule. It also contains a tuition calculator, which provides an estimate of your tuition rate by selecting your specific student characteristics, such as school or college, student level, residency, etc. You can also choose "Add Housing and Meal Plan" to estimate those costs, if applicable. Lastly, within the calculator, you can self-input your payment methods to help determine how you will finance your Temple education.

University-Wide Fees

The Bursar's Office's web site contains the latest copy of the fee schedule.

Please note that Tuition and Fees are subject to change by action of the university's Board of Trustees.

Temple University 2023-2024 Tuition Rate Schedule by School/College:

	Pennsylvania Residents	Out-of-State Residents
Center for the Performing and Cinematic Arts		
Boyer College of Music and Dance		
Full-time Undergraduate Semester Rate ¹	\$10,308	\$18,108
Full-time Undergraduate Annual Rate ²	\$20,616	\$36,216

Full-time Undergraduate Overload Rate (per credit hour) ³	\$573	\$1,006
Part-time Undergraduate Rate (per credit hour) ⁴	\$859	\$1,509
Part-time Graduate Rate (per credit hour)	\$1,187	\$1,583
Part-time Graduate Rate Online MM in Music Education	\$871	\$871
School of Theater, Film and Media Arts		
Full-time Undergraduate Semester Rate ¹	\$9,864	\$17,088
Full-time Undergraduate Annual Rate ²	\$19,728	\$34,176
Full-time Undergraduate Overload Rate (per credit hour) ³	\$548	\$949
Part-time Undergraduate Rate (per credit hour) ⁴	\$822	\$1,424
Part-time Graduate Rate (per credit hour)	\$1,169	\$1,565
College of Education and Human Development		
Full-time Undergraduate Semester Rate ¹	\$8,988	\$16,188
Full-time Undergraduate Annual Rate ²	\$17,976	\$32,376
Full-time Undergraduate Overload Rate (per credit hour) ³	\$499	\$899
Part-time Undergraduate Rate (per credit hour) ⁴	\$749	\$1,349
Part-time Graduate Rate (per credit hour)	\$1,053	\$1,449
Executive Educational Leadership Programs Part-time Graduate Rate (per credit hour)	\$1,184	\$1,513
Program in Jamaica Doctoral Part-time Graduate Rate (per credit hour)	\$731	\$731
Program in Jamaica Master's Part-time Graduate Rate (per credit hour)	\$433	\$433
College of Engineering		
Full-time Undergraduate Semester Rate ¹	\$11,232	\$18,408
Full-time Undergraduate Annual Rate ²	\$22,464	\$36,816
Full-time Undergraduate Overload Rate (per credit hour) ³	\$624	\$1,023
Part-time Undergraduate Rate (per credit hour) ⁴	\$936	\$1,534
Part-time Graduate Rate (per credit hour)	\$1,280	\$1,675
College of Liberal Arts		
Full-time Undergraduate Semester Rate ¹	\$8,988	\$16,188
Full-time Undergraduate Annual Rate ²	\$17,976	\$32,376
Full-time Undergraduate Overload Rate (per credit hour) ³	\$499	\$899
Part-time Undergraduate Rate (per credit hour) ⁴	\$749	\$1,349
Part-time Graduate Rate (per credit hour)	\$1,053	\$1,449
College of Public Health		
Full-time Undergraduate Semester Rate ¹	\$10,908	\$18,948
Full-time Undergraduate Annual Rate ²	\$21,816	\$37,896
Full-time Undergraduate Overload Rate (per credit hour) ³	\$606	\$1,053
Part-time Undergraduate Rate (per credit hour) ⁴	\$909	\$1,579
Part-time Graduate Rate (per credit hour)	\$1,109	\$1,521
Part-time Graduate Rate Online Programs (per credit hour)	\$1,087	\$1,087

School of Social Work

Full-time Undergraduate Semester Rate ¹	\$8,988	\$16,188
Full-time Undergraduate Annual Rate ²	\$17,976	\$32,376
Full-time Undergraduate Overload Rate (per credit hour) ³	\$499	\$899
Part-time Undergraduate Rate (per credit hour) ⁴	\$749	\$1,349
Online Bachelor of Social Work Part-time Undergraduate Rate (per credit hour) ⁴	\$665	\$665
Part-time Graduate Rate (per credit hour)	\$1,053	\$1,449
Part-time Graduate Rate Online Programs (per credit hour)	\$1,087	\$1,087

College of Science and Technology

Full-time Undergraduate Semester Rate ¹	\$11,112	\$18,312
Full-time Undergraduate Annual Rate ²	\$22,224	\$36,624
Full-time Undergraduate Overload Rate (per credit hour) ³	\$617	\$1,017
Part-time Undergraduate Rate (per credit hour) ⁴	\$926	\$1,526
Part-time Graduate Rate (per credit hour)	\$1,301	\$1,696
Online MS in Information Science and Technology Part-time Graduate Rate (per credit hour)	\$923	\$923
Postbaccalaureate Programs:		
Basic Core Medical Science (rate assumes fall, spring and two summer sessions)	\$30,294	\$37,372
Advanced Core Medical Science (rate assumes fall and spring semesters)	\$30,294	\$37,372

Fox School of Business and Management

Full-time Undergraduate Semester Rate ¹	\$11,412	\$20,772
Full-time Undergraduate Annual Rate ²	\$22,824	\$41,544
Full-time Undergraduate Overload Rate (per credit hour) ³	\$634	\$1,154
Part-time Undergraduate Rate (per credit hour) ⁴	\$951	\$1,731
Online Bachelor of Business Administration (OBBA) Part-time Rate (per credit hour) ⁴	\$665	\$665
All Specialized Master's Programs (except those listed below) Rate (per credit hour) ⁵	\$1,165	\$1,165
Master of Business Administration - Full-time, Part-time, Online Rate (per credit hour) ⁵	\$1,250	\$1,250
Executive Master of Business Administration (EMBA) Rate (per credit hour)	\$1,900	\$1,900
Executive Doctor of Business Administration Program (EDBA) Part-time Rate (per credit hour)	\$2,200	\$2,200
Doctor of Philosophy (PhD) Part-time Rate (per credit hour)	\$1,000	\$1,250
Graduate Certificates (and non-matriculated students) Part-time Rate (per credit hour)	\$1,000	\$1,150

Klein College of Media and Communication

Full-time Undergraduate Semester Rate ¹	\$9,864	\$17,088
Full-time Undergraduate Annual Rate ²	\$19,728	\$34,176
Full-time Undergraduate Overload Rate (per credit hour) ³	\$548	\$949

Part-time Undergraduate Rate (per credit hour) ⁴	\$822	\$1,424
Part-time Graduate Rate (per credit hour)	\$1,169	\$1,565
School of Sport, Tourism and Hospitality Management		
Full-time Undergraduate Semester Rate ¹	\$11,412	\$19,560
Full-time Undergraduate Annual Rate ²	\$22,824	\$39,120
Full-time Undergraduate Overload Rate (per credit hour) ³	\$634	\$1,087
Part-time Undergraduate Rate (per credit hour) ⁴	\$951	\$1,630
Executive Master of Science in Sport Business Online Part-time Rate (per credit hour)	\$956	\$956
Master of Science in Travel and Tourism Online Part-time Rate (per credit hour)	\$956	\$956
Master of Science in Sport Business Part-time Rate (per credit hour)	\$956	\$1,100
Master of Science in Hospitality Management Part-time Rate (per credit hour)	\$956	\$1,100
Graduate Certificates (and non-matriculated students) Part-time Rate (per credit hour)	\$900	\$1,050
Tyler School of Art and Architecture		
Fine Arts:		
Full-time Undergraduate (BFA) Semester Rate ¹	\$12,480	\$20,748
Full-time Undergraduate (BFA) Annual Rate ²	\$24,960	\$41,496
Full-time Undergraduate (BFA) Overload Rate (per credit hour) ³	\$693	\$1,153
Part-time Undergraduate (BFA) Rate (per credit hour) ⁴	\$1,040	\$1,729
Part-time Graduate (MFA) Rate (per credit hour)	\$1,266	\$1,682
Architecture:		
Full-time Undergraduate Semester Rate ¹	\$11,268	\$18,864
Full-time Undergraduate Annual Rate ²	\$22,536	\$37,728
Full-time Undergraduate Overload Rate (per credit hour) ³	\$626	\$1,048
Part-time Undergraduate Rate (per credit hour) ⁴	\$939	\$1,572
Part-time Graduate Rate (per credit hour)	\$1,262	\$1,658
All Other Programs:		
Full-time Undergraduate Semester Rate ¹	\$8,988	\$16,188
Full-time Undergraduate Annual Rate ²	\$17,976	\$32,376
Full-time Undergraduate Overload Rate (per credit hour) ³	\$499	\$899
Part-time Undergraduate Rate (per credit hour) ⁴	\$749	\$1,349
Part-time Graduate Rate (per credit hour)	\$1,053	\$1,449
University College		
Full-time Undergraduate Semester Rate ¹	\$8,988	\$16,188
Full-time Undergraduate Annual Rate ²	\$17,976	\$32,376
Full-time Undergraduate Overload Rate (per credit hour) ³	\$499	\$899
Part-time Undergraduate Rate (per credit hour) ⁴	\$749	\$1,349

University Studies

Full-time Undergraduate Semester Rate ¹	\$8,988	\$16,188
Full-time Undergraduate Annual Rate ²	\$17,976	\$32,376
Full-time Undergraduate Overload Rate (per credit hour) ³	\$499	\$899
Part-time Undergraduate Rate (per credit hour) ⁴	\$749	\$1,349

Non-Matriculated Students (Continuing Studies)

Full-time Undergraduate Semester Rate ¹	\$8,988	\$16,188
Full-time Undergraduate Annual Rate ²	\$17,976	\$32,376
Full-time Undergraduate Overload Rate (per credit hour) ³	\$499	\$899
Part-time Undergraduate Rate (per credit hour) ⁴	\$749	\$1,349

Beasley School of Law

Day Juris Doctor Full-Time Rate	\$29,842	\$45,738
Evening Juris Doctor Full-Time Rate	\$23,878	\$36,604
Part-Time Juris Doctor (per credit hour)	\$1,155	\$1,850

Note: In addition to any University wide fees, Juris Doctor students, full- and part-time, are assessed a Student Bar Association fee of \$70.

SJD Program Part-time Rate (per credit hour) (Students are assessed a \$12,000 matriculation fee during admit term)	\$1,155	\$1,850
International Master of Laws (LLM) Full-Time Rate	\$34,320	\$34,320
International Master of Laws (LLM) Part-Time Rate (per credit hour)	\$1,560	\$1,560
Master of Laws in Trial Advocacy (LLM) Full-time Rate	\$29,200	\$29,200
Graduate Tax Program Part-time Rate (per credit hour)	\$1,000	\$1,225
Master of Science (MS) in Taxation Part-time Rate (per credit hour)	\$1,165	\$1,165
Summer Abroad: Rome Full-time Rate (\$400 Program fee billed separately)	\$3,700	\$3,700
Law Summer Washington DC Full-time Rate (\$500 Program fee billed separately)	\$1,155	\$1,155
Temple - China (15 months tuition)	\$27,000	\$27,000

Kornberg School of Dentistry

DMD Program Full-time Rate	\$67,800	\$77,308
Post Dentistry Foreign Training 2 Year Program Full-time Rate	\$94,886	\$94,886
Advanced Faculty Program Full-time Rate	\$12,000	\$12,000
Graduate (Endodontics / Orthodontics / Periodontics) Full-time Rate	\$68,130	\$76,566
Graduate MS Oral Health Sciences Part-time Rate (per credit hour)	\$1,549	\$1,549
Dental Public Health (Graduate) Full-time Rate	\$47,494	\$47,494
Postbaccalaureate Program - PreDental Full-time Rate	\$46,366	\$46,366

Lewis Katz School of Medicine

MD Program Full-time Rate	\$56,080	\$59,462
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Graduate Programs:

Urban Bioethics Part-time Rate (per credit hour)	\$1,984	\$2,341
Biomedical Sciences - MS Degree Part-time Rate (per credit hour)	\$992	\$1,360
Biomedical Sciences - PhD Degree Part-time Rate (per credit hour)	\$992	\$1,360
Physician Assistant - MMS Degree Part-time Rate (per credit hour)	\$774	\$812
Postbaccalaureate Program:		
Basic Core Medical Science Full-time Rate (rate assumes fall, spring and two summer sessions)	\$30,294	\$37,372
Advanced Core Medical Science Full-time Rate (rate assumes fall and spring semesters)	\$30,294	\$37,372

School of Pharmacy

Doctor of Pharmacy Full-time Rate	\$38,452	\$41,250
Doctor of Pharmacy Part-time Rate (per credit hour)	\$1,046	\$1,193
Graduate (including MS in Quality Assurance) Part-time Rate (per credit hour)	\$1,186	\$1,475

School of Podiatric Medicine

DPM Program Full-time Rate	\$45,074	\$47,098
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1

The full-time semester tuition is assessed to students who register for 12–18 credit hours per academic semester.

2

The full-time annual tuition consists of the fall and spring semesters. There are additional charges associated with summer registration.

3

The full-time overload is assessed to full-time students who register for credit hours exceeding 18 per academic semester. Each credit hour over 18 is assessed at this per credit hour rate.

4

The part-time rate is assessed to students who register for less than 12 credit hours per academic semester. Each credit hour registered is assessed at the part-time rate.

5

One-time program fee in first semester is \$750.

All students are assessed the University Services Fee during each academic semester based upon the number of credit hours they register for. The fee breakdown can be found under the "University Services Fee" heading below.

Disclaimer: Tuition and fees are set annually each summer, regardless of the method of instruction. Temple University expressly reserves the right to deliver some or all instruction remotely at its discretion. Tuition, the university services fee and certain other fees are required to be paid in full and will not be refunded regardless of the method of instruction, the inability to access university-maintained facilities, or any disruption to or cancellation of classes, activities, events, services or programs.

Temple's refund (p. 1808) policy is available below.

By registering for classes, the student and anyone paying on their behalf acknowledges and accepts these terms.

Description of Special Charges and Fees

Students may be required to pay some or all of the following (subject to change):

Application Fee

The admissions application fee is \$55.00.

Matriculation Fee

A one-time charge is assessed of all first-year students who are degree-seeking candidates in their initial semester after admittance. This fee includes the student orientation program. The rate for undergraduate students is \$218.00 and the rate for graduate students is \$85.00. Professional students should check with their respective college as the rates vary per school.

University Services Fee

All students are assessed the non-refundable University Services Fee every semester. The University Services Fee is a single, comprehensive fee that helps fund a number of university services, including

- Funding for state-of-the art computer equipment and technologies to provide support for the students' academic experiences, including e-mail access and modern lab facilities;
- Access to all student activities, events and recreational facilities;
- Expansion and maintenance of recreational and academic facilities to enhance and improve student life; and
- Availability of basic student health and treatment services provided by nurses and physicians on campus.

The fee structure for the fall and spring semesters is:

- Enrolled for 9 or more credits: \$484.00
- Enrolled for 5.0 to 8.9 credits: \$347.00
- Enrolled for 1.0 to 4.9 credits: \$177.00

The fee structure for each summer session is:

- Enrolled for 9 or more credits: \$244.00
- Enrolled for 5.0 to 8.9 credits: \$184.00
- Enrolled for 1.0 to 4.9 credits: \$111.00

Please direct all questions about the University Services Fee to the Office of Student Financial Services at 215-204-2244 or sfs@temple.edu.

International Student Fee

All international students are assessed a \$178.50 international student fee in the fall and spring semesters.

Course Fees

Certain courses charge additional fees such as lab fees, etc. The charge is assessed at the time of registration for that particular course.

Late Registration Fee Policy

All students will be assessed a \$100.00 late registration fee for initial registrations beginning the first day of the term. No new registrations or registration revisions will be processed after the end of the twelfth week of classes during the fall and spring semesters and after the end of the fourth week of summer sessions.

Late Payment Fee

Tuition payments not received by the final semester due date will be subject to a \$100.00 late payment fee. Students who fail to pay their initial semester bills by the due date will automatically be enrolled in the University's Deferred Payment Plan and assessed the appropriate payment plan fees as noted above in the "Payment Plans" section.

Returned Check Penalty

If a paper or electronic check payment is returned by the bank because of insufficient funds, a closed account, an invalid account number or other reasons, a \$25.00 returned check fee will be assessed. If an account indicates a history of returned checks, the University reserves the right to suspend a student's check payment privileges. Returned checks that remain unpaid and/or cases where there are multiple returned checks may be referred to the University Disciplinary Committee and/or Temple University Campus Safety Services for further action.

Transcript Fee

Consult the Office of the University Registrar's web site for ordering instructions.

Health Insurance

Group medical insurance to defray certain medical expenses at hospitals is offered to full-time students during a limited period of time at the start of each semester. Students should consult the Human Resources Benefits Department, e-mail studentinsurance@temple.edu, or call 215-926-2270 for details

concerning costs and application procedures. International students are required to buy medical insurance or show proof of comparable coverage to the Human Resources Benefits Department.

Veteran/Military Education Benefits

Temple University will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries, or other institutional facilities, or the requirement that a covered individual borrow additional funds, on any covered individual because of the individual's inability to meet his or her financial obligations to the institution due to the delayed disbursement funding from VA under chapter 31 or 33.

Temple University will impose a late fee and financial hold for those students who have an outstanding balance beyond the amount of expected VA tuition and fee payment for the term.

Tuition and Fees Policy

I. Policy

A. Tuition charges and fees are based upon the student's enrollment status in the respective schools or colleges. Refunds are made in accordance with the student's academic records.

B. Students will be charged 100% of their semester bill unless a course drop form is processed by a registration office of the university or the student successfully drops courses through Self Service Banner by the Drop/Add deadline date. See registrar.temple.edu/academic-calendar for add/drop and withdrawal deadlines for each semester (please note that deadlines may vary according to the Part of Term in which the course is scheduled). Students who process their course drops by the deadline date will be issued a 100% refund.

C. No complete financial credit will be made if a student does not process course drops for all registered classes.

D. Students who are still registered for classes after the Drop/Add deadline date are responsible for paying all related tuition and fees. The record for students who withdraw will reflect withdrawal ('W').

II. Exceptions

A. Failure to Process Drop or Withdrawal Form by Deadline

Under extreme, extenuating circumstances, an appeal may be made to the Office of the University Registrar if the drop transaction is not completed by the deadline, and the student did not attend classes after the deadline date. All appeals must be signed by an academic advisor or a program coordinator and accompanied by the following information:

1. A statement explaining the extenuating circumstances of the appeal.
2. A properly-signed registration schedule revision or official withdrawal form available from the Dean's Office.
3. Supporting documentation that will establish that the student never attended the semester in question or that he/she did not attend beyond the official refund period.
4. Appeals for retroactive course deletions must be filed prior to the end date of the semester for refunds to be considered. If the above conditions are met, the Office of the University Registrar will direct the removal of the semester's records from the academic history. This automatically results in a 100% refund of tuition and fee charges for the semester.

B. Death of a Student

In the event of death during a semester, the student's account will be credited with a 100% refund of tuition and fee charges for the semester. The student's record will reflect excused withdrawals ('WE').

C. Serious Extenuating Circumstance Which Prevents a Student from Attending All Classes

In the event of a serious extenuating circumstance (medical, family emergency, military deployment, or other) that prevents the student from completing all courses, the following steps can be taken within one (1) year from the end date of the semester:

1. The student should provide the Office of the University Registrar with a complete Petition for Excused Withdrawal, containing the following as appropriate:
 - a. A personal statement from the student listing the reason(s) for their excused withdrawal request.
 - b. Medical Provider's Statement from a licensed physician verifying that the student or family member was ill. NOTE: For purposes of this policy, a family member is defined as the student's parents, spouse, child(ren), or any other family member noted under the federal Family Leave Act.
 - c. Verification from the student's instructor(s) or department chairperson(s) of last known date of participation in or attendance at an academically related activity (online or in person).
 - d. Supporting documentation for serious family emergency.
 - e. United States military deployment orders.

2. If the above criteria in C.1 are met and the petition is approved, the student's record will reflect excused withdrawals ('WE' or 'M' for military deployments) and the bill will reflect an adjusted tuition charge (if any) in accordance with the attached schedule. A credit will be issued on a pro-rated basis after:
 - a. Confirming that the student has no other outstanding balances, and
 - b. Having the Department of Student Financial Services adjust any financial aid awards, where applicable, in accordance with state and federal regulations.
3. The effective date for all credits will be based on the earlier of either:
 - a. The official date of withdrawal, as established by the Office of the University Registrar, or
 - b. The physician's date of certification, if the student is physically unable to complete a withdrawal by the end of the semester.

D. Employment Change/Relocation

1. If a student must withdraw from classes because of a mandatory job change or shift in work hours that prevents the student from attending classes, the student may request a pro-rata credit, based on the actual withdrawal date and in accordance with the Fee Schedule of Adjusted Tuition Charges, if documentation from the employer is provided showing that the individual is no longer able to take classes because of a change in job scheduling or relocation.
2. This provision applies solely for the student and only after the student has totally withdrawn from all registered courses.

III. Authority

- A. The Office of the University Registrar will have authority for determining the student's academic records.
- B. The Office of the University Registrar will have authority for approving financial exceptions to the policy.
- C. Appeals of any decision outlined under this policy will be made to the Office of the University Registrar, whose decision is final.

Tuition and Fees Refund Policy

Fee Schedule of Adjusted Tuition Charges in the Event of an Exception to the General Policy

Date of Official Excused Withdrawal	Adjusted Tuition/ Charges You Pay
Fall and Spring Semesters	
1st through 7th calendar day after the end of the Drop/Add deadline date	30%
8th through 14th calendar day after the end of the Drop/Add deadline date	40%
15th through 21st calendar day after the end of the Drop/Add deadline date	50%
22nd through 28th calendar day after the end of the Drop/Add deadline date	60%
29th through 35th calendar day after the end of the Drop/Add deadline date	70%
36th through 42nd calendar day after the end of the Drop/Add deadline date	80%
43rd through 49th calendar day after the end of the Drop/Add deadline date	90%
Thereafter	100%
1st and 2nd Summer Semesters	
1st through 3rd calendar day after the end of the Drop/Add deadline date	30%
4th through 7th calendar day after the end of the Drop/Add deadline date	40%
8th through 10th calendar day after the end of the Drop/Add deadline date	50%
11th through 14th calendar day after the end of the Drop/Add deadline date	60%
15th through 17th calendar day after the end of the Drop/Add deadline date	70%
18th through 21st calendar day after the end of the Drop/Add deadline date	80%
22nd through 24th calendar day after the end of the Drop/Add deadline date	90%
Thereafter	100%

Financial Aid

Emilie Van Trieste, Director
 Office of Student Financial Services
 Carnell Hall, Ground Floor
 215-204-2244
sfs.temple.edu/
sfs@temple.edu

Application Procedures

Documents Needed to Apply

The Free Application for Federal Student Aid (FAFSA) is the only document required by Student Financial Services (SFS) and **MUST** be filed online each year at studentaid.gov/h/apply-for-aid/afsa. The federal code for Temple University is 003371. Locations and phone numbers for Temple University's SFS offices are listed at sfs.temple.edu/about.

Application Deadline

February 1

Priority consideration is given to new and renewal applications received by the federal processor by this date. Late applicants will be considered, but all funding sources may not be available.

Verification and Financial Aid Requirements

Federal regulations require that the Office of Student Financial Services reviews all student financial aid applications (FAFSA information) for accuracy. The Office of Student Financial Services is required to resolve any conflicting information, inconsistencies or errors made on FAFSA applications to ensure the integrity of federal student financial aid programs.

More information on all financial aid requirements and the Federal Verification process is available at sfs.temple.edu/eligibility/eligibility-requirements/federal-verification.

Submission of requested requirements is required within thirty days. If all documents are not received by the deadline, all federal and university need-based aid will be removed from the financial aid offer.

Your financial aid eligibility will be outlined in the financial aid offer. All students (new, transfer, and continuing) will receive an e-mail notification when the financial aid offer is available to review online via the Costs and Aid Tab located within the student's TUportal.

International Students

The Office of International Services, 215-204-7229, offers limited financial assistance to persons holding non-immigrant visas. Federal regulations limit most financial aid to U.S. citizens or eligible non-citizens. Learn about eligibility requirements at studentaid.gov/understand-aid/eligibility/requirements.

Please contact International Student and Scholars Services for more information.

Academic Requirements

Applicants for Federal, State and University financial aid programs administered by Temple University must be accepted for admission or currently enrolled as a matriculated student in a degree program.

A student may apply for a Federal Direct Loan, or a parent may apply for a Federal Parent Loan on behalf of a dependent student, for coursework that is documented as a prerequisite for admission into a degree-seeking Temple University program. If enrolled at least half time in these prerequisite courses, the student may be eligible for loans for one consecutive 12 month period.

Satisfactory Academic Progress

Financial aid funds are restricted to students who make satisfactory academic progress. The qualitative standard is defined as being in good academic standing as defined by the school or college in which the student is enrolled. The quantitative component of the satisfactory academic progress standard requires students to successfully complete 67% of all attempted credits. For more information, see sfs.temple.edu/policies/satisfactory-academic-progress-sap.

Enrollment Status

Some financial aid programs are restricted to full-time students. Other aid programs are available to both full-time and part-time students. (NOTE: High school students accepted under the Early Admissions Program are not eligible for financial aid until they receive their high school diploma.)

Students should be aware that dropping and adding courses can affect financial aid eligibility, and they must notify the Office of Student Financial Services, sfs@temple.edu, of any change in enrollment status.

Academic Dismissal/Reinstatement

Eligibility for financial aid, including federal work-study, ends if a student is academically dismissed or ceases to be enrolled.

Financial Aid Eligibility -- Need Analysis

Some financial aid is offered to students based on financial need. Financial need is determined by the following U.S. Department of Education formula:

(Estimated cost of attendance) minus (Expected Family Contribution¹) minus (Expected Financial Aid) equals Financial Need

1

The Expected Family Contribution (EFC) is determined by a federal formula based on information reported on the student's FAFSA application. The EFC is the number that's used to determine a student's eligibility for federal student financial aid. This number results from the financial information a student and/or parent provided in the FAFSA application. The student's EFC is reported to the student on the Student Aid Report (SAR).

The result of a need determination is met by a combination of awards called a financial aid package.

Other sources exist that may be available to students for educational assistance. Some of these are private scholarship programs, Cooperative Education programs, Veterans Administration benefits, public assistance, and Social Security benefits. If outside assistance is received, financial aid offered by the university may be adjusted.

Independent Student Definition

Federal Financial Aid regulations define a student as independent if they meet the FAFSA criteria. For more information, see studentaid.gov/apply-for-aid/fafsa/filling-out/dependency

Federal regulations require that a student not meeting the definition of independent apply as a dependent. These students must provide income, asset, and household information for themselves and their parent(s). For more information, see studentaid.gov/apply-for-aid/fafsa/filling-out/parent-info

Estimated Financial Aid Cost of Attendance

Financing a college education takes planning and budgeting. Students should try to plan ahead, anticipating costs and resources, and should request aid for the entire academic year. The basic budget for a year at Temple should include tuition and fees, housing and meals, books and supplies, living expenses, and transportation. Tuition shown in the following example is an estimate for undergraduates attending Main Campus. Financial aid offers will be adjusted accordingly for programs having different tuition rates. The figures in the table are based on estimates from the U.S. Bureau of Labor Statistics. The economy and one's style of living may make actual costs higher or lower.

Estimated Undergraduate Financial Aid Cost of Attendance for the 2023-2024 Academic Year

	In-state	Out-of-state
Tuition and Fees (Estimated)	\$17,372	\$30,607
Housing and Meals (Estimated)	\$15,148	\$15,148
Books/Supplies (Estimated)	\$1,515	\$1,515
Living Expenses/Transportation/Personal/Miscellaneous (Estimated)	\$4,030	\$4,030
Totals	\$38,065	\$51,300

NOTE: Sample above is meant for a student living on campus in a dorm or off campus in an apartment paying rent. A student living at home or with family/friend will have a lower financial aid cost of attendance. Actual rates will vary depending on school/college, program, housing selection and meal plan option. See bursar.temple.edu/tuition-and-fees/tuition-rates. **All rates above are estimates.**

Financial Aid Notification and Refund Policy

Applicants are notified of aid eligibility by e-mail after applications have been reviewed. Financial aid may consist of a combination of scholarship, grant, loan, and/or a work study opportunity.

A refundable credit balance may result on your student account because of financial aid / loan disbursements, over-payments and/or account adjustments. If the credit balance is created because of an over-payment made by check or electronic check, the refund will not be processed for at least ten (10) business days to allow time for the check payment to clear the bank.

If the credit balance results from a credit card payment made within the last 90 days, the credit card will be refunded up to the amount of the payment first. Any remaining credit card balance will be refunded through direct deposit or paper check.

Financial aid disbursements can occur as early as two days prior to the start of the semester and refunds are processed continually during the semester as aid is credited to the student account.

Students can access Student Choice Refunds within TUpay and select their refund option as soon as they pay a deposit to the University. TUpay is located in the Cost and Aid Tab of a student's TUportal account.

Using Title IV Financial Aid Refunds to Pay Prior Year Charges

Because of U.S. federal financial aid regulations, Temple University can only automatically apply a maximum of \$200 from the current academic year to pay any outstanding prior year charges.

In these cases, student could consider securing a private student educational loan, sfs.temple.edu/financial-aid-types/private-student-loans, for the prior term balance. A financial hold will remain on your student account until the outstanding balance is resolved. This hold will restrict many University services and only the Bursar's Office is able to make decisions on a student's hold status.

Federal Parent PLUS Refunds

Refunds are issued to the student. However, if the credit balance is the result of a Federal Parent PLUS loan and the parent selected the option on **the loan application** to receive the refund rather than the student and provided a valid address on the loan application, then the refund for the Federal Parent PLUS refund will be sent to the parent.

It is very important to note that parents are not always sent the refund from a Parent PLUS loan because the Parent PLUS refund MUST be the payment that causes the credit balance on the student account.

If you are an Authorized Payer in TUpay, you may elect to receive your Parent Plus refund via direct deposit. To sign-up for direct deposit for Parent PLUS refunds, select 'Student Choice Refunds' from the TUpay menu and follow the instructions. If you do not sign-up for direct deposit, your Parent PLUS refunds will be issued via paper check to the address you provided on the FAFSA.

If you are not an Authorized Payer on your student's account, the default refund method is paper check and there is no action you need to take. However, if you wish to become an Authorized Payer and sign-up for direct deposit, your student must create your access.

Student Employment

Academic Year

Federal Work-Study (FWS) allows students to earn money to help cover non-billable educational expenses by working within Temple University or at an approved non-profit, off-campus employer. Students are awarded a set amount to use for each semester. Please note that funding is limited so requests for increases are based on available funding.

Work-Study jobs are available at both on- and off-campus locations. Before seeking a position, a student must receive an award letter with a work study award and accept it within the TUportal. If an employer hires a student without confirming the student's eligibility for Federal Work-Study, the employer will be responsible for all wages the student has earned.

On-campus positions are posted on the Temple University Human Resources web site.

Off-campus positions are posted on the Work-Study Job Bank. All students who wish to work at an off-campus employer must first meet with Student Financial Services to see if their employer is approved for participation in our program. Temple University cannot pay work-study funds toward hours worked with an unauthorized employer.

Summer Sessions

Summer Federal Work-Study Program allows students to earn funding toward educational expenses for the upcoming academic year. Students wanting to work during the summer must e-mail Student Financial Services, wkstudy@temple.edu, to request a summer work-study award.

Eligibility Requirements:

- Students must have a valid FAFSA on file for the current year and the upcoming academic year.
- Students must qualify for Title IV Aid (meet Satisfactory Academic Progress).
- Students must have unmet financial need.
- Students must be either enrolled for summer term or preregistered at least part-time for the upcoming fall term.

Awarding Information

- Student Financial Services will determine a student's eligibility for a summer Federal Work-Study award based on remaining annual eligibility and summer session(s) or upcoming fall preregistration. Amounts awarded are determined based on available funding.
- Students that are not enrolled during the summer session(s), but are preregistered for the upcoming fall semester are required to adhere to the federal regulation that governs FWS. The regulation requires a portion of summer earnings to be used to meet education expenses during the upcoming academic year. These attributed earnings are considered a resource offsetting calculated need for the upcoming FAFSA award year.

Employment Information

Students working On-Campus will be hired through the department hiring the position.

Students wanting to work Off-Campus must contact Student Financial Services (wkstudy@temple.edu) to ensure the position is an approved off-campus partner.

- Off-Campus employers must be an approved partner with SFS (up to date contract on file and approved). *Temple's Off-Campus work-study program only contracts with local non-profits that provide services to the community. We do not contract with private organizations or organizations that do not meet our community service definition.*
- Students who begin working without prior authorization off-campus will not be paid through the Federal Work-Study grant. *Please note that outside organizations do not have access to Temple's HR or payroll system.*
- Please note that having a work-study offer on your account does not guarantee that it can be used towards an internship position. As stated previously work-study offers can only be used towards Temple contracted non-profit organizations. Students should contact SFS via e-mail wkstudy@temple.edu prior to working off-campus.

Students who are not performing to the expectations of their employers do not have special protection under Federal Work-Study. An employer may terminate students failing to meet expectations.

Workman's Compensation insurance covers students employed on each Temple University campus. If you are injured on the job, you should inform your supervisor immediately.

Temple University will not bear responsibility for injuries occurring at off-campus employers. Students should inquire about Workman's Compensation insurance coverage prior to accepting employment.

Grants, Scholarships and Loans

The following grants and scholarships have individual eligibility requirements and procedures. Be sure to read the requirements for each carefully.

Temple University Need-based Grants

Eligibility

- Temple University Grants (TUG) are university-funded, need-based grants for full-time (12 credits or more) undergraduate students pursuing their first bachelor's degree.
- Temple University Grants (TUG) are not guaranteed to continue year to year, or for the same amount. The amount of the grant can change year to year as your Expected Family Contribution (EFC) from the FAFSA changes year to year, or as other grants and scholarships are added to your financial aid funding offer.
- Students may receive a maximum of 8 full-time semester grants.
- To apply for the Temple University grant a student must submit the Free Application for Federal Student Aid (FAFSA) and have it completed with a calculated EFC each year by the February 1 priority deadline.
- Continuing students must also meet the Temple University's Satisfactory Academic Progress standards each semester to retain eligibility.
- Temple University and Hospital employee dependents receiving tuition remission are not eligible to receive the Temple University grant (TUG).
- You must report additional funding sources not listed on your financial aid offer, including Tuition Remission, University or non-University scholarships and grants such as Academic Merit scholarships, outside Scholarships, and Grants from all sources to Student Financial Services (SFS). These additional sources of funding can impact your current financial aid funding offer and eligibility (i.e., Temple University Grant, Federal, and State Grants and Federal Student Loans).
 - Temple University Grant (TUG) will be reduced or eliminated if we learn of outside scholarship after you are initially packaged. If your financial aid offer does change you will be notified via your Temple University e-mail account when the revised aid offer is ready to view in Self-Service Banner.
- Enrollment changes during the first few weeks of the semester (drop/add) can affect a student's Temple University grant eligibility. Notify the Student Financial Services office if you are considering reducing your enrollment.

Fly in 4

Fly in 4 is a partnership between incoming students and the university to promote graduation in four years. Graduating in four years reduces student debt and helps control college costs.

The Fly in 4 grants are provided to 500 incoming freshman and eligible transfer students with the greatest demonstrated financial need based on the FAFSA application.

Fly in 4 grant renewal criteria (for up to 4 full-time, continuously enrolled years) require eligible students to:

- meet all designated Fly in 4 checkpoints;
- meet financial aid Satisfactory Academic Progress (SAP) guidelines;
- attend full-time each fall and spring semester;
- continue to file and complete the annual FAFSA by the February 1 priority filing deadline;
- continue to show documented financial need on the annual FAFSA; and
- complete all financial aid requirements by specified deadlines.

Temple University Academic Merit Scholarships

Eligibility

- To be considered for an academic undergraduate scholarship, submit a complete undergraduate admission application by the February 1 deadline. Late applicants might be considered for an academic scholarship based on fund availability.
- For scholarship purposes, a first year applicant is defined as a current high school student who will graduate prior to the start of the fall semester and will not earn any college credits after graduation.
- Scholarship notification will be made no later than March 1 on TUportal.
- The nonrefundable undergraduate tuition deposit must be submitted by May 1 in order to secure a scholarship. A deposit made later will cancel the scholarship.
- Academic merit scholarships for undergraduate students are limited to eight consecutive undergraduate semesters of full-time enrollment. The scholarship is guaranteed for the first four consecutive undergraduate semesters, at the end of which a minimum cumulative GPA must be achieved and maintained in order to renew the scholarship annually. Merit scholarships are designated for *undergraduate tuition* only. Specific details will be provided in the student's undergraduate scholarship notification letter from the Office of Undergraduate Admissions. Information on the **renewal criteria** can be found in the SFS Policies.
- Students awarded our full-tuition undergraduate scholarship, the President's Scholar Award, may also apply for one \$4,000 summer educational enhancement stipend, to be used toward approved study away, research, internship or other academic activity.
- Temple University Academic Merit undergraduate scholarships are tuition only and combined with the other tuition only scholarships cannot exceed the total cost of tuition per term.

Amount

Academic scholarships for undergraduate students range from \$2,000 to full undergraduate tuition. The availability of funding and the size, quality and characteristics of the overall applicant pool will determine the number and the value of academic scholarships awarded.

Application/Selection

No separate application required. Recipients are selected by the Office of Undergraduate Admissions.

Athletic Scholarships

Athletic scholarships are available in all varsity sports. The number of scholarships, requirements, standards, and awards are controlled by Temple University and by the National Collegiate Athletic Association (NCAA). For further information, contact the Department of Intercollegiate Athletics, 215-204-2571.

ROTC Scholarships

See Military Science (p. 50) in the Academic Opportunities section of this *Bulletin*.

ROTC tuition scholarship, Temple University Academic Merit scholarship and tuition remission funding (and/or any other tuition restricted funding) combined cannot exceed the total cost of tuition per term.

State and Federal Grant Programs

To be eligible for the following grants, students must complete the Free Application for Federal Student Aid (FAFSA).

Pennsylvania State Grant

The Commonwealth of Pennsylvania funds a grant program for undergraduate Pennsylvania residents who will be matriculated students enrolled full-time (12 or more credit hours per semester) and part-time (6-11 credits) during the academic year. This program is administered by the Pennsylvania Higher Education Assistance Agency (PHEAA). Please see more information at pheaa.org/grants/state-grant-program/index.shtml

Basic Eligibility Criteria

- Grant amounts are dependent upon enrollment and classroom and/or online credit hours per semester.
- Be enrolled in a program of study where at least 50 percent of the total credit hours needed for completion of the program are earned through classroom instructions. Funding may be reduced if student's enrollment mode does not meet the PA State grant standard.
- Students must maintain PA state grant satisfactory academic progress which is different from Federal Title IV financial aid satisfactory academic progress. PA state grant progress is reviewed annually after the spring semester, and is defined as successfully completing a minimum of 12 new credits for each full-time semester of PA state grant received (6 new credits for each half-time semester grant received) during the preceding academic year. Students may receive a maximum of 8 full-time semester grants (or its equivalent).

Non-Pennsylvania residents should check with their respective state agency for state grant information. The U.S. Department of Education provides a full list of higher education agencies by state at www2.ed.gov/about/contacts/state/index.html

Students residing in states other than Pennsylvania can contact their state education department directly to inquire about scholarship and grant opportunities. A directory of state educational grant agencies can also be found online through the U.S. Department of Education

Not all state grant programs are transferable if a student is attending a school outside of their home state.

Federal Pell Grants

To be eligible for a Pell Grant, a student must be enrolled in an undergraduate degree program who has not earned a bachelor's or professional degree and has significant financial need. Notification of awards will be made in the student's financial aid offer. See more information at sfs.temple.edu/financial-aid-types/grants/federal-pell-grant.

Federal Supplemental Educational Opportunity Grant (FSEOG)

FSEOG is a federal grant program administered by the university. Awards are based on exceptional need (Pell Grant recipients) and availability of funding is limited. See more information at sfs.temple.edu/financial-aid-types/grants/federal-supplemental-education-opportunity-grant-seog.

Student Loans

Federal Direct Student Loans

Direct Loans are available to undergraduate students enrolled for at least six (6) credits per semester.

Annual Subsidized Limits:

- 1 Year Undergraduates = \$3,500
- 2nd Year Undergraduates = \$4,500
- Remaining Undergraduate Years = \$5,500
- Preparatory Coursework Needed to Enroll as Undergraduate = \$2,625

Annual Unsubsidized Limits:

- Dependent undergraduates whose parents can borrow PLUS = \$2,000
- 1 and 2nd year undergraduate dependent students whose parents cannot borrow PLUS and independent students = \$6,000
- Remaining undergraduate years for dependent students whose parents cannot borrow PLUS and independent students = \$7,000

Direct Parent Loans for Undergraduate Students (PLUS)

PLUS loans are available to the parents of undergraduate students. A credit check is required for eligibility for the Parent PLUS loan. Parents may borrow amounts not to exceed the cost of attendance.

All PLUS loans are processed for the full year, and are split evenly between the fall and spring semesters.

Alternative Private Educational Loans

Student loans are available from private lenders. The majority of the lenders of these loans require the student borrower to have a credit worthy cosigner, and the interest rate is variable and determined by the credit score of the borrower and cosigner. These loans also require school certification, and the student must be enrolled at least half time and making satisfactory academic progress. Consult with the lender for specific eligibility requirements.

All alternative/private loans are processed for the full year, and are split evenly between the fall and spring semesters.

More information is available at sfs.temple.edu/financial-aid-types/private-student-loans.

Entrance/Exit Interviews

New Federal Direct loan borrowers must complete the Annual Student Loan Acknowledgment, a Master Promissory Note and Entrance Interview. An online exit interview will be required just prior to graduation or if a student attends less than half time or takes a leave of absence. Direct loan funds will not be released without the entrance counseling requirement. Any student withdrawing from the university before graduation must complete an exit interview.

More information is available on the SFS web site at sfs.temple.edu/financial-aid-types/federal-student-loans.

Other Programs

A number of Temple's schools and colleges have privately-sponsored scholarships available for students in their programs. Details may be found in the individual school or college descriptions.

In addition to the scholarships available through Temple University, a wide range of scholarships, fellowships, and internships are available on a competitive basis to students during and immediately after their undergraduate careers. The Undergraduate Studies Office provides information about these opportunities and support for students interested in preparing applications. For more information, visit undergradstudies.temple.edu/fellowships.

Campuses

University Campuses

Convenience and accessibility are two of the benefits that draw people to Temple University. Our eight distinct campuses offer an array of diverse learning environments—from urban to suburban and local to international—that are sure to fit your needs, schedule and personality.

- Ambler Campus (p. 1816)
- Main Campus (p. 1823)
- Health Sciences Center (p. 1822)
- Podiatric Medicine
- Temple University Center City (p. 1824)
- Temple University Harrisburg (p. 1826)
- Temple University, Japan Campus (p. 1827)
- Temple University Rome

Ambler Campus

General Information

Temple University Ambler, located in Montgomery County, just 17 miles north of the Main Campus (and minutes from Route 309, the Pennsylvania Turnpike and Route 476), offers the benefits of a small college campus with the resources of a large university. Several high-quality undergraduate, graduate and non-credit courses and programs are offered to meet the educational and workforce development needs of the region.

Campus facilities include the Ambler Arboretum of Temple University, the Temple Ambler Field Station, the Tyler School of Art and Architecture Greenhouse Research and Education Complex, the Ambler Research and Collaboration Building, Ambler Campus Technology Center, the Ambler Campus Library, Red Barn Gym and fitness center, design/build studios, a 300-seat auditorium, a Low Ropes Challenge Course, Aramark P.O.D. (Provisions on Demand) Market and an Esports gaming area.

Also located on the Ambler Campus are the Fox School of Business and Management's Small Business Development Center, the College of Liberal Arts' Temple Infant and Child Lab, and the College of Liberal Arts' Criminal Justice Training Programs. Students benefit from these unique facilities as well as several academic and student services, which are listed below.

Administration

Vicki L. McGarvey, Ed.D.
Vice Provost for University College and Interim Campus Director
Temple University Ambler
580 Meetinghouse Road
Ambler PA 19002

Contact Information

267-468-8000
<https://ambler.temple.edu>

Undergraduate Degree Programs

- Accounting (online classes required)
- Business Management (online classes required)
- Horticulture (Associate and Bachelor's Degrees available)
- Human Resource Management (online classes required)
- General Studies (online classes required)
- Landscape Architecture (Note: Studio courses in the first and second year offered at Main Campus only)
- Liberal Studies (online classes required)
- Marketing (online classes required)
- Psychology (some online classes may be required)
- Supply Chain Management (online classes required)

Graduate Degree Programs

- Landscape Architecture

Undergraduate Certificate Programs

- Business Basics Certificate (for non-degree students only)
- Business Plus Certificate (for non-degree students only)
- Environmental Sustainability Certificate (requires Main Campus courses)
- Horticultural Therapy Certificate
- Landscape Plants Certificate (requires Main Campus courses)
- Management Career Certificate
- Native Perennial Garden Design Certificate (requires Main Campus courses)
- Sustainability Certificate (requires Main Campus courses)
- Sustainable Food Systems Certificate (requires Main Campus courses)

For more information about undergraduate majors, minors, and certification programs that can be completed at the Ambler Campus, visit: <https://ambler.temple.edu/academics/academic-programs>.

First-year Experience at Temple Ambler Program

Newly admitted first-year students who enroll full-time at Temple Ambler for two semesters and remain in good academic standing are eligible to receive a First-year Experience Campus Grant. After successfully completing their first year at Temple Ambler, students may then choose to continue their studies at Ambler Campus, transition to Main Campus for their remaining three years of undergraduate coursework or take courses at multiple campuses in the same semester, depending on their major. Learn more about the First-year Experience.

Non-Credit Programs

ncc@temple.edu

<https://noncredit.temple.edu>

The Office of Non-Credit and Continuing Education provides quality, professional and accessible education and lifelong learning opportunities at every stage of your career or life. Courses and programs are available in the areas of Professional Development and Personal Enrichment.

Educational opportunities offered through Youth and Summer Programs and the Osher Lifelong Learning Institute (OLLI) are also available at the Ambler Campus. For more information on these and other programs, see the Special Programs section of this *Bulletin*.

Criminal Justice Training Programs (CJTP)

Haines House

215-204-7930

<https://liberalarts.temple.edu/research/labs-centers-and-institutes/criminal-justice-training-program>

Criminal Justice Training Programs, a division of the College of Liberal Arts' Department of Criminal Justice, has conducted professional training for a variety of criminal justice agencies and occupations since 1968. It is located at the Temple University Law Enforcement Training Center (TULETC) at Temple Ambler. Each year, more than 3,000 criminal justice employees attend programs offered by CJTP, including police personnel, sheriffs and deputy sheriffs, constables, school security officers, and park rangers. Other activities include the development of training curricula and the delivery of online learning.

Park Ranger Law Enforcement Academy (PRLEA)

215-468-8600

<https://universitycollege.temple.edu/academics/park-ranger-law-enforcement-academy>

The Temple University Park Ranger Law Enforcement Academy (PRLEA) was established in 2010 and is one of six law enforcement academies in the U.S. certified to provide the 680-plus hour basic training program which is required for a person to be commissioned as a seasonal law enforcement park ranger with the National Park Service and with Pennsylvania's Department of Conservation and Natural Resources. The curriculum is designed to impart the knowledge, skills, and abilities to preserve and protect our nation's local, state, and national parks for public use today, and for many years to come.

Academic Awards and Scholarships at Ambler

For details and application procedures about the various scholarships available to Ambler Campus students, visit: <https://ambler.temple.edu/admissions/cost-aid-and-scholarships/ambler-campus-scholarships>.

Academic and Student Services

Our mission is to provide students with personalized academic and student support, as well as unique leadership and service-learning opportunities, at a conveniently located suburban campus. We strive to complement the University's mission by promoting and offering social, cultural, educational and developmental programs for Ambler Campus students.

Admissions

Learning Center, Room 102 / Welcome Center
267-468-8100
<https://ambler.temple.edu/admissions>

Prospective and admitted students can connect with Ambler Campus staff and current students to learn more about the admissions process and options for beginning or completing a degree program at Ambler Campus. Campus events and tours are held throughout the year to engage with current high school students, students looking to transfer to Temple from other institutions and non-traditional students returning to the classroom.

Academic Advising and Student Success

Learning Center
267-468-8200
ambleradvising@temple.edu
<https://ambler.temple.edu/campus-resources/advising-and-student-success>

Dedicated professional advisors help students choose a program of study that is suited to their educational and career goals, assist with information about program requirements and university policies and procedures. Transfer students can discuss transfer credit evaluations and whether these credits meet Temple program requirements.

Undergraduate Advising - Fox School of Business & Management

267-204-7672
<https://ambler.temple.edu/campus-resources/advising-and-student-success>
<https://www.fox.temple.edu/advising>

Ambler Campus business students are advised by Fox School of Business and Management advisors and can make an appointment online.

Inter-campus Bus Service

Learning Center, Room 102 / Welcome Center
267-468-8423
<https://campusoperations.temple.edu/parking-transportation/shuttle-services>

Temple University provides free inter-campus bus service between Ambler, Health Science, and Main campuses (fall and spring) for students who take classes at the Ambler Campus. Inter-campus bus schedules are available in the Welcome Center and online.

Computer Center

Ambler Campus Technology (ACT) Center
Learning Center, Room 106
Help Desk: 267-468-8324
<https://ambler.temple.edu/campus-resources/technology>

The Ambler Campus Technology (ACT) Center has Windows and Macintosh computers equipped with software for all Temple programs; 3D, color and black-and-white laser printers; a plotter; and standard and wide format scanners. A Help Desk is located within the ACT Center. A breakout room is available for students to reserve and there is a Zoom room upstairs in Learning Center, Room 206.

Counseling Services

Main Campus: 215-204-7276
<https://counseling.temple.edu/>

Free and confidential virtual counseling services are available for Temple Ambler students by appointment. Emergencies and/or "walk-ins" and psychiatric services are managed on the Main Campus at Tuttleman Counseling Services located at 1700 N. Broad Street, Second Floor.

Disability Resources and Services

Learning Center, Room 102 / Welcome Center
267-468-8200

<https://ambler.temple.edu/campus-resources/disability-resources-and-service>

The Office of Academic and Student Services, in conjunction with Disability Resources and Services (Division of Student Affairs) at Main Campus, assists with providing accommodations for students with disabilities at Temple Ambler.

Student Financial Services (SFS)

Learning Center, Room 109

267-468-8443

<https://ambler.temple.edu/admissions/cost-aid-and-scholarships>

Temple University's Student Financial Services Office readily assists all Temple students in making their college education affordable. Financial Aid counselors are available to meet with students at the Ambler Campus. See the Financial Aid (p. 1809) section in this *Bulletin* for more information.

Library

Learning Center, Room 106

267-468-8648 (Library Service Desk)

<https://ambler.temple.edu/campus-resources/library>

The Ambler Campus Library supports students and faculty with an on-site collection of print resources and online journals and reference material. As part of the Temple University Libraries system (<https://library.temple.edu>), the Ambler academic community may request materials to be sent to Ambler from the vast, deep discipline-based collections of all of Temple's libraries. Librarians are on site for research help and take appointments for "face to face" or Zoom appointments for research consultations.

Off-Campus Housing

Learning Center, Room 102 / Welcome Center

267-468-8423

<https://ambler.temple.edu/campus-resources/campus-housing>

While Ambler Campus is a commuter campus, the Office of Student Life provides a listing of apartments and houses to rent or share and brochures on local apartment complexes.

OWLcard Access and ID

Learning Center, Room 102 / Welcome Center

267-468-8200

<https://ambler.temple.edu/campus-resources/id-cards>

Your OWLcard is Temple University's ID card and gives you access to Temple buildings, parking lots and services, including libraries and gyms. You can also use your OWLcard to access Diamond Dollars, the University's debit-card program. Learn more about how to obtain a mobile OWLcard.

Parking at Ambler Campus

Learning Center, Room 102 / Welcome Center

267-468-8000

<https://ambler.temple.edu/about/maps-and-directions/parking>

All faculty, staff and students at the Ambler Campus are required to purchase parking hangtags, which can be purchased online and mailed to you. Campus visitors should register their vehicles in order to avoid parking citations.

Re-enrollment

Learning Center

267-468-8200

<https://ambler.temple.edu/admissions/request-re-enroll>

Degree students who have not attended Temple for one semester or more may request to re-enroll. Once a student has submitted a Request to Re-enroll form, an academic advisor will assist with choosing and registering for courses.

Recreation, Outdoor Education & Wellness (ROW)

Red Barn Gym and Recreation Center

267-468-8151

<https://ambler.temple.edu/campus-resources/recreation-and-wellness/recreation>

ROW offers a holistic approach to health and wellness through a range of programs including open recreation, intramural sports, team building programs and special events. Facilities include a multi-purpose gymnasium and a fitness room with both cardiovascular and free weight equipment. Outdoor facilities include the new 15-element challenge course lab, a swimming pool, and basketball, tennis and volleyball courts. The Ambler Campus also has more than two miles of wooded trails for walking and running. Students may also participate in Main Campus recreational activities.

Student and Campus Life

Learning Center, Room 102 / Welcome Center
267-468-8423
<https://ambler.temple.edu/campus-resources/student-life>

This office oversees student programs, events and student organizations. Students can get involved on campus in order to gain leadership experience, develop special skills and interests, and build community with their fellow students. Students may also obtain information regarding the inter-campus bus service, as well as Main Campus events.

For information about student organizations in the Fox School of Business and Management, please refer to the Fox section (p. 789) of the *Bulletin*.

Student Success Center

215-204-0702
<https://studentsuccess.temple.edu/>

Temple Ambler students have access to a wide variety of virtual tutoring services for writing, math and science through the Student Success Center at Main Campus. Learn more about the services, workshops and programs offered.

Unique Facilities and Programs at Temple Ambler

Ambler Arboretum of Temple University

<https://ambler.temple.edu/arboretum>

Temple University's 187-acre Ambler Campus is an Arboretum, or a public garden with a significant focus on a tree collection. Comprised of a unique mix of naturalistic and formal landscapes, including botanic collections, horticulture displays, woodlands and meadows, the Ambler Arboretum is a platform for scientific research; teaching, learning and practical training; and environmental responsibility and conservation.

The University is a leader in modeling the art and science of horticulture. Arboretum staff are horticulturists and curators who steward the living collections. Staff are available to assist faculty and students with teaching and research. They also provide information about the University's woody-plant collection to scholars and professionals around the world. Staff actively engage collection development to fulfill a mission to conserve tree and genetic diversity.

The Ambler Arboretum is open every day of the year from sunrise to sunset. Faculty and students are encouraged to visit to experience the beauty and health benefits of nature, plants and gardening. The Arboretum is known for its 4 seasons of interest—from the Barbara F. and Philip R. Albright Winter Garden to the Louise Bush-Brown Formal Perennial Garden. Of particular interest is the Ernesta Ballard Healing Garden, which includes a labyrinth for contemplation and enjoyment and doubles as a storm-water management garden as does the Sustainable Wetland Garden.

The Ambler Campus was established as the Pennsylvania School of Horticulture for Women in 1911. This historic public garden is now known as the Ambler Arboretum of Temple University which serves as the public garden, outdoor classroom and living laboratory for Temple University.

Temple University Field Station at Ambler

<https://ambler.temple.edu/fieldstation>

Temple University's 187-acre Ambler Campus is a Field Station, a platform for environmental field research and education that spans multiple disciplines, from the natural sciences, to engineering and the liberal arts. The Field Station serves as an ecological observatory that aids in the scientific documentation of fundamental changes in our natural environments. The Field Station's research initiatives provide data to a broad community of scientists and educators, and advance the understanding of global change impacts, as well as innovative and meaningful solutions to these changes.

The Temple University Field Station at Ambler offers a diversity of natural habitats including older growth and secondary forests; aquatic and wetland environments including ponds and ephemeral streams; meadows and turf; and natural and designed garden landscapes.

Faculty may teach and offer experiential opportunities in the Field Station's varied environments. Field Station faculty and staff are available to aid in the creation of modules or pedagogical tools. Field Station courses, offered in conjunction with Temple's schools and colleges, provide hands-on training in field methodologies and applications. Internships integrate students into ongoing research activities that deepen scientific knowledge and enrich students' academic experience, preparing them for further study and careers. Current research initiatives include the Temple Forest Observatory, a collaboration with the Smithsonian Institution's Forest Global Earth Observatory (ForestGEO) program.

Undergraduate and graduate students may participate directly in research through the Field Station's Ecological Observatory Program, which advances understanding of local ecosystems and facilitates large-scale comparative study of dozens of observatories across the country. The Global Change Program enables students to conduct research on ecological impacts of climate change and invasive species. The Field Station also welcomes students and researchers to pursue their own explorations of the natural world.

Athletic Facilities

The Ambler Campus has several facilities for collegiate sports, including NCAA soccer fields, an NCAA softball field and an NCAA baseball field. Ambler fields are used by various club sports including soccer, rugby, softball and baseball.

The Ambler Campus Intercollegiate Athletics Field House, located off Woods Drive, includes "green roof" structures. A green roof is a living biological community of plants that provides an environmentally sound alternative to a traditional roof system. The green roof garden allows for educational and research opportunities for students and faculty. The Field House has locker rooms, training facilities, offices and game-day concessions.

Auditorium

The 300-seat Learning Center Auditorium, with smart technology and performance space, provides opportunities to offer cultural, educational and entertaining events for our students and the surrounding community. Reserve the Auditorium by contacting the Ambler Campus Scheduling and Events Office at 267-468-8223.

Challenge Course Lab

TUA_ROW@temple.edu

<https://ambler.temple.edu/campus-resources/recreation-and-wellness>

A state-of-the-art challenge course facility was built in 2022 featuring 15 elements. This facility can be utilized to enhance experiential learning opportunities for academic courses and for departmental team building programs. In addition to the outdoor facility, the program has multiple "portable" elements and a highly trained staff that can deliver programs at any location indoor or out.

Temple Ambler EarthFest

<https://ambler.temple.edu/community/earthfest>

Temple Ambler EarthFest, in collaboration with the Ambler Arboretum, the Temple Ambler Field Station and other partners, provides meaningful, impactful educational experiences for all ages throughout the year related to citizen science, sustainability and protecting, preserving and connecting with the environment. Join us to celebrate the Earth, stargaze, camp out and explore outdoor biodiversity.

Tyler School of Art and Architecture Greenhouse Education and Research Complex

267-468-8180

<https://ambler.temple.edu/campus-resources/greenhouse>

The Tyler School of Art and Architecture Greenhouse Education and Research Complex provides faculty and students with first-class facilities to study plant and soil science and conduct horticultural research. The energy-efficient greenhouse includes computerized climate controls and thermal blankets to protect the plants in the winter and shade them in the summer. Modern fertilizer injection systems water and fertilize plants simultaneously. The Complex includes a one-acre research garden with an apiary, a shade house and a hoop house.

Institutional Research and Assessment Testing Center

Learning Center, Room 210

<https://ira.temple.edu/>

The testing center is certified by the National College Testing Association (NCTA) and is managed by Temple's Office of Institutional Research and Assessment. The facility administers several computer-based school entrance exams such as GRE, LSAT, MAT, MPRE and Praxis, as well as the GED and other exams.

Law Enforcement Training

Located at Temple Ambler, the Temple University Law Enforcement Training Center is the home to the College of Liberal Arts' Criminal Justice Training Programs and the University College Park Ranger Law Enforcement Academy. Ambler Campus has unique facilities and resources to facilitate highly specialized training for first responders, which enables the Center to serve municipal, state and federal agencies.

Temple Infant and Child Laboratory

Widener Hall

267-468-8610

infantlab@temple.edu

<https://templeinfantlab.com>

The College of Liberal Arts' Infant and Child Laboratory invites parents and their children to shape the future by participating in research at the frontier of science. Directed by nationally recognized child development authorities and professors Dr. Kathy Hirsh-Pasek and Dr. Nora Newcombe, the lab provides fun-filled activities for children who become part of cutting-edge scientific discoveries. Parents learn more about their children's first words and ability to create mental maps. At the lab, infants, toddlers and older children teach scientists new ways to optimize education and advance learning.

Temple Small Business Development Center

Widener Hall

<https://www.fox.temple.edu/faculty-research/institutes-centers/small-business-development-center>

The Fox School of Business' Small Business Development Center (SBDC) has a branch at Ambler Campus, offering general business consultants who work with pre-venture, start-up, and existing small business clients. Most services are provided free to clients, due to grant funding from the Small Business Administration. In addition to one-on-one consulting, classes, workshops and training opportunities, the SBDC offers a unique program called Warrior Rising, a Small Business Special Forces Incubator.

Health Sciences Center

Step onto the Health Sciences Center and be immersed in the future of health care. Home to four of Temple's medical-related schools and colleges, as well as the nationally ranked Temple University Hospital, the Health Sciences Center is a hub of academic, clinical and research activities.

Programs and services of the Lewis Katz School of Medicine, the Maurice H. Kornberg School of Dentistry, the School of Pharmacy, the College of Public Health, and Temple University Hospital are at the Health Sciences Center. Buildings and facilities, covering some 20 acres, extend to either side of North Broad Street from Allegheny Avenue to above Tioga Street. Public transportation to the campus includes SEPTA bus routes 4 and 16 on Broad Street, the Broad Street subway (Allegheny stop to the south, Erie stop to the north); the North Broad and the North Philadelphia stations of the Regional High-Speed transit lines are between the Health Sciences Center and Main Campus.

Each of the schools and colleges located at the Health Sciences Center offers student and academic services. For a specific program or service of the undergraduate schools, refer to the appropriate section of this *Bulletin*, or inquire at the Office of the Dean. For information about the schools of Medicine and Dentistry, contact their respective dean's offices.

Housing and Dining Options

Residential housing is provided on the Main Campus and is accessible by a Temple University shuttle bus or convenient public transportation. Dining options are available at the Student Faculty Conference Center, the hospital cafeteria, and the Main Campus dining centers.

Podiatric Medicine

The School of Podiatric Medicine is located on its own campus at 8th and Race Streets. This campus was the first-ever developed specifically for podiatric education and treatment. The complex includes student housing, educational facilities and the comprehensive Foot and Ankle Institute, all just steps away from Philadelphia's historic and entertainment attractions.

Contact Information

Maurice H. Kornberg School of Dentistry

3223 North Broad Street

Philadelphia, PA 19140

Amid I. Ismail, BDS, MPH, MBA, DrPH, diplomate ABDPH, Dean

<https://dentistry.temple.edu/>

Lewis Katz School of Medicine

Medical Education and Research Building (MERB)

3500 North Broad Street

Philadelphia, PA 19140

Amy J. Goldberg, MD, Dean

<https://medicine.temple.edu/>

Temple University School of Podiatric Medicine

148 North 8th Street

Philadelphia, PA 19107

John Mattiacci, DPM, Dean

215-777-5808

<https://podiatry.temple.edu>

Temple University School of Pharmacy
3307 North Broad Street
Philadelphia, PA 19140
Jayanth Panyam, PhD, Dean
215-707-4990
<https://pharmacy.temple.edu/>

Temple University Hospital
3401 North Broad Street
Philadelphia, PA 19140
<https://www.templehealth.org/>

Main Campus

General Information

Temple's bustling Main Campus crackles with energy, thanks to its location in the heart of Philadelphia, numerous new building projects and the 10,000 students who live on or around our increasingly residential campus. On- and off-campus activities abound, including more than 300 registered student organizations; NCAA Division I sporting events; and nearby restaurants, shops and entertainment.

Temple's Main Campus serves students from the Delaware Valley area, from throughout the United States, and from 116 foreign nations.

The Main Campus can be reached easily by public transportation using SEPTA bus routes 4 or 16 on Broad Street, the Broad Street Subway (Cecil B. Moore Avenue stop), AMTRAK at North Broad Street Station and SEPTA Commuter Rail Lines at the Temple/Cecil B. Moore Station (Ninth and Berks Streets).

The major facilities of the Main Campus are located between 10th and 16th Streets and between Oxford and Diamond Streets. Twelve Temple schools and colleges with undergraduate programs have their central administrative offices at the Main Campus, as well as most of their classrooms. These include:

- The Fox School of Business and Management;
- The College of Education and Human Development;
- The College of Engineering;
- The College of Liberal Arts;
- The Lew Klein College of Media and Communication;
- The College of Public Health;
- The School of Social Work;
- The College of Science and Technology;
- The School of Sport, Tourism and Hospitality Management;
- The Tyler School of Art and Architecture; and
- The Center for the Performing and Cinematic Arts, which consists of the Esther Boyer College of Music and Dance and the School of Theater, Film and Media Arts.

The Graduate School and the James E. Beasley School of Law are also located on Main Campus. Many of these schools and colleges offer programs and courses on other campuses and at various extension centers. Those offerings are described in each individual college section.

Location and Contact Information

1801 N. Broad Street
Philadelphia, PA 19122
215-204-7000 (general number)
www.temple.edu

Programs Offered

All of the programs listed in the Academic Programs chart (p. 2908) are offered on the Main Campus except select programs within the Tyler School of Art and Architecture (Landscape Architecture, Horticulture and Community Development); most of the programs of the College of Public Health, the Maurice H. Kornberg School of Dentistry, the Lewis Katz School of Medicine, and the School of Pharmacy, which are offered at the Health Sciences Center only; the programs of the School of Podiatric Medicine, which are offered at 8th and Race Streets; and those programs only offered in Temple University Japan.

Physical Facilities

In addition to housing the major classroom and administrative facilities of twelve of the schools and colleges of Temple, the Main Campus is also the central location of the university's Library System and Computer Center. Other facilities include two stages for theatrical productions (Tomlinson Theater and Randall Theater), two music recital halls (Klein Recital Hall and Rock Hall), a dance laboratory theater (Conwell Dance Lab), and the Temple Performing Arts Center.

The Main Campus is home to the Media Learning Center for the study of Critical Languages and other self-study courses and the Presser Learning Center, a nationally-known multimedia laboratory for teacher education in music. The university's 24-hour classical and jazz radio station, WRTI-FM, is located at the Entertainment and Community Education Center, behind the Liacouras Center at 1509 Cecil B. Moore Avenue, Third Floor, Philadelphia, PA 19121-3410.

The Liacouras Center is a 10,000-seat multi-purpose venue for sports, entertainment, cultural, and educational activities and is home to the Temple Owls Basketball teams, the Esther Boyer Theater, the Independence Blue Cross Student Recreation Center, the Entertainment and Community Education Center, and a 1,200-car garage.

The world-class TECH Center, located on 12th and Montgomery, features many technology resources available to students. The facility includes hundreds of computers, a help desk, the university Welcome Center, faculty wing, specialty labs, an internet lounge, social spaces, and private breakout rooms for studying.

The Howard Gittis Student Center includes the Food Court, the Graphics Media Center, a Barnes & Noble Bookstore, The UPS Store, Philadelphia Federal Credit Union, the Student Activities office, The Reel Cinema, an information center, the student newspaper, Temple Student Government Offices, Main Campus Program Board, the school yearbook, the Office of the Dean of Students, television lounge, quiet lounge and student organizational space.

Recreation facilities include a student fitness complex in the Independence Blue Cross Student Recreation Center, with free weights and racquetball courts; two Olympic-size swimming pools, weight-training rooms, including a cardiovascular fitness center, in Pearson and McGonigle Halls; an eight-lane, 400-meter outdoor track; an indoor track in the Independence Blue Cross Student Recreation Center; a lighted outdoor recreation and sports complex that includes four acres of artificial turf and a 4,500 seat arena. The Main Campus also has a student recreation facility consisting of a 39,000-square foot Student Pavilion with lighted tennis courts and an outdoor in-line skating surface. Main campus also houses TU Fitness (TUF), a fitness facility with over 16,000 square feet of space that includes cardio equipment, strength training equipment, an 11-piece selectorized equipment circuit, and a stretching area.

Tuttleman Learning Center is a hub for emerging learning technologies, with flexible classrooms, distance learning sites, student lounges, and personalized areas for small group activities, and is home to the University Writing Center, the University Honors Program, and International Programs.

Liacouras Walk, a major pedestrian way running through the center of campus, provides retail shops, food service, and the Conwell Inn.

Temple University Center City

General Information

Located across the street from City Hall and surrounded by the home offices of major national corporations, Temple University Center City offers a wide selection of undergraduate and graduate courses and full degree programs in the evening, as well as stimulating non-credit workshops and seminars during the day, in the evening, and on weekends.

Location and Contact Information

1515 Market Street
215-204-8822
<https://centercity.temple.edu/>

Administration

Melanie Ellison-Roach, Associate Director
Ramon Rios, Senior Academic and Student Services Coordinator

Credit Programs

Most of Temple University's schools and colleges offer courses at Temple University Center City (TUCC). It is possible to complete the following undergraduate degree programs at TUCC in the evening:

- Business Administration
- Bachelor of General Studies (some courses may be offered online)

Students can also complete *many* of their general education requirements at the campus.

Student Services

Hours of Operation

During regular semesters, the TUCC administration office (suite 215) is open 8:30 a.m. to 8:00 p.m., Monday through Thursday, and 8:30 a.m. to 5:00 p.m. on Friday. When Temple University is not in session, please call 215-204-8822 for hours.

Academic Advising and Registration

TUCC's Senior Academic and Student Services Coordinator can give you the information and support you need to succeed. Office hours are scheduled into the evening so that you can make an appointment during your lunch hour or after work. You can also discuss transfer options and career-related topics. Below are the current advising hours:

Monday: 9:00 a.m. to 5:30 p.m.

Tuesday: 10:00 a.m. to 6:45 p.m.

Wednesday - Friday: 9:00 a.m. to 5:30 p.m.

Call 215-204-4358 or e-mail ramon.rios@temple.edu for information or to schedule an appointment.

You must be advised by a representative of your school or college if you are admitted to a degree program. If you are a student in the Fox School of Business and Management, use the Fox Online Appointment System, accessed through the Fox Center for Undergraduate Advising web site. Specify that you want an appointment at TUCC. The Senior Academic and Student Services Coordinator can register non-matriculated students.

Career Advising

TUCC's Senior Academic and Student Services Coordinator can help you utilize the many online career services tools that the University offers. You can obtain information regarding your options. Call 215-204-4358 for an appointment or more details.

Center City Technology Center

Accessing a computer is as easy as a trip to the Center City Technology Center located on the fourth floor. Many resources are available including a help desk, laser printing and scanners. A battery share kiosk is available for students to check out a battery bank to use in their classrooms and recharge their mobile devices while in class. Call 215-204-1521 for more information about available resources or hours of operation.

Student Photo ID Cards

Students registering for the first time can have a photo ID card made in the TUCC administration office (suite 215). Call 215-204-8822 for more information or hours of operation.

Parking

As a service to our students, Temple University has negotiated parking discounts with participating garages at the listed locations on our web site. Temple University Center City has no business relationship with these garages and does not play a role in making their policies. In order to receive the discount, students must have their parking ticket validated and show their Temple ID card. The validation and list of participating garages are available at the security desk in the ground floor lobby area.

Facilities

The TUCC campus occupies six floors at 1515 Market Street. There are over 60 classrooms, conference rooms, and computer classrooms. All classrooms have access to the internet and computer technology.

Meeting and Training Space

The next time your organization needs meeting or training space, consider Temple University Center City. We offer classrooms, conference rooms, and computer labs in a wide range of capacities and a variety of configurations. Every room is equipped with white boards, a ceiling-mounted LCD projector, and a computer. A selection of media equipment is available to enhance your event. All rooms have large windows that provide plenty of natural light and beautiful views. Clients value our convenient location and the professional quality of the space. Affordable rates make TUCC an attractive option to non-profit organizations and government agencies, and you are free to choose your own caterer. Rooms can be rented for full or half days. There is no charge to Temple student organizations. Call 215-204-4357 for information, or to meet with a representative and view the facility.

Lounges and Vending areas

Lounges, seating and vending areas are located on all floors and provide good places to relax or study.

Vending Machines

Vending machines are located in the seating and vending areas on the second, third, fourth, and fifth floors. Call 215-204-0589 if there is a problem with the machines.

Internet Access

Wireless Internet access is available throughout the TUCC campus. In addition, Ethernet connections and power outlets are located around the perimeter of all lounge areas. For more information, contact Center City Technology Center, 215-204-1521.

Non-Credit Programs

TUCC hosts a wide variety of non-credit programs including the Real Estate Institute, the Osher Lifelong Learning Institute, the Boyer Music and Dance Preparatory Program (Music Prep) and a selection of professional development programs offered by Temple's schools and colleges. For detailed information on these programs, see the Special Programs (p. 32) section of this *Bulletin* or go to <https://noncredit.temple.edu>.

Real Estate Institute

Non-credit real estate programs for professionals and consumers. Call 215-204-1539 for more information.

Music Prep

Dynamic non-credit music and dance programs for infants through adults. Call 215-204-1512 for more information.

Osher Lifelong Learning Institute at Temple University (OLLI)

A membership organization that offers non-credit learning and enrichment programs for retirees. Call 215-204-1505 for more information.

Temple University Harrisburg

General Information

At Temple Harrisburg, you will find an active community of students improving their professional knowledge and skills. Temple Harrisburg is engaged in improving the central Pennsylvania community through academic degrees, certificate programs, and professional development programs.

The mission of Temple University Harrisburg (TUH) is to serve as the leading academic and professional development center in the areas of social work, education, public policy and public service in central Pennsylvania.

The campus location in the capital region allows the opportunity to share Temple's commitment to social justice, innovative research and community service with legislative, governmental decision makers and the public. TUH strives to support the university's role in the public discourse on social and policy issues through the provision of excellent graduate programs, professional development opportunities, public policy discussion and innovative research.

Administration

Link Martin, MSW
Director
Temple University Harrisburg
234 Strawberry Square
Harrisburg, PA 17101
717-232-6400
lmartin@temple.edu
harrisburg.temple.edu

Lynn Notestine, MSW
Associate Director
Temple University Harrisburg
234 Strawberry Square
Harrisburg, PA 17101
717-232-6400
lynn.notestine@temple.edu

Programs Offered

For further information regarding the programs highlighted below, please visit the Temple University Harrisburg web site.

Certificate Programs

- Post Graduate Certificate in Play Therapy
- Clinical Supervision
- Strengths-based Leadership Certificate
- Grant Writing Certificate Program
- Certificate in Working with Veterans and Their Families

Non-Credit Programs/Professional Development

- Credential for Strengths-based Family Workers
- Network of Evaluation Services and Training (NEST)
- Non-Profit Management Training Program & Enhancing Communities Lunch Series
- International Nonprofit Training and Leadership Training Program (INTL)
- Institute on Protective Services
- Certified Investigator Training Program
- Institute on Adolescent Sexual Health
- Teacher Professional Development
- Personal Care Home Administrator Training
- Medication Administration Training Program
- Community Health Worker Training Program

Undergraduate Programs

Capital Semester

The Institute for Public Affairs sponsors an internship semester in association with Temple University Harrisburg. Students have the opportunity to gain experience in government affairs, policymaking and policy implementation first-hand at the State Capital.

Transfer Degree: Liberal Studies

Temple University Harrisburg is committed to building transfer programs to serve the needs of the Capital area community. Potential transfer students are encouraged to contact the Assistant Director for Academic Programs about opportunities. Transfer students may apply for the Liberal Studies program in Harrisburg with a focus on social sciences. The requirements are designed to be flexible and allow for a significant number of transfer credits. Students enroll in a combination of online, face-to-face or hybrid courses.

Facilities

The Temple University Strawberry Square facility is 20,000 square feet located across from the capitol in an office/shopping complex and offers a wide range of classrooms, conference rooms and computer labs equipped with the latest technology for meeting, video conferencing and presentation needs.

Temple University, Japan Campus

Overview

Mission Statement

Truly International: Temple University, Japan Campus (TUJ) is committed to providing a superior education in Japan, grounded on the traditions and contemporary practices of American higher education. Through innovative teaching, exceptional care, and rewarding opportunities in a multicultural setting, we equip students to thrive in an interconnected world. TUJ prioritizes students and strives to provide them with the tools to imagine, explore, and succeed in an ever-changing global workplace. While offering a truly international education in a multicultural and inclusive environment, we embrace the values, rigor and community spirit of our Main Campus in Philadelphia.

Our Vision: TUJ supports internationally-minded learners in the pursuit of their educational and career goals while encouraging a multicultural, cooperative, innovative, and entrepreneurial mindset. For the benefit of our learners, TUJ also seeks to build bridges across cultures and advance the globalization of higher education. It is our vision to cultivate excellence and foster student success through the following actions.

- Provide a rigorous American-style undergraduate liberal arts education (bachelor's and associate's degrees) and graduate programs (master's and doctorate degrees) within a student-centered learning environment infused with global views and intercultural perspectives.
- Elevate learners in degree and non-degree programs through an educational experience that focuses on the development of global competencies, critical thinking, problem-solving, communication, creativity, artistry, leadership, interpersonal intelligence, integrity, research, and practical skills.
- Furnish a global, multicultural, and inclusive environment composed of students, staff, and outstanding faculty from the U.S., Japan, and other parts of the world.

- Offer individualized student attention, smaller class sizes, and regular interactions with faculty.
- Develop pathways to careers and graduate studies through TUJ stakeholders and connections.
- Forge cooperative relationships and engage with partners in education, government, and industry.

Brief History

TUJ is the **oldest and largest foreign university in Japan**. Founded in 1982, TUJ has developed into a nationally recognized institution offering an extensive range of educational programs.

TUJ is the first educational institution in Japan to be **officially recognized as a Foreign University, Japan Campus** by Japan's Ministry of Education, Culture, Sports, Science and Technology. This status allows TUJ to sponsor student visas, enabling international students to study at the university on either a short-term basis (one or two semesters) or a long-term basis (such as to complete a full four-year program).

Learn more about the history of TUJ.

Accreditation

Departments and programs at TUJ are accredited by the Middle States Commission on Higher Education (MSCHE). The Tyler School of Art and Architecture's Bachelor of Arts in Art program is accredited by the National Association of Schools of Art and Design (NASAD).

Scholarships, Financial Aid and Awards

TUJ provides a variety of scholarships for incoming and continuing undergraduate students. Learn more about these opportunities at TUJ's Scholarships and Loans.

Study Away Opportunities

TUJ students are encouraged to participate in programs abroad including attending Temple Main Campus, Temple Rome, and other Exchange programs with partner institutions. Learn more about Study Abroad.

In addition to programs abroad, TUJ students who are interested in experiencing student life and education at a Japanese university can take advantage of exchange programs with local Japanese partner institutions.

Facilities and Resources

Classroom Studios

TUJ's building houses studio facilities for the Art Program including a printmaking/bookmaking studio, 3D design/sculpture studio, digital studio (Mac labs), and a painting/drawing studio.

The Media Room at TUJ is an excellent facility that provides students with the tools and resources necessary to create high-quality video, audio, and new media projects. Featuring state-of-the-art equipment, including professional-grade cameras, microphones, and editing software, the Media Room offers students the opportunity to hone their skills and unleash their creativity. With the guidance of experienced faculty and staff, students can access the resources they need to produce compelling and engaging media content. The Media Room at TUJ is an invaluable resource for students who are looking to develop their skills in media production and build a portfolio of impressive work.

Academic Advising Center (Room 102)

Jenika Kaul, MA, Director

Shota Fujii, MA, MEd, Assistant Director

TUJ's Academic Advising Center (AAC) works with all undergraduate students in any major at any level. See the Advising (p. 1831) section for more details.

Registrar's Office (Room 102)

Yoko Namima, Registrar, Temple Japan Campus

TUJ Registrar's Office (RO) is responsible for academic record maintenance (e.g. manual registration input, certified document issuance, etc.) in order to assist students in achieving their academic goals.

The RO handles various registration-related data input and release for TUJ staff members and students, and is also committed to collaborating with the Main Campus Office of the University Registrar to share mutual issues and work to continuously improve processes and procedures.

The Learning Center

Ryan Rashotte, PhD, Director

The Learning Center (TLC) at TUJ offers free online and in-person peer-tutoring in a variety of subjects, resources for self-access independent study, and support for faculty.

Free peer-tutoring for students in any TUJ program is available from Monday through Friday. Every semester, tutoring generally begins sometime during the second week of classes, and the last day of undergraduate classes is the last day of TLC tutoring. In-person tutoring is held in Room 402, Showa Building 10 (the building next to the TUJ cafeteria).

Accessibility Services / Disability Resources and Services (Room 603A)

Michelle Bridges, MFA, Accessibility Services Coordinator

The Accessibility Services / Disability Resources and Services (DRS) team ensures that students with diverse educational needs can access the full university experience. DRS collaborates with both instructors and students to secure appropriate classroom accommodations and provide students with equal access to educational opportunities.

Counseling Services (Room 603B-D)

The aim of the TUJ Counseling Office is to help students increase their self-awareness, improve their problem-solving skills, and accomplish their personal and academic goals. Services provided by professional counselors include individual counseling, group counseling, and workshops and seminars. Counseling service is available both in English and Japanese.

Bursar's Office (Room 105)

The Bursar's Office at Temple University, Japan Campus assists students with inquiries related to making or confirming payments for classes and questions related to tuition statements and invoices. The Bursar's Office also works with other university departments in processing financial aid and arranging refunds. For inquiries, please e-mail tujbursar@tuj.temple.edu.

Career Development Office (Room 107)

Erica Adams, Director

The Career Development Office (CDO) at TUJ provides comprehensive career development services to empower each student to confidentially launch their individual careers after university. CDO provides career advising, seminars on job hunting strategies, and guidance on internships, resumes, and interviewing techniques.

Internship Program

The Internship Program, coordinated by the CDO, is one of the distinctive features of a TUJ education. Students find it useful to not only gain valuable work experience, but also to build their future career plan. In fact, many students choose to find the same kind of job as they undertake during their internship.

A credit internship is a valuable way to gain practical work experience, often in a student's field of interest, while earning academic credits. Since a credit internship is treated as an academic course, you will need to register with the Academic Advising Center. Students usually work from 10 to 20 hours per week on site under managerial supervision.

Not only TUJ students but also qualified Main Campus students are welcome to apply for the Internship Program through Study Abroad. Main Campus students who are interested in applying for TUJ's Internship Program should contact Education Abroad and Overseas Campuses, 200 Tuttleman Learning Center.

Office of Student Services and Engagement (Room 104)

Nicole Despres, Assistant Dean of Students

Paul Gaspari, Director

Luis Navarro García, Assistant Director of Student Engagement

The Office of Student Services and Engagement (OSSE) supports TUJ's diverse student population as they become members of the university community. In addition to providing assistance with the visa application process and coordinating financial aid and housing, OSSE provides orientations to help students adapt to the academic and social life at TUJ. OSSE also works with the Student Government and other student organizations to encourage social interaction among students with different backgrounds by creating events and activities that appeal to all TUJ students.

Other Spaces for Students

In addition to the facilities and resources listed above, TUJ also provides student space for a variety of activities such as group or individual study, exercise, prayer and more. TUJ students also have access to Showa Women's University (SWU) facilities. While some of these spaces are freely open, others require a reservation. Learn more about student spaces.

Student Organizations and Other Student Engagement Opportunities

Student Organizations

Student organizations—created and run by students—are overseen by Student Activities which is housed within the Office of Student Services and Engagement (OSSE). These organizations help students identify others with similar interests, as well as promote affinity towards other students while enhancing their TUJ experience.

Student Events and Activities

TUJ sponsors a variety of events and activities throughout the semester, including culture and language exchange programs, day outings and overnight trips. These activities are designed to cultivate social relations among our diverse university community and advance the university's mission as an international institution in Japan.

Student Government

The TUJ Student Government (TUJ SG) serves as the voice of the student body, and assists in matters of academia and student life. Student Government also organizes events during the semester to help promote active student life amongst the general student body. Their office is located on the first floor of TUJ within the Cafeteria space, Meeting Room 110-B. They can be reached by e-mail at stugv@tuj.temple.edu.

Emerging Leaders Program

The Emerging Leaders Program is designed to help participating students develop leadership skills, gain life-long friendships, find opportunities to network, and prepare for the global marketplace.

TUJ LEAD

TUJ LEAD | Leading in Equity, Acceptance, and Diversity, focuses on supporting efforts to raise cultural awareness, equity and inclusion of all members of the TUJ community and for the public, acknowledging differences in beliefs, gender, identity, nationality, race and sexual orientation. The group endeavors to develop resources, policies and initiatives that foster greater inclusion for all members of the community. TUJ LEAD aims to be your partner in promoting inclusion, access and opportunities for open exchange among students, faculty, staff and alumni.

Learn more about Student Engagement, as well as activities and organizations.

Research Opportunities for Students and Faculty

Mariko Nagai, MA, Director

As the only fully accredited American university in Tokyo, TUJ is uniquely positioned and committed to supporting research opportunities for both students and faculty, especially in Teaching English as a Second Language, Law, the Humanities, Art, Business Studies, Communications Studies, and the Social Sciences. Learn more about research opportunities.

Institute of Contemporary Asian Studies

Robert Dujarric, MBA, Co-Director
Kyle Cleveland, PhD, Co-Director

The Institute of Contemporary Asian Studies (ICAS) provides lectures, seminars and discussions of issues related to Japanese politics, society and economics. Participants include a wide range of individuals from both the foreign and Japanese business, government and academic communities. ICAS also publishes articles on Asian and US affairs, hosts adjunct and visiting fellows, and coordinates undergraduate and graduate student internships. Its events and publications are in English. Details about ICAS seminars, events and publications are available at the ICAS web site listed above.

Contact Information

Matthew J. Wilson, JD, Dean

Temple University, Japan Campus
1-14-29 Taishido, Setagaya-ku, Tokyo, Japan 154-0004
+81-3-5441-9800 (from overseas) / 03-5441-9800 (in Japan)
<https://www.tuj.ac.jp/contact>

Academic Affairs (Undergraduate)

Yasuko Taoka, PhD, Associate Dean for Academic Affairs
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Jenika Kaul, MA, Director of Academic Advising Center

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Undergraduate Programs

Temple University, Japan Campus (TUJ) offers the following programs:

- Art BA (p. 122) (at TUJ only)
- Art Minor (p. 136)
- Art History Minor (p. 135)
- Asian Studies BA (p. 976)
- Asian Studies Minor (p. 980)
- Communication Studies with Contemporary Media Environments Track BA (p. 1258)
- Communication Studies with Production Track BA (p. 1282) (at TUJ only)
- Communication Studies with Communication Studies Thesis Track BA (p. 1250)
- Computer Science Minor (p. 1523)
- Economics BA (p. 1005)
- Economics Minor (p. 1009)
- eSports Certificate (p. 1758)
- Fundamentals of Programming Certificate (p. 1581)
- General Business Studies Minor (p. 853)
- General Program AA (p. 1033) (at TUJ only)
- General Program BA (p. 1034) (at TUJ only)
- General Studies BGS (p. 1779)
- Information Science and Technology Minor (p. 1629)
- International Affairs BA (p. 1069) (at TUJ only)
- International Business Studies BS (p. 1076) (at TUJ only)
- Japanese BA (p. 1088) (at TUJ only)
- Japanese Minor (p. 1092)
- Japanese Certificate (p. 1092)
- Management Career Certificate (p. 1110)
- Political Science BA (p. 1129)
- Political Science Minor (p. 1135)
- Political Economy Certificate (p. 1127)
- Psychological Studies BA (p. 1137) (at TUJ only)
- Psychology Minor (p. 1147)
- Social Science Research Certificate (p. 1154)
- Tourism and Hospitality Management BS (p. 1772)

Academic Advising

TUJ Academic Advising Center (AAC)

Room 102, TUJ Building

1-14-29 Taishido, Setagaya-ku, Tokyo 154-0004

+81-3-5441-9862 (from overseas) / 03-5441-9862 (in Japan)

aac@tuj.temple.edu

Jenika Kaul, MA, Director of Academic Advising

Shota Fujii, MA, MEd, Assistant Director of Academic Advising

Academic advising is a series of supportive activities provided for students to accomplish their academic and career goals through assistance such as:

- choosing an appropriate major based on their interests;
- selecting appropriate courses for their program of study;
- monitoring their academic progress;
- informing about the university's deadlines, policies, and regulations; and
- assisting students on exploring academic options and opportunities.

Please also see AAC's full mission statement.

The Academic Advising Center works with all undergraduate students as a primary support unit. Major coordinators are also available to assist students in course selection for the major and minor requirements based on their academic interest and needs.

Advising by Professional Advisors

Undergraduate students in all majors at any level can get assistance from the AAC staffed with full-time professional academic advisors. The AAC uses a caseload advising system so that all students have an assigned academic advisor to work with through the duration of their academic careers. Students will be ensured by the AAC advisors to satisfy all of the University's graduation requirement areas, such as General Education, major and college requirements. Advising is available on an appointment basis throughout the semester except for certain designated periods in which advising is limited, such as Graduation Review and Clearance or New Student Orientation.

Advising Appointments

Appointments are typically available between 10:00 a.m. and 5:00 p.m. on Monday through Friday. In order to make an appointment, students simply can stop by the AAC or submit a request through the online form. Each advising slot typically lasts for 30 minutes. The AAC also provides drop-in advising and workshops throughout the semester.

Major Coordinators

While the AAC serves as the primary unit for advising to TUJ undergraduate students, major coordinators are also available for students to discuss their course selection particularly for major and minor requirements. Students should remember that major coordinators are specifically responsible for the respective major and minor requirements only, and not General Education or other college requirements. Students who seek assistance in comprehensive academic advising to cover all degree requirements should meet with a professional academic advisor from the AAC in combination with their major coordinator.

Prospective Study Abroad Students

Students from Temple Main Campus or other U.S. colleges and universities who are interested in studying at TUJ should first discuss their options with Education Abroad and Overseas Campuses, 200 Tuttleman Learning Center.

Academic Policies

As one of the campuses run by Temple University, TUJ also follows the university's Academic Policies. See Academic Policies (p. 1835) and the TUJ web site.

Academic Calendar

Available on TUJ web site: Academic Calendar

Course Schedule

Available on TUJ web site: Course Schedules

Faculty

Sunghee Ahn, Assistant Professor, Department of First Year Writing Program; MA, Columbia University.

Ada Angel, Associate Professor, Department of Psychology; EdD, Temple University.

Mark Azzopardi, Associate Professor, Department of Intellectual Heritage; PhD, University of Sydney.

Dennis Bacani, Associate Professor, Department of Mathematics; PhD, Sophia University.

James D.J. Brown, Professor, Department of International Affairs; PhD, University of Aberdeen.

Ronald Carr, Professor, Department of Communication Studies; MFA, University of California Los Angeles.

Jeremy S. Chambers, Instructor, Department of First Year Writing Program; PhD, University of Phoenix.

Sunghee Cho, Assistant Professor, Department of International Affairs; PhD, Syracuse University.

William Clark, Associate Professor, Department of American Studies; PhD, University of Minnesota.

Kyle Cleveland, Associate Professor, Department of Asian Studies; PhD, Temple University.

Michael Thomas Cucek, Assistant Professor, Department of Asian Studies; BA, Stanford University.

Prachi Gupta, Assistant Professor, Department of Economics; PhD, Indira Gandhi Institute of Development Research.

Erhan Selcuk Haciomeroglu, Professor, Department of Mathematics; PhD, Florida State University.

Irene Herrera, Associate Professor, Department of Communication Studies; MA, Nihon University.

May May Ho, Assistant Professor, Department of Economics; MSc, Lancaster University.

Sachiko Horiguchi, Professor, Department of Asian Studies; PhD, University of Oxford.

Leonard Horton, Professor, Department of Music; DMA, Boston University.

Yoshiko Ichimura, Assistant Professor, Department of Japanese; MSc, The University of Edinburgh.

Hady George Kahy, Associate Professor, Department of Economics; PhD, University of Tsukuba.

Masaki Kakizaki, Professor, Department of Political Science; PhD, University of Utah.

Hani Karam, Assistant Professor, Department of Computer Science; PhD, University of Tsukuba.

Jeff Kingston, Professor, Department of Asian Studies; PhD, Columbia University.

Takayuki Kubota, Assistant Professor, Department of Art; MFA, City University of New York.

John Lipartito Jr., Assistant Professor, Department of Communication Studies; BA, Temple University.

Ian Lynam, Associate Professor, Department of Art; MFA, California Institute of the Arts.

Yuka Matsuhashi, Assistant Professor, Department of Japanese; MA, University of Oregon.

Johnathan McCaskill, Assistant Professor, Department of Law; JD, University of Wisconsin.

Shimpei Miyagawa, Assistant Professor, Department of International Business Studies; PhD, Kobe University.

Mariko Nagai, Professor, Department of Japanese; MA, New York University.

Farid Nakhle, Assistant Professor, Department of Computer Science; MS, American University of Science and Technology.

Marco Narducci, Assistant Professor, Department of International Business Studies; PhD, International Christian University.

Taro Nettleton, Associate Professor, Department of Art History; PhD, University of Rochester.

Karl Neubert, Associate Professor, Department of Communication Studies; MFA, Musashino Art University.

Yukiko Oki, Assistant Professor, Department of First Year Writing Program; EdD, Anaheim University.

Ryoko Osada, Assistant Professor, Department of Japanese; MA, University of Wisconsin-Milwaukee.

Ryan Rashotte, Assistant Professor, Department of First Year Writing Program; PhD, University of Guelph.

Patrick Rosenkjar, Professor, Department of Intellectual Heritage; EdD, Temple University.

Lee Roser, Assistant Professor, Department of Intellectual Heritage; MS, MEd, Temple University.

Junko Saito, Associate Professor, Department of Japanese; PhD, University of Hawaii at Manoa.

Kaoru Sakurai, Associate Professor, Department of Art; MFA, Cranbrook Academy of Art.

Morgan Schulz, Lecturer, Department of Intellectual Heritage; MFA, Brooklyn College.

Dariusz Skowronski, Associate Professor, Department of Psychology; PhD, Adam Mickiewicz University.

Vasileios Tserolas, Assistant Professor, Department of Computer Science; PhD, Nihon University.

Shinya B Watanabe, Associate Professor, Department of Art; MFA, Temple University.

Darryl Wharton-Rigby, Assistant Professor, Department of Communication Studies; MFA, Dodge College of Film and Media Arts.

Mike Williams, Assistant Professor, Department of American Studies; MA, Boston University; MEd, Temple University.

Asako Yamaguchi, Assistant Professor, Department of Japanese; MA, The Ohio State University.

Zhaocheng Zeng, Assistant Professor, Department of International Business Studies; PhD, McMaster University.

Suzi K. Zimmerman, Associate Professor, Department of Psychology; PhD, University of Illinois.

Academic Policies

These academic policies and regulations generally apply to all undergraduate students and provide a framework within which schools and colleges may specify further conditions or variations appropriate to students in their courses or programs. Statements of academic policies and regulations apply to both degree-seeking and non-degree-seeking students unless explicitly noted otherwise.

The information in this bulletin is subject to change by Temple University at any time. Neither this bulletin nor any parts of it may be relied upon as a contract between Temple University and any student, applicant, or other user of this site. All prospective and current students should consult with appropriate University Offices to verify current information and the status of policies, programs, descriptions of curricula, or other information in this bulletin.

The texts of some of these policies are available on the Temple University Policies & Bylaws web site at <https://secretary.temple.edu/policies>.

Students should consult their advisors and dean's offices for any changes in policy that affect them.

Academic Policies

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- Academic Forgiveness (p. 1836)
- Academic Progress for Undergraduate Courses (p. 1837)
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- Academic Rights and Responsibilities (p. 1838)
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Academic Course Load

The average semester load for full-time students is 15 to 17 semester (or credit) hours. Students must carry at least 12 semester hours to be classified as full time.

Academic overloads (19 or more semester hours) during fall and spring semesters need special approval of the dean or dean's designee of the school or college in which a student is matriculated. Tuition for full-time students covers 12 to 18 hours. Credits over 18 carry additional tuition charges. See Tuition and Fees (p. 1800) in the Financial Information section of the *Bulletin*.

Summer Sessions

Undergraduates must get overload approval for 9 credits or more.

Academic Forgiveness

NOTE: This policy is currently under review. If a new version is approved during the 2023-2024 academic year, the policy document link below and this Bulletin page will be updated accordingly.

Scope of Policy & Rationale

The Academic Forgiveness policy allows students approved for re-enrollment an opportunity to return with a reset grade point average. If they apply for and are approved for Academic Forgiveness, these students re-enroll with a 0.00 cumulative grade point average and the opportunity to apply credits from courses completed previously at Temple with a "C-" or higher towards their degree.

Former undergraduate, degree-seeking students who have not taken any coursework at Temple University for a minimum of four consecutive years are eligible for Academic Forgiveness (policy # 02.10.17). Students are also eligible to petition for Academic Forgiveness after three consecutive years of non-enrollment at Temple if, during that time, they have completed at least 15 transferable credits elsewhere with a cumulative grade point average of 3.00 or higher.

Definitions

1. **Re-enrolled** - Students are re-enrolled when they are approved to return to the university after a period of separation from the university or following academic dismissal. These students follow the then-current degree requirements.
2. **Academic Forgiveness** - Academic Forgiveness is a status that enables students to return to the university with a reset cumulative grade point average (GPA) of 0.00.
3. **Four Consecutive Years** - A total of eight consecutive fall and spring semesters.
4. **Three Consecutive Years** - A total of six consecutive fall and spring semesters.

Policy Statement

Undergraduate, degree-seeking students who re-enroll following a minimum absence from the university defined by this policy may petition to have their cumulative GPA reset at the time of re-enrollment to the university. Once applied, Academic Forgiveness cannot be reversed.

Upon successful application for Academic Forgiveness:

- Cumulative grade point average will be reset to 0.00 after the Drop/Add period of the semester of reenrollment.
- All prior courses and grades will remain on the student's academic record and transcript.
- The notation of "Academic Forgiveness" will be recorded on the student's transcript.

- Courses previously earned at Temple University with grades of CD, D+, D, D-, F, NC, NR, MG, PI will not be used for credit towards the student's degree. Credit will be considered for courses with grades of A, A-, B+, B, B-, C+, C, C- and CR. The student's department has final approval of credits that will count towards graduation. Schools/Colleges may disallow credits towards graduation for courses that are no longer applicable to the current degree, per applicable major rules.

Re-enrolled students electing the forgiveness option may repeat a course one additional time if they previously exhausted their repeat options for that course under the policy on Repeating a Course (policy # 02.10.12).

Students who choose Academic Forgiveness and wish to qualify for Latin Honors at Graduation must complete a minimum of 60 earned credit hours at Temple following their reinstatement, i.e., excluding their earned credit hours allowed at the time of academic forgiveness.

Students are afforded one opportunity for Academic Forgiveness.

Notes

1. Dates of official enactment and amendments

Adopted by the president on February 8, 2011. Effective August 30, 2011 (Fall 2011).

The January 2021 amendment adds a three-year option for students who complete credits elsewhere; specifies that once Academic Forgiveness is applied it cannot be reversed; and students can only be approved for Academic Forgiveness once.

It also adds the grade CD to the grades that cannot be used for credit towards the student's degree.

2. History

This policy was amended in January 2021.

Supersedes

Previous policies concerning Withdrawal; Repeat; and Academic Warning, Probation and Dismissal with effective dates prior to May 16, 2011.

3. Cross References

- Policy # 02.10.12, Repeating a Course (Undergraduate)
- Policy # 02.10.14, Discontinuation of Registration: Dropping or Withdrawing from Courses (Undergraduate and Graduate)
- Policy # 02.10.11, Academic Standing (Undergraduate)
- Policy # 02.10.18, Transfer Credit Policy for Matriculated Undergraduate Students

Procedures related to this policy can be found in the Academic Policies section of the *Undergraduate Bulletin*.

Academic Progress for Undergraduate Courses

Students in undergraduate courses receive a mid-semester rating report indicating that their work to date is satisfactory or unsatisfactory or that they have not been attending the course. This report is available on Self-Service Banner by the end of the sixth week of fall and spring semesters. For further information, see the full policy below.

Policy on Academic Progress for Undergraduate Courses

(Policy # 02.10.15)

Scope of Policy

The transition from high school to college is challenging. There are fewer classroom hours, and time is less structured. Study and other academic work are undertaken more independently than in secondary school. Evaluations of performance are less frequent. As a result, students may be unaware that they are not meeting academic expectations.

The current program of midsemester "early warnings" is restricted to courses in the lower division. The positive benefits of this feedback system to students, faculty and university support services are clear. Extending the system to include all undergraduate courses underscores the University's commitment to improving the academic performance of all undergraduate students by providing timely feedback, guidance and assistance thereby enhancing overall student performance in classes in the University.

This policy's purpose is to provide students in upper division courses with the same early warning of University concern as is currently provided for lower division courses. This will enable them to seek early guidance and assistance when their performance in a course is not satisfactory.

Policy

Effective Fall semester 2014, courses offered principally for undergraduates shall include one or more evaluations of student progress prior to the completion of approximately one-third of the course (equivalent to the end of the fifth week of a standard 14-week semester). Evaluation(s) may include quizzes, exams, papers, essays, performances, presentations, laboratory or studio demonstrations or experiments, or other activities determined by the instructor to be subject to evaluation or grading.

The instructor shall enter Midterm Progress Ratings in Self-Service Banner (SSB) for each course included in the process. A rating will be entered for each student by selecting the appropriate rating in the drop down box in the "Rating" column on the electronic form. During and after the rating

period, ratings can be viewed on the 'Grade History' page. The rating period will begin when approximately 45% of the course is completed and end when approximately 55% of the course is completed (equivalent to the beginning of the sixth week and end of the eighth week of a standard 14-week semester, respectively).

Reports of unsatisfactory ratings submitted by the faculty may be used by the University, including its schools or colleges and its central academic offices, to advise students that their academic performance in certain courses is a cause for concern and to counsel students to seek appropriate assistance in their studies, including assistance from the instructor in the course. Exceptions to this policy may be granted by Deans if early evaluation of student progress is inconsistent with the purpose of the course or presents a significant burden in meeting course objectives. Each Dean shall report such exceptions each semester to the Provost.

Notes

1. Dates of Official Enactment and amendments:

Adopted by the President on February 6, 2003. Effective on September 1, 2003.

Amended by the President on August 27, 2014. Effective Fall 2014 semester.

2. History:

Secretary's Note: This policy was previously identified as #02.78.15.

The August 2014 amendment changes the courses covered by the policy and updates the language to reflect the shift from paper to an online rating process.

3. Cross References

None

Academic Residency Requirements

Temple University requires that all undergraduate degree candidates complete 45 hours of the last 60 hours of the degree or program as matriculated students at Temple University. If a matriculated student previously took Temple courses on a non-matriculated basis, those courses are counted towards this requirement. See the policy on Transfer Credits (p. 27).

Students admitted to the University with a large number of transfer credits who want to participate in a Temple Exchange or approved external study abroad program in their junior or senior year should meet with their academic advisors to discuss eligibility.

To graduate with Latin Honors, a student must complete at least 60 semester hours of the program matriculated at Temple. See Honors (p. 1855).

Students should consult their school or college for additional academic residency requirements.

This policy was last updated in Fall 2014. Students following Catalog Terms prior to Fall 2014 are subject to the residency requirements indicated in the Bulletin of their Catalog Year.

Academic Rights and Responsibilities

Summary

Temple University students who believe that instructors are introducing extraneous material into class discussions or that their grades are being affected by their opinions or views that are unrelated to a course's subject matter can file a complaint under the university's policy on academic rights and responsibilities (Temple Policy 03.70.02).

The policy encourages students to first discuss their concerns with their instructor. If a student is uncomfortable doing so, or if discussions with the instructor do not resolve the student's concerns, an informal complaint can be made to the Student Ombudsperson for the student's school or college. Unresolved complaints may be referred to the dean for handling in accordance with the school or college's established grievance procedure. Final appeals will be determined by the Provost.

Go to the Student Rights and Responsibilities section of this *Bulletin* for additional information.

See below for the full policy text.

Student and Faculty Academic Rights and Responsibilities

(Policy # 03.70.02)

Scope of Policy and Rationale

As an academic institution, Temple University exists for the transmission of knowledge, the pursuit of truth, the development of students, and the general well-being of society. Free inquiry and free expression are indispensable to the attainment of these goals. As members of the academic community, students should be encouraged to develop the capacity for critical judgment and to engage in a sustained and independent search for truth.

Freedom to teach and freedom to learn are inseparable facets of academic freedom. The freedom to learn depends upon appropriate opportunities and conditions in the classroom, on the campus, and in the larger community. The university and the faculty have a responsibility to provide students with opportunities and protections that promote the learning process in all its aspects. Students similarly should exercise their freedom with responsibility.

Temple University therefore reaffirms its commitment to academic freedom, and adopts the following statement of academic freedom principles applicable to faculty and students.

Policy Statement

1. Faculty are entitled to freedom in the classroom in discussing their subjects, but they should be careful not to introduce into their teaching controversial (or other) matters which have no relation to their subject. The faculty member is responsible, however, for maintaining academic standards in the presentation of course materials.
2. As members of the academic community, students should be encouraged to develop the capacity for critical judgment and to engage in a sustained and independent search for the truth.
3. Faculty members in the classroom and in conference should encourage free discussion, inquiry, and expression. Student performance should be evaluated solely on an academic basis, not on opinions or conduct in matters unrelated to academic standards.
4. Students should be free to take reasoned exception to the information or views offered in any course of study and to reserve judgment about matters of opinion, but students are responsible for learning the content of the course of study in which they are enrolled. The validity of academic ideas, theories, arguments, and views should be measured against the relevant academic standards.
5. Students should have protection through orderly grievance procedures against prejudice or capricious evaluations that are not intellectually relevant to the subject matter under consideration. At the same time, students are responsible for complying with the standards of academic performance established for each course in which they are enrolled.

Procedures

Student Grievance Procedure

Except in cases in which a student challenges a grade received in connection with a course, the following procedures shall apply when a student believes that a faculty member has infringed upon the student's academic rights as set forth in this policy. In cases in which the student is challenging a grade in connection with a course, the student shall follow the grade appeal procedure applicable to the school or college in which the course is offered.

1. If a student grievance for an alleged violation of academic rights cannot be resolved between the faculty member and the student, or if the student does not feel comfortable in discussing the matter directly with the faculty member, the student may bring an informal complaint to the student ombudsperson of the school or college to try to affect an informal resolution.
2. If a resolution satisfactory to the student is not obtained through an informal mediation process with the student ombudsperson, the student may submit a formal, written grievance to the dean or the dean's designee.
3. The dean or the dean's designee may attempt informal resolution through discussion with the student and faculty member. If a mutually agreeable resolution is not achieved through informal discussion, the dean shall refer the matter for consideration in accordance with the procedures for resolution of student grievances as set forth in the bylaws of the school or college.
4. The dean will consider the recommendation of the school or college's student grievance committee and issue a written decision and remedy. Appropriate precautions should be developed to safeguard the confidentiality of the grievance proceedings, including information about the outcome.
5. Either party to a grievance may appeal the decision of the dean to the provost, in writing, within ten (10) days following notice of the dean's decision. A written reply by the other party must be filed within ten (10) days after receipt of the appeal. The dean's decision shall be held temporarily pending appeal. The provost has discretion to determine the information and procedure that he/she will utilize in deciding each appeal. The decision of the provost shall be in writing and shall be final.

Recordkeeping and Reporting

The officers should develop mechanisms and procedures for developing and maintaining records in a confidential manner of all grievances brought pursuant to this policy. In addition, the officers shall provide a report on all grievances pursuant to this policy each semester to the chairs of the Academic Affairs, Student Success, and Diversity Committees of the Board of Trustees, and establish a mechanism for annual reviews of this policy and its effectiveness by appropriate university officials and the board.

Notes

1. History:

Last Amended:

Adopted by the Executive Committee, acting on behalf of the Board of Trustees on July 19, 2006.
November 2022: Updated to reflect current Bylaws and job titles.

Initial Policy Effective Date:

August 1, 2006

2. **Cross References/Appendix:**

None

Academic Standing

NOTE: This policy is currently under review. If a new version is approved during the 2023-2024 academic year, the policy document link below and this Bulletin page will be updated accordingly.

Scope of Policy & Rationale

Undergraduate baccalaureate and associate degree-seeking students are subject to the academic standing rules addressed in this policy.¹ (Policy # 02.10.11)

Definitions

1. **Academic Term** - A fall, spring, summer I or summer II semester in which a student registers for one or more courses.
2. **Academic Good Standing** - A student is in Academic Good Standing if enrolled in a degree-seeking program and not in the first term of Academic Recovery.
3. **Academic Warning** - A student is on Academic Warning status when:
 - a. the student's most recent semester grade point average is less than 2.0 **or**
 - b. the student's cumulative grade point average is less than 2.0 prior to accruing 30 cumulative hours (or 20 cumulative hours for an associate degree program) or completing a 4th Academic Term.
4. **Academic Probation** - A student is on Academic Probation when the student's cumulative grade point average is below 2.0 after accruing 30 or more cumulative hours (or 20 or more cumulative hours for an associate degree program) or completing a 4th Academic Term. First-year and transfer students in the first matriculated semester are not subject to Academic Probation.
5. **Academic Dismissal** - The status of Academic Dismissal is applied to a student with:
 - a. more than 30 credit hours (or more than 20 credit hours for an associate degree program) or after completion of the 4th Academic Term; and
 - b. the status of Academic Probation in the most recent completed semester; and
 - c. a cumulative GPA equal to or below the Dismissal GPA (See Appendix 1: Dismissal GPA by Total Institutional GPA Hours + Total Transfer Earned Hours).
6. **Academic Recovery** - A student on Academic Dismissal status can apply to the applicable advising office for the status of Academic Recovery. The status of Academic Recovery is available, upon approved application, provided that the student:
 - a. is on Academic Dismissal status for the first time; and
 - b. has a cumulative GPA equal to or below the Dismissal GPA (See Appendix 1: Dismissal GPA by Total Institutional GPA Hours + Total Transfer Earned Hours); and
 - c. has a cumulative GPA that can be raised above the Dismissal GPA (See Appendix 1) within two calendar years or 150 total attempted credit hours, whichever comes first.
7. **Institutional GPA Hours** - include credit hours in all courses graded "A" through "F". Credit hours for repeated courses are calculated according to the policy on Repeating a Course (Undergraduate and Graduate) (Policy # 02.10.12).

Policy Statement

The university assesses academic standing and the statuses of Academic Warning, Academic Probation, Academic Dismissal and Academic Recovery based on academic performance following each Academic Term.

A student on Academic Warning or Academic Probation or a student who is granted Academic Recovery status must meet with an advisor to discuss his/her academic standing. An advisor will help in planning a schedule of courses to assist the student in achieving above the Dismissal GPA. A student on Academic Warning will be able to self-register after this meeting; a student on Academic Probation or Academic Recovery must be registered by his/her advisor.

If a student is on Academic Dismissal status for the first time, the student has two options:

1. *Apply for Reinstatement*

A student on Academic Dismissal status for the first time may apply for reinstatement not less than four years from the date of last enrollment at Temple University. At the time of application, all credit hours will be evaluated. Final determination of the acceptability of such credit hours is the responsibility of the applicable academic unit.

A student may also apply for Academic Forgiveness (Policy # 02.10.17) at this time.

2. *Reinstatement through Academic Recovery*

A student on Academic Dismissal status for the first time may apply for Academic Recovery status through their respective advising unit. Academic Recovery would be applicable the next immediate semester or summer term unless the student is granted a Leave of Absence pursuant to university

policy. Students granted Academic Recovery status will be required to meet with advisors, complete for a grade a minimum of six credit hours, and achieve a minimum semester GPA requirement.

During the student's first semester or summer session of Academic Recovery status, the student will not be in Academic Good Standing and therefore will be ineligible for aid of any kind, including without limitation federal loans or grants, tuition remission and scholarships.

Students who successfully complete the requirements of the first semester or summer session on Academic Recovery status will:

- a.) return to Academic Good Standing
- b.) be permitted to attend classes during the next summer session or semester.

Students may only continue on Academic Recovery if they meet the Target Semester GPA. (See Appendix 2.) The student must maintain a GPA at or above the Target Semester GPA in Appendix 2 for each semester or session they are on Academic Recovery. Students on Academic Recovery must register for a minimum of six (6) credit hours per term. Course overloads are not permitted while on Academic Recovery.

Students may not remain on Academic Recovery status for more than two calendar years² following their original dismissal or 150 attempted credits, whichever comes first.

A student on Academic Recovery who achieves above the Dismissal GPA (as determined by Appendix 1) will be removed from Academic Recovery status.

Students who do not meet requirements of their Academic Recovery status during any summer session or semester will be Academically Dismissed for a second time. Upon the second Academic Dismissal a student must wait and apply for reinstatement not less than four years from the date of the first Academic Dismissal in accordance with this policy. The student will also be eligible for Academic Forgiveness (Policy # 02.10.17).

In the event a student is removed from Academic Recovery status after achieving above the Dismissal GPA, but is subsequently Academically Dismissed for a second time, the student must wait and apply for reinstatement four years from the date of the second Academic Dismissal. The student will also be eligible for Academic Forgiveness.

1

Academic Standing is determined by calculating Total Earned Transfer Hours plus Total Institutional GPA Hours. For Academic Forgiveness Students calculation includes Forgiveness Institutional Earned Hours (grades A through C- preceded by an asterisk) + Total Institutional GPA Hours + Total Transfer Earned Hours. Not included in Total Institutional GPA Hours for all calculations: AU, CR, NC, HC, I, IC, IP, MG, M, NR, P, PI, R, S, W, WE, WF, WS. See your academic advisor for assistance.

2

A calendar year begins the date of dismissal and is equivalent to one fall, one spring, and two sequential summer sessions.

Notes

1. Dates of official enactment and amendments

Adopted by the President on June 12, 2003.

Amended by the President on September 7, 2006. Effective immediately.

Amended by the President on September 26, 2007. Effective immediately.

Amended by the President on August 1, 2011. Effective May 16, 2011 (Summer Session I). Beginning May 10, 2012 (End of Spring Semester 2012), students will be dismissed when they fail to complete English 0701, English 0802, IH 0851, IH 0852, and Math 0701 or other equivalent versions of these courses in the requisite number of times per Policy 02.10.12, Repeating a Course.

Amended by the President on May 18, 2012. Beginning end of Spring Semester 2012 and applying retroactively to end of Fall 2011 semester, admitted transfer students in first matriculated semester and who are registered for 18 or fewer credits and whose semester grade point average is less than 2.0 will be applied the status of warning.

Amended by the President on June 1, 2015, effective immediately. Students on Academic Dismissal status at the end of the 2012 spring semester are eligible to apply for Academic Recovery status, if necessary, or return to such other academic status as permitted by university policy. (For example, a student placed on Academic Dismissal for failure to complete English 0701, but who had a cumulative GPA above 2.0 would be eligible to return to Academic Good Standing.)

Students on Academic Dismissal status for the first time at the end of the 2012 spring semester may apply for Academic Recovery status through their respective advising unit for return to the university no later than the 2016 spring semester. The two calendar year limit for the Academic Recovery status for these students will apply from the date of their first registered term.

2. History

September 7, 2006 amended the provisions regarding eligibility for institutional financial aid and university housing.

September 26, 2007 amended the requirements for academic good standing and dismissal.

August 1, 2011 amended language describing the method by which dismissal is determined and the requirements for reinstatement.

May 18, 2012 amended the requirements for academic warning and probation for first-semester transfer students.

June 2015 amended the dismissal requirements for certain courses and created Academic Recovery status.

October 2021 defined Academic Term and clarified policy application to part-time students.

Supersedes

This policy supersedes all policies and procedures related to academic warning, dismissal and reinstatement for undergraduates, and specifically "Undergraduate Policy on Academic Warning, Probation, Dismissal and Reinstatement."

3. Cross References

Policy 02.10.12, Repeating a Course (Undergraduate and Graduate)

Policy 02.10.17, Academic Forgiveness (Undergraduate)

Policy 02.10.16, Leave of Absence (Undergraduate)

Appendix 1 Dismissal GPA by Total Institutional GPA Hours + Total Transfer Earned Hours

Total Institutional GPA Hours + Total Transfer Earned Hours	Dismissal GPA (equal to or less than)
1-30	No Dismissal
31	1.51
32	1.53
33	1.55
34	1.56
35	1.58
36	1.60
37	1.61
38	1.63
39	1.64
40	1.65
41	1.67
42	1.68
43	1.69
44	1.70
45	1.71
46	1.72
47	1.73
48	1.74
49	1.75
50	1.75
51	1.76
52	1.77
53	1.78
54	1.78
55	1.79
56	1.80
57	1.80
58	1.81
59	1.82
60	1.82
61	1.83
62	1.83
63	1.84
64	1.84
65	1.85
66	1.85
67	1.86
68	1.86
69	1.87
70	1.87
71	1.87
72	1.88

73	1.88
74	1.89
75	1.89
76	1.89
77	1.90
78	1.90
79	1.90
80	1.91
81	1.91
82	1.91
83	1.91
84	1.92
85	1.92
86	1.92
87	1.93
88	1.93
89	1.93
90	1.93
91	1.94
92	1.94
93	1.94
94	1.94
95	1.95
96	1.95
97	1.95
98	1.95
99	1.95
100	1.96
101	1.96
102	1.96
103	1.96
104	1.96
105	1.97
106	1.97
107	1.97
108	1.97
109	1.97
110	1.97
111	1.98
112	1.98
113	1.98
114	1.98
115	1.98
116	1.98
117	1.99
118	1.99
119	1.99

Appendix 2 - Target GPA Calculation

$$\frac{[(\text{Max recovery hours available} + \text{Current GPA hours}) * (\text{New Dismissal GPA} + 0.01)] - [\text{Current GPA hours} * \text{Current GPA}]}{\text{Max recovery hours available}}$$

Where:

1. Max recovery hours available is the lesser of: hours remaining to the 150 attempted hours ceiling OR 68 (which represents 4 major semesters at 17 hours per semester)
2. Current GPA hours is the cumulative GPA hours after the most recent semester completed
3. New Dismissal GPA is the projected Dismissal GPA threshold at the end of the Academic Recovery period, when the 2-year period and/or available hours to the 150 attempted credit ceiling have been exhausted
4. Current GPA is the cumulative GPA after the most recent semester completed.

Assessment of Student Learning

Temple University is committed to providing superior educational opportunities to its students. To help us maintain quality academic offerings, the University and its programs regularly examine the effectiveness of the curricula, teaching, services, and programs the University provides. *As Temple University sees appropriate, it may retain representative examples or copies of student work.* This might include papers, exams, creative works, or portfolios developed and submitted in courses or to satisfy the requirements for degree program(s).

In addition to regularly collecting and reviewing student work, Temple University may summarize the results of this review, and use the information to improve programs and enhance student learning. Some of this assessment may also be necessary for Temple University or its programs to demonstrate it meets the standards of external review or accrediting bodies.

Typically, results will be reported in a general, summary format and students' names will not appear on the collected examples. Cohorts may be tracked for specific educational purposes, but the expectation is that assessment will be anonymous. Identifiers will only be used when there is a compelling reason and educational value.

Questions about the assessment of student learning at Temple University may be directed to the Office of Institutional Research and Assessment, 215-204-8277 or assessment@temple.edu.

Attendance

Enrollment in a course presupposes intention to attend regularly. Attendance requirements should be announced by the instructor at the beginning of the course. The student who is absent for any reason is responsible for work missed. If a pattern of excessive absences develops, the instructor may report this fact to the student's advisor through the department in which the student is enrolled.

The student should understand that excessive absences may, at the option of the instructor, jeopardize the grade and/or continuance in the course. Although attendance is basically a matter between the student and the instructor, either may request the counsel of the advisor or the Office of the Dean in special cases.

Students should consult the policies and regulations of their own school or college for any further specifications of attendance policy.

Audit

There may be circumstances under which a student will wish to audit a course, i.e., participate in the class without earning academic credit, credit hours, or grades.

Written permission of the instructor and of the school/college dean (or designee) is required on the Special Registration Approval Form. Full tuition is charged, and standard payment procedures apply.

Change of registration from credit to audit, or from audit to credit, must be processed prior to the add/drop deadline for the respective part of term in which the course is scheduled. Course credits in audit status will not count in the following:

- Calculation of full-time, part-time, or half-time enrollment status.
- Eligibility for financial aid.
- Eligibility for loan deferment.
- Full-time status for international students to satisfy visa requirements.
- Full-time status for student-athletes to satisfy eligibility requirements.
- Military and/or veteran education benefits.
- Credits attempted.

Audited courses will be transcribed with a grade designation of 'AU'.

Continuing Degree Seeking Students

Continuing degree seeking students are those who have applied, been accepted, and enrolled in a degree program of the university during the semester for which they were admitted.

Completion of course credits before becoming a continuing degree seeking student does not assure the acceptance of those credits into the program of study.

Course Numbering System

Course Numbering Rules and Conventions

All courses have full four-digit numbers. The first digit of a course identifies its level.

- Courses numbered A000 - U000 are reserved for transferred elective and generic credits.
- Courses numbered 0700 - 0999 are reserved for preparatory courses, General Education courses and Honors General Education courses.
- Courses numbered 1000 - 1999 are appropriate for undergraduate students in their first year of study.

Courses numbered 2000 - 5999 are considered "upper level" for undergraduates.

- Courses numbered 2000 - 2999 are appropriate for undergraduate students in their second year of study.
- Courses numbered 3000 - 3999 are appropriate for undergraduate students in their third year of study.
- Courses numbered 4000 - 4999 are appropriate for undergraduate students in their fourth year of study.
- Courses numbered 5000 - 5999 are primarily for graduate students, but undergraduate students in their third or fourth year may enroll with permission of their instructors and the dean's designee.
- Courses numbered 8000 - 9999 are for graduate students.

Other Classifications and Definitions

Undergraduate Courses

- **0700 - 0799 Preparatory Courses:** Courses numbered from 0700-0799 are appropriate for undergraduate, first-year math and writing courses. Students' math and writing placement assessment results determine these course-level selections.
- **0800 - 0899 General Education Courses:** Courses numbered from 0800-0899 are appropriate for any undergraduate General Education course requirements.
- **0900 - 0999 General Education Honors Courses:** Courses numbered 0900-0999 are appropriate for any undergraduate General Education Honors course requirements.
- **xxx0 Special Topics:** Regularly-scheduled courses (not individualized instruction) offered with variable content, and repeatable for credit.
- **x9xx Honors Courses:** Undergraduate Honors courses will be identified by a 9 as the second digit of the course number and will have "Honors" as the first word of the title. The 9 in the second position will not be used by any non-Honors undergraduate course. General Education Honors courses are designated 09xx.
- **xx81 Cooperative Assignment:** Increasingly complex, experiential learning with supervision external to the university. Usually these courses include learning experiences over more than one semester - as part of a defined program.
- **xx82 Independent Study:** Explorative study or research initiated by an undergraduate student with faculty sponsorship and an approved Independent Study contract.
- **xx83 Directed Reading/Study:** Mentored reading/study between a faculty member and an undergraduate student.
- **xx84 Performance:** Concert performance, juried art exhibition or other performance taken as a requirement for the degree.
- **xx85 Internship/Externship:** Pre-professional clinical or experiential traineeships contracted by the student's department, including experiences with a clinical, research, or other special concentration in a specific area. Students must have faculty sponsorship and an approved Internship/Externship contract.
- **xx86 Internship/Externship:** Reserved for a continuation of an internship/externship experience, following xx85.
- **xx87 Practicum:** Programs that are traineeships contracted by the student's department to meet the educational, geographic, and specific interests of the student. Settings generally have on-site clinical supervision.
- **xx88 Student Teaching:** Practical experiences in student teaching designed to support and lead to teacher certification.
- **xx89 Field Study:** On-site, observational study or data collection and analyses which deepen practical knowledge in the discipline. The purpose of the Field Study is to integrate and apply academic theories to on-site experiences.
- **xx91 Directed Research:** Mentored research between a faculty mentor and an undergraduate student.
- **xx92 Undefined**
- **xx93 Undefined**

- **xx94 Undefined**
- **xx95 Undefined**
- **xx96 Writing-Intensive Course:** Courses fulfilling the requirement of the General Education Program that each undergraduate major designates at least two courses as "writing-intensive." The designated courses shall require students to edit and rewrite papers to achieve a high level of clarity and cogency, use a variety of methods to find appropriate materials to support written work and to make proper attribution of those sources.
- **xx97 Writing-Intensive Course**
- **xx98 Writing-Intensive Course**
- **xx99 Undergraduate Thesis:** Sustained research, performance or artistic project resulting in a substantial, finished written report or other product in a format appropriate to the project. Assumes faculty sponsorship and mentorship.

Graduate Courses

- **xxx0 Special Topics:** Regularly-scheduled courses (not individualized instruction) offered with variable content, and repeatable for credit.
- **5x81 and 9x81 Co-operative Assignment:** An experiential learning experience with supervision external to Temple University.
- **5x82 and 9x82 Independent Study:** Explorative study or research initiated by a graduate student with faculty sponsorship and an approved Independent Study contract.
- **5x83 and 9x83 Directed Reading/Study:** Mentored reading/study between a faculty member and a graduate student.
- **5x84 and 9x84 Performance:** Concert performance, juried art exhibition, or other performance taken as a requirement for the degree.
- **5x85 and 9x85 Internship/Externship:** Professional clinical or experiential traineeships.
- **5x86 and 9x86 Internship/Externship:** Reserved for continuation of Internship/Externship experiences numbered 5x85 and 9x85.
- **5x87 and 9x87 Practicum:** Programs that are traineeships contracted by the student's department to meet the educational, geographic and specific interests of the student. Settings generally have on-site clinical supervision.
- **5x88 and 9x88 Practicum:** Reserved for continuation of practicum experiences 5x87 and 9x87.
- **5x89 and 9x89 Field Study:** On-site observational study or data collection/analyses in the transition from the academic to the professional environment. The purpose of Field Study is to integrate and apply academic theories to the professional arena.
- **5999 Research Experience**
- **9991 Directed Research:** Mentored research between a faculty mentor and a graduate student.
- **9992 Master/Doctoral Leveling Exam(s):** Competency examinations that must be satisfied prior to sitting for the master's or doctoral preliminary/candidacy exam.
- **9993 Master Comprehensive Exams**
- **9994 Doctoral Preliminary/Candidacy Exam**
- **9995 Thesis/project Credits: Master of Fine Arts**
- **9996 Thesis Credits: Masters**
- **9997 Reserved for future use**
- **9998 Doctoral Proposal/Candidacy**
- **9999 Dissertation Credits**

For more specific policies, consult individual schools, colleges, or programs.

Courses Inapplicable to Graduation

Semester hours earned in some courses are excluded from the total minimum semester hours or earned credit hours required for graduation from some schools and colleges. While policies vary among schools and colleges, courses inapplicable to graduation requirements generally are ELECT, Mathematics 0015 (formerly Mathematics 0001), Russell Conwell Center courses, and lower-level Military Science (ROTC) courses.

For specific information, see Policies and Regulations: Courses Inapplicable to Graduation in each school and college's section in this *Bulletin*, or consult academic advisors.

Courses Over Ten Years Old

In admitting transfer or returning students, the university will, when possible, allow credit for courses taken ten or more years prior to the date of admission or re-enrollment.

However, academic units may choose not to accept courses regardless of age for credit in the major. Courses of a technical nature or courses in a particularly dynamic field may not be accepted for credit.

Final determination of the acceptability of such courses is the responsibility of academic units in the schools and colleges and generally occurs after the student has matriculated or been re-enrolled.

Credit for Prior Learning

For information on credit for prior learning, refer to the Transfer Students (p. 27) section of this *Bulletin*.

Credit Hours

Scope of Policy & Rationale

This policy (Policy # 02.10.19) applies to all credit-bearing academic programs and courses within the university.

Definitions

The semester credit hour is the basic unit of academic credit granted by Temple University. One semester credit is equivalent to one hour (50 minutes) of faculty instruction time per week for 15 weeks, which includes one week for exams; and a minimum of two hours of out of class student work each week per credit hour. An equivalent amount of work is required for other academic activities such as laboratory work, internships, practica, studio work, or other academic work leading to the award of credit hours.

Note: Temple University follows a semester system with the fall and spring semesters consisting of approximately 16 weeks, which includes one week for exams and one week per semester for a fall and spring break. Summer semesters vary in length and adhere to this policy.

Policy Statement

Temple University's credit hour policy is consistent with guidelines set by the Pennsylvania Department of Education for determining the amount and level of credit awarded for courses, regardless of instructional method or mode of delivery. These guidelines are in compliance with policies set forth by both the US Department of Education and the Middle States Commission on Higher Education.

1. Determination of amount and level of credit

The faculty is responsible for the curriculum. Credit values are determined at the department level based on course goals, learning outcomes, instructional needs and faculty expertise. Once a course is approved it is included in the University course catalog. It is then the responsibility of the school/college to verify that it is scheduled for the minimum number of minutes.

2. Credit hours by instructional method

Lecture and seminar: Courses with multiple students that meet to engage students in various forms of group instruction. A typical 3 hour course will meet 2100 minutes over 14 weeks (excluding the exam period and scheduled breaks).

Lecture Hours Per Required Credit:

Credits awarded	Minimum contact time per week for 14 weeks	Minimum instructional time
1	50 contact minutes	700 contact minutes
2	100 contact minutes	1400 contact minutes
3	150 contact minutes	2100 contact minutes
4	200 contact minutes	2800 contact minutes

Laboratory and studio: Courses with a focus on experimental learning where in the student performs substantive work in a laboratory or studio setting. The minimum contact time per credit is twice that of a lecture (2:1 ratio).

Laboratory/Studio Hours Per Required Credit:

Credits awarded	Lab studio minimum instruction time per week for 14 weeks	Minimum instructional time
1	100 contact minutes	1400 contact minutes
2	200 contact minutes	2800 contact minutes
3	300 contact minutes	4200 contact minutes
4	400 contact minutes	5600 contact minutes

Independent study: Courses offered as directed studies with approval and supervision of faculty member. Student(s) meet periodically as agreed upon during the duration of the course. Semester hour credit awarded must be comparable in scope, content, academic rigor and student study time as courses offered in lecture format.

Internships, Practicum/clinical/field experience, Externships: Courses developed for independent learning or experience involving self-directed and often off-site learning. These courses are taught on a minimum 2:1 ratio (see laboratory / studio chart above).

Accelerated Courses: Courses offered in terms of length less than a traditional 15 week semester. These courses offer the same semester credit hours as traditional semester-length classes. Within the shortened time frame, accelerated courses must meet the minimum contact hour requirements of the lecture format.

Online: Courses offered entirely online without regard to face-to-face meetings. Students are expected to be academically engaged with comparable learning outcomes of a standard lecture course with alternate delivery methods. Contact time is satisfied through several means which can include but is not limited to the following: a) regular instruction or interaction with a faculty member once a week for each week the course runs;

b) academic engagement through interactive tutorials, group discussions moderated by faculty, virtual study/group projects, engaging with class peers and computer tutorials graded and reviewed by faculty. Departments must document through scheduling of classes or syllabi that they are meeting the minimum credit hour requirement for the credit awarded.

Hybrid: Courses offered in a blended format with one or more required face-to-face class sessions and with one or more required online sessions. Departments must document through scheduling of classes or syllabi that they are meeting the minimum credit hour requirement for the credit awarded.

3. Courses evaluated for transfer from colleges and universities with different credit systems

Courses evaluated for transfer from colleges and universities with different credit systems (quarter hours, units) are converted to semester hours (i.e., 2 quarter hour credits are equivalent to 1.5 semester hour credits; 3 quarter hour credits are equivalent to 2.0 semester hour credits; 4 quarter hour credits are equivalent to 2.5 semester hour credits).

4. Review

The Banner Student Competency Center, in consultation with the appropriate administrative offices including the Office of the Registrar and the Office of Digital Education, regularly audits scheduled course offerings to ensure compliance with credit hour requirements through its processes for scheduling each semester, including compliance with the university's scheduling matrix. This review is conducted across all schools, disciplines, course levels and modes of instruction.

Notes

1. **Dates of official enactment and amendments**

Adopted by the President on February 16, 2015.

2. **History**

Supersedes previous guidelines and protocols in the *Undergraduate Bulletin* for students.

3. **Cross References**

Procedures related to this policy can be found in the Academic Policies section of the Undergraduate Bulletin.

Credit/No Credit Courses

Eligible students may want to take a course in an area in which they are not proficient or about which they are curious, while not risking their grade point average. Such students, with certain provisions, may be graded using the Credit/No Credit (CR/NC) grading option. Students will then receive one of three grades:

CR = Credit, equivalent to C- or above

CD = Credit with D, equivalent to D-, D, D+

NC = No Credit, equivalent to F.

Students may select the CR/NC grading option or return to the traditional grading option prior to the add/drop deadline for the Part of Term in which the course is scheduled (as published on the Academic Calendar) with the authorization of their advisor and/or dean's designee.

Eligibility is limited to:

- undergraduate matriculated students
- those in academic good standing.

Courses are restricted to:

- any non-General Education course
- one CR/NC course per semester
- maximum of four CR/NC courses toward the degree (not including any courses graded with CR/NC in Spring term 2020).

Students need to consider the following when selecting the CR/NC grading option:

- No grade points are assigned to the CR, CD, or NC grade, so they have no impact on the calculation of the grade point average.
- Semester hours earned are counted toward the total required for graduation.
- CR/CD/NC grading options are not included in calculating cumulative credits for determining academic actions specified in the Academic Standing policy # 02.10.11.
- CR/CD/NC grading options do count as an attempt as defined in the Repeating a Course policy # 02.10.12.

Note:

1. CR/NC grading option may not be an appropriate option for required courses in the major due to minimum grade requirements.
2. Transfer students who retake a course at Temple for which they have already received transfer credit and earned a "NC" in the Temple course, can use the transfer course to satisfy a requirement according to the School/College transfer rules.
3. If a "CD" or "NC" grade is earned in a course, this course will not satisfy prerequisite requirements that require at least a C- grade.

Dean's List

Dean's List eligibility is determined by the semester grade point average (GPA) corresponding to cut-off points that will yield the top 16% of GPAs based on the five previous fall and spring semesters for each school or college. Students must have 12 graded credits (A to F grades) in order to be eligible for dean's list for the fall or the spring semesters.

Students who begin in the fall as part-time (i.e., registered for fewer than 12 credits) and continue as part-time in the spring will be eligible for dean's list in the spring if they accumulate at least 12 graded credits (A to F grades) over the fall and spring semesters and meet the GPA criteria listed on the chart for the school or college. If a student is enrolled part-time in the fall but full-time in the spring, eligibility for dean's list will be based on spring semester grades.

For fall 2023 and spring 2024, the cut-offs for dean's list eligibility are:

College	GPA Cut-off
Boyer College of Music & Dance	3.97
College of Education & Human Development	4.00
College of Engineering	3.78
College of Liberal Arts	3.94
College of Public Health	3.93
College of Science & Technology	3.89
Fox School of Business & Management	3.78
Klein College of Media & Communication	3.94
School of Social Work	3.97
School of Sport, Tourism & Hospitality Management	3.84
School of Theater, Film & Media Arts	3.95
Tyler School of Art & Architecture	3.94
University College	3.86
University Studies	3.80

Declaration of Major and/or Concentration

Students admitted to Temple for fall 2002 and after must be enrolled as a major in a degree-granting program in a school or college by the time they have completed 60 credits, including any credits transferred from another institution.

Students admitted to Temple with 60 or more transfer credits will be matriculated directly into a degree-granting program, rather than as "undeclared" in a school or college or the Division of University Studies.

Students declare a major either by completing their school's or college's declaration of major process (see specific school or college section in this *Bulletin* or the policy on Transfer between Schools/Colleges within the University (p. 1864)). Individual schools and colleges may require students to declare a major earlier than 60 credits. Students should consult the policies of their own school/college for any additional guidelines regarding declaration of major.

The catalog year is important in reviewing requirements in the current or past University Bulletins or in the Degree Audit Reporting System (DARS). The catalog year dictates the program requirements for both a major and a concentration. When students declare or change their major, they follow the program requirements established in the current catalog year (which displays as a Fall term of the academic year). This may or may not be the same year as when they were first admitted to the University:

Semester Major is Declared	Catalog Year of Major
Current Fall Semester	Current Fall Semester
Subsequent Spring Semester	Current Fall Semester
Summer Session I	Current Fall Semester
Summer Session II	Current or Subsequent Fall Semester

Effective Fall 2021, when students declare a required or optional concentration in a term after declaring their major, the catalog term and requirements associated with the concentration will match the catalog year of the major if the concentration was active during that catalog year.

However, if a student declares a required or an optional concentration that was not in existence when the major was declared, the student's record will update as follows:

- The catalog term for the major and the concentration will reflect the current catalog year.
- The student will have to follow the major and the concentration requirements established in the updated catalog year.

Disciplinary Action

The Office of Student Conduct and Community Standards is responsible for administering the Student Conduct Code. Violations of the university's Conduct Code, including among other things, stealing, cheating, disorderly conduct, plagiarism, and illegal possession/use of alcohol and other drugs, may result in a student being brought before one of the Student Conduct Boards, as outlined in the Student Conduct Code. Student Conduct and Community Standards facilitates the student conduct process striving to create a campus environment conducive to learning. The process is designed to help students realize their role in maintaining campus civility through educational programming and sanctioning as well as through the participants on the student conduct boards.

The Student Conduct Code can be found online at the Temple University's Policies web site as policy # 03.70.12.

Double Major Across Colleges

A student who meets the major requirements of two departments may declare, and have recorded on his or her transcript, a double major. Students who graduate with a double major across two colleges are required to complete all university requirements (General Education) and the requirements of both majors (including two Writing Intensive courses for each major), but only one set of college graduation requirements. The student must obtain prior approval from both schools or colleges. One department must be declared the primary department for the purpose of registration and college graduation requirements. (Students considering a double major across colleges should ask academic advisors in both colleges about college policies related to choosing the primary department.)

Dropping or Withdrawing from Courses

Discontinuation of Registration: Dropping or Withdrawing from Courses

(Policy # 02.10.14)

Scope of Policy & Rationale

This policy defines how undergraduate and graduate students may discontinue registration in a course or courses using a "Drop" or "Withdrawal."

Dropping or withdrawing from one or more courses may impact eligibility for financial aid, including work study, loans, grants, scholarships and third-party payments, as well as visa eligibility in current and future semesters. Dropping or withdrawing may also impact student status in programs that require continuous enrollment.

Policy Statement

Drop refers to an action taken by a student during the "drop and add period" to remove a course from their schedule without incurring a financial penalty or notation on the transcript. This transaction can be performed by the student using the self-service method or with the assistance of an advisor. Drop and add deadlines vary by course and term duration and are posted on the academic calendar by the Office of the University Registrar.¹ When dropping a course, a student should be aware of the following:

- **Financial Responsibility:** Students may be eligible for a tuition refund. (See Undergraduate and Graduate Bulletin for more information.) When, however, the university is required to return grant or loan funds to the federal government on behalf of the student, the student may be financially responsible to Temple University for the returned funds.
- **Participation and Attendance:** Once a student drops a course, the student is no longer enrolled and is no longer permitted to participate in or attend the course.
- **Transcript:** Dropped courses are not recorded on the transcript.
- **Academic Dishonesty:** If a student has been informed that academic misconduct is suspected, the student may not drop the course during the investigation and adjudication process or if a failing grade for the course is given as a sanction. Any drop during this time may be reversed and the course registration reinstated. If the student is found to be not responsible, the student may drop the course provided that the allegation of misconduct predates the deadline for the requested action. This policy may be superseded in exceptional circumstances. To make this assessment, the Office of Student Conduct and Community Standards will confer with the appropriate offices to determine if the drop is warranted. See Student Conduct Code, policy #03.70.12.

Withdraw refers to an action taken by a student to discontinue enrollment in a course once the drop and add period has ended. This transaction can be performed by the student using the self-service method or with the assistance of an advisor. Withdrawal deadlines vary by course and term duration and are posted on the academic calendar by the Office of the University Registrar.¹ When withdrawing from the course, a student should be aware of the following:

- **Financial Responsibility:** The student remains financially responsible for the tuition charges for the course.
- **Participation and Attendance:** The student is no longer enrolled and is no longer permitted to participate in or attend the course. The student's withdrawal date is the last date that the student participated in any academic activity related to the course.
- **Transcript:** The course is recorded on the transcript with the notation of "W".
- **Course attempt:** The course will be included in the course attempt count under Temple's policy on Repeating a Course, policy #02.10.12.
- **Incomplete:** Students pursuing an Incomplete are not eligible for course withdrawal. See also Temple's Incomplete Coursework Policy, policy #02.10.13.
- **Academic Dishonesty:** If a student has been informed that academic misconduct is suspected, the student may not withdraw from the course during the investigation and adjudication process or if a failing grade for the course is given as a sanction. Any withdrawal during this time may be reversed and the course registration reinstated. If the student is found to be not responsible, the student may withdraw from the course provided that the allegation of misconduct predates the deadline for the requested action. This policy may be superseded in exceptional circumstances. To make this assessment, the Office of Student Conduct and Community Standards will confer with the appropriate offices to determine if the withdrawal is warranted. See Student Conduct Code, policy #03.70.12.

Excused Withdrawal refers to an approved petition to withdraw from a full semester of classes prior to the last day of class in the term in which the course is taken due to extenuating circumstances beyond the student's control that prohibit continued enrollment throughout the term.

- Extenuating Circumstances are limited to the following:
 - a. Incapacitating medical conditions
 - b. Family emergencies
 - c. Other catastrophic circumstances
- Students may file a Petition for Excused Withdrawal within one (1) year from the end date of the term in which the student experienced documented extenuating circumstances beyond their control that prohibited continued enrollment for the term in all courses.
- In rare circumstances, a student may receive a partial excused withdrawal from individual courses when the documented extenuating circumstances specifically prohibited continued enrollment in only those courses.

When seeking an excused withdrawal from all courses for the term in progress or a prior term, the student must:

1. Establish the extenuating circumstances;
 2. Provide documentation supporting the extenuating circumstance (for example, a medical provider's statement for medical conditions); if seeking a partial excused withdrawal, the student must provide documentation establishing extenuating circumstances that specifically prohibited enrollment in only those courses;
 3. Show evidence of discontinued enrollment, participation in, and attendance at academically related activities (online and/or in-person) in the course(s) prior to the last published class meeting of the term;
 4. Not have taken any final exams or submitted any assignments during the final exam period;
 5. Not have passing grades (D- or higher) or Incomplete grade notations for the term in question; and
 6. Not have an open academic dishonesty student conduct case. (See Student Conduct Code, policy #03.70.12.)
- **Financial Responsibility:** A student seeking an excused withdrawal for the entire term may be eligible for a pro-rated refund in accordance with the refund schedule published by the Office of the Bursar. If the university is required to return financial aid funds on the student's behalf, the student will owe those funds to the University.
 - **Participation and Attendance:** The calculation for the return of federal student financial aid funds is based upon the student's verified attendance or participation in academically related activities. This includes attendance, course participation, learning management system activities, exam or assignment completion, and other course related activities. The student's withdrawal date is the last date that the student participated in any academic activity related to the course.
 - **Transcript:** The course is recorded on the transcript with a "WE" grade notation.
 - **Course attempt:** "WE" grades are not included in the course repeat count under Temple's policy on Repeating a Course, policy #02.10.12.
 - **Incomplete:** Students pursuing an Incomplete are not eligible for excused withdrawal. See also Temple's Incomplete Coursework Policy, #02.10.13.
 - **Appeals:** Students may appeal a denied petition by providing documents supporting their appeal to the Office of the University Registrar. Appeals must be filed within 30 calendar days after initial decision.

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Courses scheduled in the Short Duration Course part of term vary in their start and end meeting dates. Students may drop such a course prior to the first scheduled meet date or withdraw between the first scheduled meeting date and three days prior to the last scheduled meeting date, as long as a final grade is not reported.

Notes

1. Dates of official enactment and amendments

Adopted by the president on February 4, 2003. First effective on September 1, 2003.

Amended by the president on February 8, 2011. Effective May 16, 2011 (Summer Session I).

Amended by the president on August 15, 2014. Effective August 25, 2014 (Fall 2014 semester).

Amended by the president on August 15, 2018. Effective August 27, 2018 (Fall 2018 semester).

Amended by the president in May 2019. Effective Summer 2019 semester.

Amended by the president in March 2021. Effective Fall 2021.

2. History

The February 8, 2011 amendment addressed the change in #02.10.12, Repeating a Course.

The July 2014 amendment added a one-year limit to petition the University Registrar for an Excused Withdrawal.

The August 2018 Amendment added a provision that a student may not drop a course once a student has been informed that academic misconduct is suspected.

The March 2021 amendment changed the title of the policy from Withdrawal from Classes (Undergraduate and Graduate) to Discontinuing Registration: Dropping or Withdrawing from Classes (Undergraduate and Graduate), added and defined the term "Drop", and clarified language for the Excused Withdrawal.

Supersedes

This policy supersedes all previous policies and procedures concerning drop or withdrawal from classes with effective dates prior to March 15, 2021.

3. Cross References

- Policy #02.10.12, Repeating a Course (Undergraduate)
- Policy #02.10.13, Incomplete Coursework Policy
- Policy #03.70.02, Student Conduct Code
- Tuition and Refunds
- Undergraduate (p. 21) and Graduate Bulletin

Family Educational Rights & Privacy Act (FERPA)

For information on the Family Educational Rights and Privacy Act (FERPA) of 1974, see the FERPA (p. 45) text in the Student Rights section of this *Bulletin*.

Final Examinations

University policies require that final examinations for sections scheduled in the Full Term Courses part of term for fall or spring be given only during the university-approved final examination days as noted on the academic calendar posted by the Office of the University Registrar. Final examinations for courses of shorter duration (e.g., 7-week Courses) should be given before the conclusion of the part of term.

For Full Term Courses day classes on Main campus, a detailed examination schedule, by day and time, is available on the Office of the University Registrar's web site; this information is also circulated at the beginning of each semester.

Final examinations for evening classes on Main and Ambler campuses, Temple Center City classes, and Health Sciences Center classes are given at the regular class time during final examination week.

For both day and evening Ambler classes, a detailed examination schedule, by day and time, is circulated to the faculty and may be posted to the Ambler web site.

Some courses have common final examination times. (Consult the registrar's final examination schedule for a complete list.)

Instructors are encouraged to make individual accommodations with students who have more than two (2) examinations scheduled on one day.

Grade Change

No change of final grade for a completed course will be made without the approval of the instructor's dean or designee. Deans will consider the grade change upon receipt of the instructor's written explanation. No grade will be changed after the baccalaureate degree is awarded.

Grade Point Average (GPA)

Each student's transcript indicates the credit hours completed and passed, grade points, and grade point average (GPA).

The GPA also appears on a student's DARS reports or the academic advising document as well as the Self-Service Banner (SSB) and official transcripts.

A student's GPA may be useful in assessing academic progress, in determining eligibility for specific programs, or in determining eligibility for Honors or other awards.

No change in a student's GPA is made after the baccalaureate degree is awarded.

To Compute Semester Grade Point Average:

1. Multiply the value of the grade (see Grades and Grading (p. 1853)) by the course's number of credit hours to get quality points (QPs).
2. Add the total quality points.
3. Divide total number of quality points by the total number of GPA hours completed in courses that yield quality points.

Note: Not included in GPA computations: AU, CR, CD, NC, HC, I, IC, IP, MG, NR, P, PI, R, S, W, WE, WF, WS. Also see policy on Repeating a Course (p. 1860).

To Compute Cumulative Grade Point Average:

Divide the total number of quality points by the total number of GPA hours completed in courses that yield quality points.

Note: Not included in GPA computations: I, IC, IP, MG, NR, CR, CD, NC, R, P, AU, W, WE, WS, PI. Also see policy on Repeating a Course (p. 1860).

For credit transferred from other institutions, no grade points are allowed. See also Repeating a Course (p. 1860).

Grades and Grading

Semester Grades

The work of all undergraduate students is graded and reported at the end of each semester. Students may access their semester grades on Self Service Banner within 48 hours of the end of the examination period for that semester.

Three systems are in use for grading and reporting students' work:

Letter Grades and Points

A	4.00 Excellent
A-	3.67
B+	3.33
B	3.00 Good
B-	2.67
C+	2.33
C	2.00 Fair
C-	1.67
D+	1.33
D	1.00
D-	.67 Passing
F	.00 Failed

Note: Although D- is a passing grade, a minimum grade of C- is required in General Education courses and, in many programs, courses required by the major.

Credit/No Credit

CR	Equivalent to A, A-, B+, B, B-, C+, C, or C-
CD	Equivalent to D+, D or D-
NC	Equivalent to F

Note: In the Credit/No Credit system, no grade points are assigned, but a limited number of credits in courses in which students earn the CR or CD¹ designation counts toward the total credit hours completed. See Credit/No Credit Courses (p. 1848).

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The CD grade was implemented in Spring 2020.

Other Transcript Notations

AU	Audit
I	Incomplete
IC	Incomplete in a Credit/No Credit course
IP	Incomplete pass/fail course
M	Military Leave of Absence
MG	Grade temporarily missing
NR	Grade not reported
P	Passed grade
PI	Permanent incomplete
W	Withdrawal from course
WE	Withdrawal with approved excuse
WS	Withdrawal from the semester (historical)

For more information, see the policies on Audit (p. 1844), Credit/No Credit Courses (p. 1848), Incomplete Coursework (p. 1856), and Dropping or Withdrawing from Courses (p. 1850) in this *Bulletin*.

Graduation Procedures

As students approach the end of their undergraduate careers, they must make sure that they are eligible for, and can participate in, graduation ceremonies.

In their junior year, or when 80 semester hours have been completed, students should begin an ongoing graduation check with their academic advisors in order to determine that they are meeting the university, college, departmental, and program requirements for their degree and for graduation.

Fly in 4 students must have a graduation review in their school or college prior to the start of their senior year to remain eligible for the program.

Early in the semester in which graduation requirements will be completed, students complete an Application for Graduation.

Questions about this process or graduation status should be directed to the student's Advising Office or Academic Dean's Office.

Application deadlines are:

- February 1 for Spring graduation
- June 1 for Summer graduation
- October 1 for Fall graduation

Note: *Earlier deadlines may be in effect in some academic units.*

The Application for Graduation must be properly completed, particularly the areas relating to the resolution of incompletes and diploma instructions. Information concerning commencement activities (such as time, place, invitations, rental of academic regalia) is available to students once they have submitted their completed Application for Graduation. Students will not have their diploma or transcript released until all university tuition and fees have been paid.

Petition for Non-graduates to Attend University and/or School/College Graduation Ceremonies: Students within 2 courses or 8 credits of meeting their degree requirements may petition to attend University Commencement and/or School/College graduation ceremonies. Completed petition forms (available on TUportal) must be submitted directly to the student's Advising Office by the graduation application deadline.

Grievances

See Grievances (p. 47) in the Student Rights section of the *Bulletin*.

Honors for Academic Achievement

Temple University recognizes academic achievement in several ways.

Dean's Lists

Dean's Lists record the names of those full-time students in each school or college who completed a semester's work with 12 graded credits and meet the GPA criteria as outlined in the Dean's List (p. 1849) policy. In addition, part-time students who have accumulated at least 12 graded credits across an academic year (fall and spring semesters) are eligible to be considered for Dean's List recognition in the spring.

For further information, see the Dean's List (p. 1849) policy in the Academic Policies section of the *Bulletin*, check under your school or college listing in the *Bulletin*, or contact your school or college Advising Center.

Graduation (Latin) Honors

Latin Honors are awarded based on estimation procedures that are intended to yield 2% Summa, 5% Magna, and 9% Cum Laude awards for baccalaureate recipients from each Temple school and college. Graduates who have completed at least 60 credits at Temple are eligible for the appropriate honor if their cumulative grade point average (CGPA) is equal to or greater than the cut-off value established for the honor. (Students returning to the university following Academic Forgiveness may qualify for Latin Honors if they have a minimum of 60 earned hours in addition to the approved earned hours allowed at the time of Academic Forgiveness.)

Awards for August 2023, January 2024 and May 2024 graduates are based on five-year average cutoff scores computed from 2018 to 2023.

The cut-off values for calculating eligibility for Summa, Magna, and Cum Laude Honors for August 2023, January 2024 and May 2024 graduates are listed in the table below along with the schedule for updating the cut-off values.

Latin Honors Minimum Cumulative Grade Point Averages by College (for August 2023, January 2024 and May 2024 Graduations)

College	Summa Cum Laude GPA (lower threshold)	Magna Cum Laude GPA (lower threshold)	Cum Laude GPA (lower threshold)
Boyer College of Music & Dance	3.98	3.96	3.93
College of Education & Human Development	3.99	3.97	3.94
College of Engineering	3.95	3.88	3.80
College of Liberal Arts	3.98	3.95	3.91
College of Public Health	3.97	3.92	3.87
College of Science & Technology	3.97	3.93	3.88
Fox School of Business & Management	3.93	3.86	3.79
Lew Klein College of Media & Communication	3.97	3.93	3.88
School of Social Work	3.98	3.95	3.92
School of Sport, Tourism & Hospitality Management	3.94	3.86	3.81
School of Theater, Film & Media Arts	3.98	3.96	3.93
Tyler School of Art & Architecture	3.98	3.95	3.91

Award and Update Schedule for Latin Honors

For Honors awarded in:	Cut-offs based on CGPAs for Graduates:
August 2023, January 2024, May 2024	August 2018 through May 2023 (calculated July 2023)
August 2024, January 2025, May 2025	August 2019 through May 2024 (calculated July 2024)
August 2025, January 2026, May 2026	August 2020 through May 2025 (calculated July 2025)

August 2026, January 2027, May 2027
 August 2027, January 2028, May 2028

August 2021 through May 2026 (calculated July 2026)
 August 2022 through May 2027 (calculated July 2027)

Incomplete Coursework

NOTE: This policy is currently under review. If a new version is approved during the 2023-2024 academic year, the policy document link below and this Bulletin page will be updated accordingly.

An instructor will file an "I" (Incomplete) only if the student has completed the majority of the work of the course at a passing level, and only for reasons beyond the student's control.

An instructor may file an "I" when a student has not completed the work of a course by the time grades must be submitted, but has completed the majority of the work at a passing level and has a written agreement with the instructor and the department regarding completion of the work, including the nature of the work to be completed, the means by which the final grade will be determined, and the date by which the work must be completed. The completion date may be no later than one year from the end of the semester in which the student took the course. The agreement shall also specify a default grade to be received if the work is not completed by the date indicated. One copy of the agreement shall be retained by the instructor, one shall be given to the student, and one shall be filed with the department office or, in colleges or schools without departments, the Dean's office.

When reporting the grade of "I" for a student, the instructor shall also file a report of the default grade in the electronic grading system. If the instructor does not change the grade of "I", pursuant to the agreement with the student, by the end of one year from the time the grade of "I" was awarded, the appropriate University official shall automatically change the grade of "I" to the reported default grade, and the default grade shall appear on the transcript and be used for all other grading purposes as the actual grade received in the course.

Faculty advisors and staff advisors have the option of not permitting a student to register for an "overload" if the student is carrying one or more active incomplete courses, or for a "full load" if the student is carrying two or more active incompletes.

For more information, read policy # 02.10.13.

Leave of Absence

Policy #02.10.16

Scope of Policy & Rationale

A Leave of Absence (LOA) for up to a total of two consecutive semesters of non-enrollment (summer sessions excluded) is permitted one time during a student's degree program.

An LOA allows active baccalaureate or associate degree students to interrupt enrollment without having to apply for re-enrollment and without changing the requirements of their degree program. A degree candidate who does not register for consecutive semesters and is not on a LOA must apply for re-enrollment.

Policy Statement

An LOA may be filed through October 1 for fall terms and March 1 for spring terms. Any extension of the LOA from one semester to two semesters must be filed by October 1 for fall term extensions and March 1 for spring term extension. Students currently registered for or withdrawn from courses are not eligible for an LOA or LOA extension for that term. Under special circumstances, exceptions to the duration of a LOA or additional LOA's may be considered, but, if granted, some of the privileges listed below may not be preserved.

Courses taken at other colleges or universities during the LOA period, or taken between two consecutive LOA semesters, may not be used for transfer credit at Temple University.

New students who wish to defer enrolling in their first semester are not eligible for an LOA and, instead, must contact the Office of Undergraduate Admissions to discuss their options.

International students who seek an LOA must obtain additional advising from the Office of International Services.

Fly in 4 participants must meet with an advisor to discuss potential effects of the LOA on time to degree and their eligibility for the Fly in 4 program.

Students on an LOA retain their admitted student status and remain eligible for the following privileges:

- Retention of the academic program requirements in place at the time of their matriculation at Temple, including the requirements in place at the time they declared their major, concentration, minor and/or certificate.
- Temple e-mail access.

- Priority registration for the semester of return.
- Library access and borrowing privileges.

Students on a LOA are not considered registered students and, as non-enrolled students, are **not** eligible for:

- Financial aid disbursements, including work study funds, during the semesters while on LOA. Students on a LOA are reported to lenders and loan servicing agencies as "not enrolled" and should contact lenders for information on possible repayment requirements.
- Student employment.
- Enrollment verification. Students on LOA are reported as "not enrolled," which could affect eligibility for health insurance and other programs and services.
- Use of Student Health Services and Tuttleman Counseling during the semesters while on LOA or any other university services not listed in the previous section.
- On-Campus Housing.
- Programs requiring continuous enrollment or academic progress.

Students may return earlier than the original return date by registering for courses, keeping in mind applicable deadlines for registration, financial aid, etc.

Students who do not return from their LOA on the expected return date, or those students who ceased enrollment without an LOA, must submit an application for re-enrollment to their schools/colleges in order to continue their coursework. These students must follow the most current requirements for their schools/colleges, majors, and the university.

Students taking an approved medical withdrawal in a current semester are not considered to be on LOA. Medical or excused withdrawals are governed by Policy #02.10.14, Discontinuation of Registration: Dropping or Withdrawing from Courses (Undergraduate and Graduate).

To access the Leave of Absence form, students can sign in to the TUportal and under TUapplications, select Enrollment Services, and then select Services. Select Leave of Absence from the Services menu and complete the necessary information.

Notes

1. Dates of official enactment and amendments

Adopted by the president on February 8, 2011. Effective August 30, 2011 (Fall 2011).

Amended by the president in November 2019; effective Spring 2020.

Amended by the president in December 2021; effective Spring 2022.

2. History

Policy created to in absence of standard procedures at the undergraduate level.

The November 2019 amendment adds eligibility of part-time students for LOA, clarifies language, and aligns policy with practice.

The December 2021 amendment extends the deadline to file an LOA or an extension of an LOA.

Supersedes

This policy supersedes all prior school/college policies and procedures related to undergraduate Leave of Absence.

3. Cross References

Policy #02.10.14, Discontinuation of Registration: Dropping or Withdrawing from Courses (Undergraduate and Graduate)

Policy #02.10.11, Academic Standing (Undergraduate)

Policy #02.10.17, Academic Forgiveness (Undergraduate)

Policy #03.70.11, Temple University Policy for Students Called to Military Service Obligation (all Students)

Procedures related to this policy can be found in the Academic Policies section of the Undergraduate Bulletin.

Non-Degree Seeking Students

Non-degree seeking students are those who have not been admitted formally to a degree program. For information and academic advising for non-degree seeking students, see Programs with Academic Credit (p. 37) in the Special Programs section of the *Bulletin* and the Office of Continuing Studies web site. Effective Summer 2018, non-degree seeking students with previously earned undergraduate degrees at Temple will have their coursework transcribed under the NU (NonDegree Continuing Undergrad) level.

Enrolling as a non-degree undergraduate student:

For an applicant who intends to enroll in undergraduate courses as a non-degree student:

- The applicants must have earned a high school diploma or a G.E.D. certificate.
- An applicant who attended another college or university must have earned at least a 2.00 GPA and provide a transcript (official or unofficial) of their previous academic work.

- An applicant with a previously earned undergraduate degree at Temple who intends to enroll as a non-degree student must contact the Office of Continuing Studies to begin the enrollment process. Grades earned in non-degree coursework will not count toward or against the previously earned undergraduate cumulative grade point average at Temple University.
- An applicant must satisfy all prerequisite requirements and other restrictions placed on courses by the academic departments offering the courses.

Non-degree seeking undergraduate students who wish to pursue a degree are required to apply for admission to a degree program before they complete 30 (attempted or earned) credits. Non-degree seeking undergraduate students accepted into an undergraduate degree program may count their non-degree credits toward their residency requirements. Credits earned at Temple as a non-degree student cannot be counted towards eligibility for the 45+ GenEd.

For all non-degree seeking students:

Non-degree seeking students are not eligible for priority registration. Likewise, many academic policies do not apply to non-degree students. Additionally, non-degree seeking undergraduate students are not permitted to take more than 11 credits during their semester. More information can be found in the Office of Continuing Studies.

Permission to Complete a Course at another Institution after Matriculation

The policies and procedures stated below are defined in the Transfer Credit Policy for Matriculated Undergraduate Students (Policy # 02.10.18).

Scope of Policy & Rationale

Undergraduate, degree-seeking students are expected to take their courses at Temple in order to fulfill their Temple degree requirements. This policy defines the criteria and circumstances in which transfer credit may be accepted toward the requirements of Temple undergraduate degrees.

Policy Statement

Undergraduate students at Temple may receive credit for courses taken elsewhere if they receive permission in advance, pursuant to this policy.

This policy applies only to transfer credits for courses taken by degree-seeking students after matriculation.

Information on transfer policies and the admissions process is available at

<http://bulletin.temple.edu/undergraduate/about-temple-university/general-admissions-information/transfer-students/#transfercredit>

Undergraduate, degree-seeking students may receive credit for two types of transfer courses:

1. **Courses from a Temple-approved study abroad program sponsored by another** university or other formal program of study offered jointly by Temple and another **institution**

Successful completion of an approved, external study abroad program or formal joint program will be awarded transfer credit.

To ensure that students appropriately transfer credit for their study abroad, they must complete the approval process prior to registering for the course(s), including any required evaluation of the external program courses: <https://studyabroad.temple.edu/course-approval>.

2. **Courses from another institution**

Students in good academic standing who meet all student and course eligibility criteria may, in accordance with this policy, transfer credit **for two (2) summer or special session courses (up to a maximum of 8 credits) taken elsewhere toward their Temple baccalaureate or associates degrees. For certain courses, higher credit totals (up to a maximum of 10 credits in transfer) may be approved, but the equivalent Temple courses must not exceed 8 credits in total.**

In order to be approved for transfer credit by their school or college advising unit:

- The student must submit a petition to take courses elsewhere.
- The student must have a cumulative grade point average of 2.00 or above at the time of the request.
- All courses taken elsewhere must have established course equivalencies at Temple.
- After completion of the course, the student must still meet the Academic Residency Requirements policy (p. 1838) (all undergraduate degree candidates must complete 45 of the last 60 credit hours of the degree as matriculated students at Temple).
- The course cannot be a duplicate of a course for which the student has already received credit.
- The course cannot be a duplicate of a course previously attempted (earned a letter grade, CR, CD, NC, W or I) at Temple. If a student takes a Temple course after receiving transfer credits for the same course, the transfer credits will be removed.

- The course cannot be used to satisfy General Education course requirements.
- Students must have satisfied all prerequisites for courses they are seeking to take elsewhere. Failure to satisfy prerequisites may result in credits not transferring.
- Completion of the course with a grade of C or better is required for transfer credit to be awarded.
- The course must comply with all Temple school, college, or department program requirements.
- Transfer credit is not awarded for internships, practice, field studies or independent studies not supervised by Temple University faculty. Students should check with their school or college academic advisor for exceptions.

Approval Process

To ensure transfer of credit for courses taken at another institution, students should complete the approval process prior to registering for courses elsewhere. Students access the "Petition to Take Courses Elsewhere" form by logging into the TUportal, selecting the Student Tools tab, and under the University Forms channel, selecting Permission to Take Courses Elsewhere. This form will be routed to the student's advising unit for approval.

Additional information can be found by contacting your advising unit or at <https://undergradstudies.temple.edu/advising/forms>.

Students should also note the following:

- Credits can only be added after an official transcript is received by Temple University's Admissions Office.
- Some Temple schools and colleges have additional limitations on the kind or number of transfer credits accepted. For example, some majors have additional residency requirements in addition to the Academic Residency Requirements policy.
- To be eligible for Latin Honors at graduation, a student must complete a minimum of 60 semester hours of the program while matriculated at Temple.

Notes

1. Dates of official enactment and amendments

Adopted by the President on December 12, 2012. First effective January 1, 2013.

Amended by the President on December 5, 2014. Effective August 1, 2015.

Amended by the Provost/President on May 2, 2022. Effective May 1, 2022.

2. History

Prior to 2014, guidelines and protocols were published in the *Undergraduate Bulletin* for students seeking permission to take courses elsewhere, entitled "Permission to Take Courses at Another Institution after Matriculation".

Guidelines and protocols were published in the 2014-2015 *Undergraduate Bulletin* under Transfer Credit Policy. <https://bulletin.temple.edu/archives/2014-2015/undergraduate/about-temple-university/general-admissions-information/transfer-students/#transfercredit>

The February 2015 amendment changes the allowable grade required for credits taken elsewhere from C- to C. "C-" transfer grades, regardless of when they were earned, will not be accepted for students admitted for fall 2015 and after. For currently enrolled students, C- grades earned after summer session II 2015 will not be accepted.

The May 2022 amendment removed the restriction on students admitted to Temple with 60 or more transfer credits, removed the restriction on courses available through the Temple distance learning program, and clarified language.

Supersedes

This policy supersedes all previous policies and procedures concerning transfer credit for matriculated undergraduate students with effective dates prior to May 2022.

3. Cross References

Academic Residency Requirements (p. 1838) policy published in the *Undergraduate Bulletin*

Policy #02.10.16, Leave of Absence

Placement Assessments

Success at Temple University does not follow one particular pathway, as our students are varied and diverse in their backgrounds. For incoming students, it is important that they start on the right track, beginning with determining the appropriate courses for their first semester. Placement Assessments are offered in English, math, and foreign languages and are taken after students have been admitted to the University and have paid the tuition deposit. Assessments may be taken up through the first week of the student's incoming term.

Some incoming students will be automatically placed into math and English courses using their student data, including but not limited to: high school grade point average, SAT/ACT scores, and/or AP scores (English only) while others will need to take placement assessments. **Only scores from SAT/ACT tests taken up to two years prior to the start of the incoming student's first semester are considered for automatic course placement.**

Students who applied test-optional but have submitted SAT or ACT scores are automatically placed with the option to take an assessment. Some students will be required to take an assessment. For example, if Temple does not have enough information to automatically place a student, the student will need to take an assessment. Students in some majors may also be required to take placement assessments.

For English, students with an autoplacement are eligible to take an assessment. Students who are required to take an assessment for English or choose to take an assessment for math or a foreign language may also take an assessment (one additional attempt for English and foreign language and two additional attempts for math). **If a student has more than one course placement, the student may use the highest course into which they place.**

Course placements into English 0701/0711, French 1001, German 1001, Italian 1001, Spanish 1001, Math 0701/0702, GQ, Math 1015, and Statistics 1001 do not expire. **Placement Assessment results into all other courses are valid for two years from the term for which they were taken.** Current students who need to take or retake a placement assessment should contact their advisor.

Students who take a course in the math sequence (Math 0702, 1021, 1022, 1041/1941) are bound by their performance in the course for future course eligibility (rather than performance on previous or future placement assessments).

For more information about Placement Assessments, go to the Institutional Research and Assessment web site at <https://ira.temple.edu/placement-assessments>.

Plagiarism and Academic Cheating

See Academic Honesty (p. 42) in the Student Responsibilities section of the *Bulletin*.

Prerequisites and Co-requisites

Prerequisites

A course **prerequisite** is any requirement an academic department identifies as essential for a student to complete before taking a course. The university is responsible for publishing prerequisite requirements. All prerequisites, whether they apply to an individual course or to all courses in a department, should be stated in the electronic version of the university's Course Catalog. They should also be stated in the course syllabus.

Course prerequisites consist of one or more of the following: completion of placement or proficiency tests or other assessments; achievement of specified scores on placement or proficiency tests or other assessments; possession of specified knowledge or skills; approval after audition; approval of portfolio; declaration of major or admission to restricted program; completion of specific courses, sets of courses, and/or kinds of courses; completion of a specified number of semester hours or achievement of a specified class level; achievement of specified grades in prerequisite courses or sets of courses; achievement of a specified GPA; approval of an application or proposal; permission of the instructor, department, or other person or office; satisfaction of other specified requirements.

Students are responsible for knowing and completing all published prerequisite requirements for a course before taking that course. The university has the obligation to inform students of prerequisite requirements. It has the right to cancel a student's registration in a course if the student has not satisfied the published prerequisite requirements for that course.

Co-requisites

A course **co-requisite** is a requirement that must be completed at the same time as the course for which it is required. The university is responsible for publishing co-requisite requirements. All co-requisites, whether they apply to an individual course or to all courses in a department, should be stated in the electronic version of the university's Course Catalog. They should also be stated in the course syllabus. Co-requisites may be specified courses, permissions, admission to programs, and/or other requirements. Students are responsible for knowing and completing all published co-requisite requirements for a course. The university has the obligation to inform students of co-requisite requirements and the right to cancel a student's registration in a course if the student has not arranged to satisfy the co-requisite requirements for that course.

Probation and Dismissal

See Academic Standing (Undergraduate) (p. 1840).

Registration

See the Registration (p. 39) section of the *Bulletin*.

Repeating a Course

Repeating a Course (Undergraduate and Graduate)

(Policy # 02.10.12)

Scope of Policy & Rationale

This policy allows undergraduate and graduate students to repeat a course to earn a higher grade. Except for courses designated to be taken multiple times ("repeatable"), such as an independent study or research course, credit will be granted only once for each course and only the highest grade earned for that course will be used to calculate a student's grade point average. In order to ensure student progress towards graduation, the number of attempts will be limited to a maximum of three (3).

Definitions

An attempt is defined as registration in a class resulting in a grade or a withdrawal (indicated by the W grade notation). Standard grading options include: A, A-, B+, B, B-, C+, C, C-, D+, D, D-, F. (See Bulletin for other grading options.)

Policy Statement

All students are permitted to attempt a course a second time. A student seeking a third attempt must obtain the approval of the student's home school or college. Approval of a third attempt is not guaranteed. Except as permitted by this policy, no student may attempt a course more than three times. This policy does not apply to English 0701, English 0802, IH 0851, IH 0852, or Math 0701 and their course equivalents, which may be taken more than three times.

If a course was taken previously with a standard grading option, it cannot be repeated with a credit/no credit or pass/fail grading option. If a course was taken previously with a credit/no credit or pass/fail grading option, it may be repeated with a standard grading option if a standard grade is needed to satisfy prerequisite requirements. Each instance of the course with the credit/no credit grading option or pass/fail grading option counts as a course attempt as defined above. Students are responsible for choosing the appropriate grading option for repeated attempt(s) of the course.

All occurrences of a course appear on the transcript with the grade received, but only the highest grade received in a course is used in calculating a student's grade point average.

Since credits are awarded only once for a course, repeating a course can affect athletic eligibility, academic standing and financial aid status.

Once matriculated at Temple University, a student cannot receive transfer credit for a course that they have already attempted at Temple (See Policy # 02.10.18, Transfer Credit Policy for Matriculated Undergraduate Students.)

All course withdrawals, with the exception of "withdrawal with approved excuse," are included in the course attempt count (see Policy # 02.10.14, Discontinuation of Registration: Dropping or Withdrawing from Courses).

Courses with the grade notation of AU (audit) are not considered an attempt as defined by this policy.

Second attempt: Undergraduate students are strongly encouraged to meet with an academic advisor prior to registration for a second attempt to discuss academic and financial implications.

Graduate students seeking a second attempt are required to meet with the graduate coordinator in their school/college.

Third attempt: Students must obtain the approval of the dean or the dean's designee of their home school or college for a third attempt and can only be registered for a third attempt by their home school or college.

Students unable to successfully complete courses in the allotted number of attempts necessary to satisfy major or school/college requirements or prerequisites must meet with their academic advisors to discuss alternate graduation plans. Undergraduate students who have exhausted course attempts for course(s) required for their major will be required to change majors and, depending on the course, may also be required to change their school or college. Graduate students who have exhausted course attempts for course(s) required for their major will be unable to graduate from their program.

Following the awarding of a degree, no changes in the grade average point average will be made through the repeat process.

Notes

1. Dates of official enactment and amendments

Adopted by the president on November 13, 2002. First effective on September 1, 2003.

Amended by the president on February 8, 2011. Effective May 2011 (for Summer Session I) - GPA calculation with highest grade. Effective March 2012 (for Summer I, II and Fall 2012 registrations) - maximum number of course repeats including their course equivalencies.

Amended by the president in June 2015. Effective as of May 2015. Effective as of Spring 2019.

Amended by the president in November 2019. Effective as of Spring 2020.

2. History

The February 8, 2011 amendment added the limit on the number of repeats.

The May 18, 2012 amendment clarified that students who have exhausted allowable course attempts in courses required for the major or school/college degree requirements may be required to change majors or transfer internally within Temple to another school or college.

The June 2015 amendment eliminated the university dismissal for failure to successfully complete certain courses.

The November 2019 amendment includes updates and clarification of current policy.

Supersedes

This policy supersedes all other policies and procedures related to repeating a course.

3. Cross References

Policy # 02.10.11, Academic Standing (Undergraduate)

Policy # 02.10.14, Discontinuation of Registration: Dropping or Withdrawing from Courses (Undergraduate and Graduate)

Policy # 02.10.17, Academic Forgiveness (Undergraduate)

Policy # 02.10.18, Transfer Credit Policy for Matriculated Undergraduate Students

Reverse Transfer

Students who are one or two courses short of completing the requirements for an Associate degree approved for GenEd/Core-to-GenEd from a partner community college are eligible for Conditional GenEd (limited reverse transfer). Students will need approval from their community college to complete their Associate degree using one or two courses from their first semester roster at Temple University.

For more information, see the Conditional GenEd/Core-To-GenEd (Protocols) form at <https://undergradstudies.temple.edu/advising/forms>.

Satisfactory Academic Progress

Satisfactory academic progress is determined by a number of factors, including a student's semester grade point average, cumulative grade point average, and the number of semester hours attempted and completed. A student's progress is reviewed at the end of each semester by the student's Temple school or college and may affect the student's ability to continue in a program or major and eligibility for financial aid. Students should be advised that course withdrawals and incompletes will affect their progress and thus their academic standing. See Academic Standing (p. 1840) and Grade Point Average (p. 1853).

Second Degrees

A second baccalaureate degree may not be the only option available to enhance academic credentials, to prepare for a change in career, or to obtain a professional certification. In some cases, all that may be needed are additional undergraduate courses. Professional schools and organizations, Temple's Career Center, Graduate School, Continuing Studies, Pre-Professional Health Advising, as well as the advising units of the schools and colleges may have more information on alternative paths. In other cases, the student may be encouraged to begin graduate-level academic work in the new discipline.

If a second bachelor's degree is sought, this is possible in some, but not all, schools and colleges of Temple University when the second degree is in a sufficiently different field of study. Students should consult with the Office of the Dean of the school or college offering the desired degree.

A student may earn a second baccalaureate degree provided the requirements for the second degree include a minimum of 45 new semester hours beyond those required for the first degree. Students approved for the second baccalaureate degree will be waived from University requirements (i.e., General Education (GenEd) requirements). Note: This GenEd waiver does not apply to students with an international baccalaureate degree. Students must provide documentation of equivalency to a domestic bachelor's degree, and upon review, may be approved to complete the 45+ GenEd curriculum. Students with a Temple baccalaureate degree will be waived from the 45 new semester hour requirement, since they will already have met the residency requirements. However, in all cases, students must fulfill all non-waived requirements for the second degree.

Students at the undergraduate level may not be enrolled in concurrent undergraduate degree programs, but may regularly have second majors (p. 1850), or might consider an approved accelerated or joint program with a Temple graduate or professional school, if they meet admissions qualifications. For more information, refer to the list of accelerated programs (p. 1792) and requirements.

Simultaneous Enrollment

Matriculated students at Temple University may not be enrolled simultaneously at another institution in the same semester or summer session and receive permission to transfer those credits to Temple. Certain exceptions are allowed, if permission is given in advance, for courses unavailable at Temple but needed to complete degree requirements for the next scheduled awarding of degrees; or for specialized study where alternatives are not available at Temple; or as part of established programs. Students taking a Temple online course during the summer and living well beyond commuting distance of a Temple campus may also be approved for simultaneous enrollment at another institution. See Permission to Complete a Course at Another Institution after Matriculation (p. 1858).

Student Conduct Code

The Temple University Student Conduct Code (policy # 03.70.12) can be viewed in full at University Policies & Bylaws. Further information is available at the Office of the Dean of Students and the Office of Student Conduct and Community Standards. Other information about the Student Conduct Code may also be found in the Student Responsibilities (p. 42) section of this *Bulletin*.

Students Called to Military Service Obligation

Scope of Policy & Rationale

Temple University is governed by federal and state law on the duties to and the rights of students who are members of the US Armed Forces, including the National Guard and the reserves, when they are temporarily unable to attend classes or have to suspend their studies due to service requirements. This policy (policy # 03.70.11) is intended to conform fully to pertinent federal and state laws.

Policy Statement

I. Withdrawal from classes for a military service obligation:

1. Students called to a military service obligation should contact the Office of the University Registrar, Second Floor, Conwell Hall. Each such student has the following options:
 - a. If prior to official drop/add deadline, drop classes and receive a full refund.
 - b. If after the official drop/add deadline, drop from classes and receive a full refund. A grade notation of "M" will be applied to each course to indicate drop due to military obligation.
 - c. Receive an "Incomplete (I)" if eligible according to university policy. If the student chooses this option, then if the student is not able to fulfill the course completion requirement(s), regardless of the circumstances, the student cannot later choose option (a) above. (See Incomplete Coursework, Policy 02.10.13).
2. Students should provide advance written notice with supporting documents of their military service obligation to the Office of the University Registrar.
 - a. If unable to provide advance notice of the military service due to military necessity, students will submit at the time of reenrollment an attestation that the student performed service in the uniformed services that necessitated the student's absence from the institution.

II. Reenrollment for service members after a military service obligation:

1. Students will be promptly reenrolled with the same academic status¹ when last in attendance or last admitted, subject to paragraphs 2 and 3 below. Temple will make reasonable efforts² at no extra cost to the students to help them become prepared or to enable the student to complete their program. However, if it is determined after reasonable efforts, that any such student is unable to complete their program or that there are no reasonable efforts that can be taken to prepare the student to resume the program at the point where he or she left off or to enable the student to complete the program, Temple is not required to readmit the student on his or her return.
2. Students will be promptly reenrolled if the cumulative length of the absence and of all previous absences by reason of service in the uniformed services does not exceed five years. Students whose previous absences cumulatively exceed five years are subject to the established reenrollment policy and procedures.
3. Students who seek reenrollment will provide to Temple documentation to establish that the student has not exceeded the service limitation of total cumulative absence of five years.

III. Additional Services

Graduate students may have special problems resulting from a military service obligation, such as a maximum number of years permitted to complete a particular academic program. Graduate students who need an extension or adjustment to their programs due to military service obligations should contact the Graduate School, Fifth Floor, Carnell Hall.

Veterans' tuition benefits at Temple are administered by the Office of the University Registrar.

1

"Academic status" is defined by the Code of Federal Regulations, 34 CFR 668.18, et seq.

2

"Reasonable efforts" is defined by the Code of Federal Regulations, 34 CFR 668.18, et seq.

Notes

1. **Dates of official enactment and amendments:**

Amended by the President on September 20, 2001. First effective Fall 2001.
Amended by the President on May 2015. First effective December 3, 2014.

2. **History:**

Supersedes Presidential Policy Statement No. I-23, Temple University Policy for Students Called to Active Military Service.

Supersedes previous version designated as Presidential Policy 03.70.11, Temple University Policy for Students Called to Military Action.

The December 2014 amendment aligns Temple's policy with requirements of the Department of Defense Readmission policies and Department of Education requirements for returning Service members (ED 34 C.F.R. 668.8 and 668.18 respectively).

3. Cross References:

Presidential Policy Statement # 04.14.11, Employment & Reemployment Rights of Temple University Employees Who Serve on Active Military Duty.

Presidential Policy Statement # 02.10.16, Leave of Absence (Undergraduate).

Incomplete Coursework Policy # 02.10.13.

Study Abroad Approval Procedures for External Programs

To receive credit for courses taken on an external study abroad program, students are required to complete Temple's External Program Approval process, which includes seeking permission from Education Abroad, having any anticipated courses evaluated and approved by appropriate academic departments, and receiving academic approval from their Temple school/college academic advising office.

A list of approved External Programs can be found on the Education Abroad web site. Temple University strongly encourages students to consider these program options prior to exploring other possibilities. In addition to the suggested list, students also have the ability to enroll directly at any accredited foreign university or petition to participate in a program that is not on the approved list.

Students should discuss their study abroad plans with their academic advisor. Permission to study abroad is rescinded if the student is placed on academic warning or probation. As with all courses accepted in transfer, only a grade of C or higher is acceptable.

Transcripts

A student's academic history is contained in the official transcript, which is maintained by the Office of the University Registrar. Learn more about transcripts.

Transfer Between Schools/Colleges Within the University (Change of Program)

Transfer between academic units is not automatic. If students decide to earn their degrees in an academic unit other than the one in which they are matriculated, they must submit a Change of Program (may also be referred to as an Intra-University transfer or IUT).

To be eligible to complete a Change of Program (CoP), a student should be in academic good standing. Please consult the individual school or college policy in the *Bulletin* for specific school/college CoP requirements. In addition the Tyler School of Art and Architecture requires a portfolio and Esther Boyer College of Music and Dance requires an audition.

Students who are compelled to change their program after exhausting the number of permitted attempts for a required course under the Repeating a Course policy (p. 1860) may consult another school or college or the Division of University Studies, regardless of grade point average, academic standing, or the number of credits completed.

Students interested in changing programs should initiate the process via their TUportal. On TUportal, select the Student Tools tab. In the Registration Box, click on the Change of Program (Major) link to begin the CoP process. If you need additional information, contact the school/college advising office to which you would like to transfer.

Transfer Credit

See Admissions: Transfer Credit (p. 27).

Undergraduates Taking Graduate Level Courses

Undergraduate students can be approved to register for graduate level coursework. There are three distinct options. Students may take advantage of more than one option except for Options 1 and 3, which are mutually exclusive.

Option 1: To fulfill both undergraduate and graduate degree requirements:

- Students must be accepted into an approved +1 accelerated degree program.
- Students accepted into an approved +1 accelerated degree program must complete at least 6 credits and no more than 12 credits of graduate coursework.
- For more information on accelerated degree programs and eligibility, go to Accelerated Degree Programs (p. 1792) in the *Undergraduate Bulletin*.

Option 2: To fulfill undergraduate degree requirements:

- Students may take 5000-level graduate courses with the permission of the instructor and the dean's designee for undergraduate credit.
- Students who wish to take higher-level graduate courses (>5000-level) must have the permission of the instructor, the dean's designee for undergraduate credit, the Office of Undergraduate Studies, and the Graduate School.
- After receiving the required approvals, students must meet with their academic advisor for assistance with the registration process.
- The credits and grades appear on the undergraduate transcript and count toward the undergraduate grade point average (GPA) only. The courses (credits and grades) cannot be applied to satisfy any graduate degree requirements.

Option 3: To take in addition to undergraduate degree requirements for graduate credit only:

- Students not enrolled in an approved +1 accelerated degree program (Option 1) may take up to three courses totaling no more than 9 credits at the graduate level for graduate credit. No more than 6 credits of graduate coursework may be taken in any one academic term.
- To be eligible, students must be seniors who have an overall cumulative GPA of at least 3.0.
- The courses (credits and grades) cannot be applied to satisfy any undergraduate degree requirements. The credits and grades appear on the graduate transcript and count toward a graduate GPA only. The grade earned in each graduate course must be a B or better to count toward a Temple University graduate degree.
- If students are enrolled in fewer than 12 undergraduate credits, their financial aid may be impacted. For more information consult the Office of Student Financial Services.
- Students must complete the "Permission for Undergraduate Student to Register for Graduate Course(s) for Graduate Credit" form and obtain the required approvals. After receiving the required approvals, students must submit the form to the Graduate School (501 Carnell Hall) prior to the end of the add/drop period of the academic term in which the course(s) is being taken.
 - Go to Student tools on the Portal, Find University Forms; Filter by Graduate School and search for this form from the list.
- Permission to enroll in graduate courses under Option 3 does not constitute a commitment on the part of any department to accept students as graduate students in the future.

About Courses

Overview

This page serves as a resource for understanding the structure of the course descriptions contained within this Bulletin.

About the Course Descriptions

Course descriptions contain the following elements:

- **Subject Code:** A two-to-four letter code preceding the course number.
- **Course Number**
- **Title:** The name of the course
- **Credit Hours**
- **Description** (if one exists)
- **Registration Restrictions** (if any exist): A course may contain more than one type of registration restriction, such as college restrictions and cohort restrictions, which allows or prevents certain student populations from registering for the course. If more than one restriction type appears on a course, students must satisfy each type of restriction to register for the course. If more than one restriction appears within the same type, students only need to satisfy one within that type.
- **Co-requisites** (if any exist): Courses that must be taken in the same term as the course for which the student is attempting to register.
- **Course Attributes** (if any exist): Typically used to denote that a course fulfills a writing intensive (WI), honors (HO), or General Education (GA, GB, GW, etc.) requirement. *See the list of Course Attributes below.*
- **Repeatability** statement: Specifies if a course may be repeated for additional credits.
- **Prerequisites** (if any exist): Courses that must be successfully completed (by earning the specified minimum grade) prior to the term as the course for which the student is attempting to register unless prerequisites are followed by the phrase "may be taken concurrently." Courses listed as concurrent prerequisites may be taken in the same term as this course. In addition to courses, prerequisites may include test codes. *See Prerequisite and Test Codes below for further information.*

Course Attributes

Some courses contain one or more of the following attribute codes:

- ANON: Anonymous Grading (for Law School courses only)
- DI: Dissertation Full Time Status
- GA: General Education Arts course
- GB: General Education Human Behavior course
- GD: General Education Race & Diversity course
- GG: General Education Global/World Society course
- GQ: General Education Quantitative Literacy course
- GS: General Education Science & Technology course
- GU: General Education US Society course
- GW: General Education Analytical Reading & Writing course
- GY: General Education Intellectual Heritage I course
- GZ: General Education Intellectual Heritage II course
- HO: Honors course
- SE: Sustainable Environment course
- SF: Sustainability Focused course
- SI: Sustainability Inclusive course
- SP: Sustainable Economics & Politics course
- SS: Sustainable Social & Culture course
- WI: Writing Intensive course

Registration Restrictions

Courses may have one or more of the following types of registration restrictions:

- Department
- Field of Study (major, minor, certificate, concentration)

- Class (e.g., freshman, senior, etc.)
- Level (e.g., graduate, undergraduate, Law, Medicine, Postbaccalaureate, etc.)
- Degree (BA, MS, PhD, etc.)
- Program (specific program codes listed)
- Campus (Main, Japan, Ambler, etc.)
- College
- Student Attribute (CLER - Clearance for Education, DWS - Dissertation Writing Student, etc.)
- Cohort (UHONORS - University Honors, etc.)

Prerequisites

Prerequisites displayed in this Bulletin are presented in a more simplistic "plain text" format than what is found in Self-Service Banner (SSB) Browse Courses and Browse Classes, but the intent is the same. Watch for qualifying words such as "and" and "or" between prerequisites. For example, the prerequisites for MATH 1034 are:

Minimum grade of C (except where noted) in (MATH 1022, MATH 1039 (may be taken concurrently), 'Y' in MC6, 'Y' in MA04, 'Y' in MC6A, 'Y' in CRMA05, 'Y' in CRMA07, or 'Y' in MC6T) and MATH 1033 (C- or higher)

To look at the prerequisites in another way, think of them in a list view:

Minimum grade of C (except where noted) in
 (MATH 1022,
 MATH 1039 (may be taken concurrently),
 'Y' in MC6,
 'Y' in MA04,
 'Y' in MC6A,
 'Y' in CRMA05,
 'Y' in CRMA07,
 or 'Y' in MC6T)
 and MATH 1033 (C- or higher)

MATH 1034 requires the student to satisfy two prerequisites: one course or a test code listed within the parentheses **and** MATH 1033.

If the prerequisite statement includes the phrase "except where noted" after the specified minimum grade, this means that students must earn that minimum grade in all the course prerequisites except for any courses that list a different minimum grade in parentheses after them. In the above example, MATH 1033 is followed by (C- or higher). If students are taking MATH 1022 or MATH 1039 to satisfy the first prerequisite, they must earn a C or higher, but only a C- or higher is required to satisfy the second prerequisite, MATH 1033.

Students could also satisfy the first prerequisite for MATH 1034 by having one of the **test codes** (such as MC6, CRMA05, etc.), which they could have received by either a placement assessment or a course that was transferred from another institution. For example, if a prerequisite requires 'Y' in MC6, this means a student needs the corresponding description of MATH PLMT CRS 1041 listed in their Test Scores. Current students can find their personal test scores by navigating to Student Tools in TUportal, selecting "View Full Profile" and then clicking on "Prior Education and Testing" from the menu on the left. Placement assessments results, some transfer test scores, and any relevant test scores related to credit/no credit grades are listed by their description.

Test Codes and Their Meanings

The following is a comprehensive list of test codes that can be found within course prerequisites.

- ACC1: ACC1, C or above in ACCT 2101; meaning that student transferred in ACCT 2101 with a grade of C or higher.
- AR01: AR01, C- or above in ARCH 1001; meaning that student transferred in ARCH 1001 with a grade of C- or higher.
- AR11: AR11, C- or above in ARCH 1011; meaning that student transferred in ARCH 1011 with a grade of C- or higher.
- AR12: AR12, C- or above in ARCH 1012; meaning that student transferred in ARCH 1012 with a grade of C- or higher.
- AR21: AR21, C- or above in ARCH 2121; meaning that student transferred in ARCH 2121 with a grade of C- or higher.
- AR22: AR22, C- or above in ARCH 2122; meaning that student transferred in ARCH 2122 with a grade of C- or higher.
- AR23: AR23, C- or above in ARCH 2123; meaning that student transferred in ARCH 2123 with a grade of C- or higher.
- AR31: AR31, C- or above in ARCH 3152; meaning that student transferred in ARCH 3152 with a grade of C- or higher.
- AR32: AR32, C- or above in ARCH 3251; meaning that student transferred in ARCH 3251 with a grade of C- or higher.
- AR41: AR41, C- or above in ARCH 2141; meaning that student transferred in ARCH 2141 with a grade of C- or higher.
- AR42: AR42, C- or above in ARCH 2142; meaning that student transferred in ARCH 2142 with a grade of C- or higher.
- AR51: AR51, C- or above in ARCH 2151; meaning that student transferred in ARCH 2151 with a grade of C- or higher.

- BCP: Business Computer Pass; applied to students who pass the Fox business computer assessment.
- BIO3: BIO3, C or above in BIOL 1111; meaning that student transferred in BIOL 1111 or BIOL 1911 with a grade of C or higher.
- BIO4: BIO4, C or above in BIOL 2112; meaning that student transferred in BIOL 2112 or BIOL 2912 with a grade of C or higher.
- BIO5: BIO5, C or above in BIOL 2227; meaning that student transferred in BIOL 2227 with a grade of C or higher.
- BIO6: BIO6, C or above in BIOL 2296; meaning that student transferred in BIOL 2296 with a grade of C or higher.
- BIO7: BIO7, C or above in BIOL 3096; meaning that student transferred in BIOL 3096 with a grade of C or higher.
- BIO9: BIO9, C or above in BIOL 2001; meaning that student transferred in BIOL 2001 with a grade of C or higher.
- BIOW: BIOL 1111&2112 transfer waiver; meaning that student meets BIOL 1111 and BIOL 2112 transfer waiver.
- CHM1: CHM1, C or above in CHEM 1031; meaning that student transferred in CHEM 1031 or CHEM 1041 or CHEM 1951 with a grade of C or higher.
- CHM2: CHM2, C or above in CHEM 1032; meaning that student transferred in CHEM 1032 or CHEM 1042 or CHEM 1952 with a grade of C or higher.
- CHM4: CHM4, C or above in CHEM 1021; meaning that student transferred in CHEM 1021 with a grade of C or higher.
- CHM5: CHM5, C or above in CHEM 1023; meaning that student transferred in CHEM 1023 with a grade of C or higher.
- CISA: CISA, CIS 1051/1057 assessment; CISA, CIS 1051/CIS 1057 assessment (used as prerequisite for CIS 1058 only; test code is applied to students who pass the CIS1051/1057 assessment and therefore tested out of CIS 1051 and/or CIS 1057).
- CRAC01: ACCT2101 - CR Grade; used for students who opted for a CR/NC grade instead of letter grade during COVID pandemic; attached to courses where the prerequisite course minimum grade is C since CR does not equal C in Banner.
- CRAC02: ACCT2521 - CR Grade; used for students who opted for a CR/NC grade instead of letter grade during COVID pandemic; attached to courses where the prerequisite course minimum grade is C since CR does not equal C in Banner.
- CRAC03: ACCT2901 - CR Grade; used for students who opted for a CR/NC grade instead of letter grade during COVID pandemic; attached to courses where the prerequisite course minimum grade is C since CR does not equal C in Banner.
- CRAC04: ACCT3511 - CR Grade; used for students who opted for a CR/NC grade instead of letter grade during COVID pandemic; attached to courses where the prerequisite course minimum grade is C since CR does not equal C in Banner.
- CRAC05: ACCT3512 - CR Grade; used for students who opted for a CR/NC grade instead of letter grade during COVID pandemic; attached to courses where the prerequisite course minimum grade is C since CR does not equal C in Banner.
- CRAC06: ACCT3526 - CR Grade; used for students who opted for a CR/NC grade instead of letter grade during COVID pandemic; attached to courses where the prerequisite course minimum grade is C since CR does not equal C in Banner.
- CRAC07: ACCT3531 - CR Grade; used for students who opted for a CR/NC grade instead of letter grade during COVID pandemic; attached to courses where the prerequisite course minimum grade is C since CR does not equal C in Banner.
- CRAC08: ACCT3596 - CR Grade; used for students who opted for a CR/NC grade instead of letter grade during COVID pandemic; attached to courses where the prerequisite course minimum grade is C since CR does not equal C in Banner.
- CRAD01: ADV1001 - CR Grade; used for students who opted for a CR/NC grade instead of letter grade during COVID pandemic; attached to courses where the prerequisite course minimum grade is C since CR does not equal C in Banner.
- CRAD02: ADV1101 - CR Grade; used for students who opted for a CR/NC grade instead of letter grade during COVID pandemic; attached to courses where the prerequisite course minimum grade is C since CR does not equal C in Banner.
- CRAD03: ADV1102 - CR Grade; used for students who opted for a CR/NC grade instead of letter grade during COVID pandemic; attached to courses where the prerequisite course minimum grade is C since CR does not equal C in Banner.
- CRAD04: ADV1103 - CR Grade; used for students who opted for a CR/NC grade instead of letter grade during COVID pandemic; attached to courses where the prerequisite course minimum grade is C since CR does not equal C in Banner.
- CRAD05: ADV1196 - CR Grade; used for students who opted for a CR/NC grade instead of letter grade during COVID pandemic; attached to courses where the prerequisite course minimum grade is C since CR does not equal C in Banner.
- CRAD06: ADV2001 - CR Grade; used for students who opted for a CR/NC grade instead of letter grade during COVID pandemic; attached to courses where the prerequisite course minimum grade is C since CR does not equal C in Banner.
- CRAD07: ADV2111 - CR Grade; used for students who opted for a CR/NC grade instead of letter grade during COVID pandemic; attached to courses where the prerequisite course minimum grade is C since CR does not equal C in Banner.
- CRAD08: ADV2121 - CR Grade; used for students who opted for a CR/NC grade instead of letter grade during COVID pandemic; attached to courses where the prerequisite course minimum grade is C since CR does not equal C in Banner.
- CRAD09: ADV2131 - CR Grade; used for students who opted for a CR/NC grade instead of letter grade during COVID pandemic; attached to courses where the prerequisite course minimum grade is C since CR does not equal C in Banner.
- CRAD10: ADV2141 - CR Grade; used for students who opted for a CR/NC grade instead of letter grade during COVID pandemic; attached to courses where the prerequisite course minimum grade is C since CR does not equal C in Banner.
- CRAD11: ADV2151 - CR Grade; used for students who opted for a CR/NC grade instead of letter grade during COVID pandemic; attached to courses where the prerequisite course minimum grade is C since CR does not equal C in Banner.
- CRAD12: ADV3022 - CR Grade; used for students who opted for a CR/NC grade instead of letter grade during COVID pandemic; attached to courses where the prerequisite course minimum grade is C since CR does not equal C in Banner.

- CRVS04: VS2002 - CR Grade; used for students who opted for a CR/NC grade instead of letter grade during COVID pandemic; attached to courses where the prerequisite course minimum grade is C since CR does not equal C in Banner.
- CS04: CS04, C or above in CIS 1055; meaning that student transferred in CIS 1055 with a grade of C or higher.
- E812: E812, Registered English 0812; applied to students who are registered for ENG 0812.
- ENG1: ENG1, C or above in ENG 2821; meaning that student transferred in ENG 2821 with a grade of C or higher.
- ENGW: ENGR1101&1102 transfer waiver; meaning that student meets ENGR 1101 and ENGR 1102 transfer waiver.
- FIN3: FIN3, C or above in FIN 3503; meaning that student transferred in FIN 3503 with a grade of C or higher.
- HIM1: HIM1, C or above in HIM 1101; meaning that student transferred in HIM 1101 with a grade of C or higher.
- HIM2: HIM2, C or above in HIM 2203; meaning that student transferred in HIM 2203 with a grade of C or higher.
- HIM3: HIM3, C or above in HIM 2215; meaning that student transferred in HIM 2215 with a grade of C or higher.
- JRN1: JRN1, C or above in JRN 1111; meaning that student transferred in JRN 1111 with a grade of C or higher.
- KIN1: KIN1, C or above in KINS 1223; meaning that student transferred in KINS 1223 with a grade of C or higher.
- KIN2: KIN2, C or above in KINS 1224; meaning that student transferred in KINS 1224 with a grade of C or higher.
- KIN3: KIN3, C or above in KINS 1201; meaning that student transferred in KINS 1201 with a grade of C or higher.
- KIN4: KIN4, C or above in KINS 2204; meaning that student transferred in KINS 2204 with a grade of C or higher.
- LCFR: LANG COURSE PLMT - FRENCH; meaning that student places into the course indicated by their test score (e.g., B1002, C1002, C2001, etc.); the B#### test scores are considered "borderline"; EXMPT is used for transfer students.
- LCGE: LANG COURSE PLMT - GERMAN; meaning that student places into the course indicated by their test score (e.g., B1002, C1002, C2001, etc.); the B#### test scores are considered "borderline"; EXMPT is used for transfer students.
- LCGR: LANG COURSE PLMT - GREEK; meaning that student places into the course indicated by their test score (e.g., B1002, C1002, C2001, etc.); the B#### test scores are considered "borderline"; EXMPT is used for transfer students.
- LCIT: LANG COURSE PLMT - ITALIAN; meaning that student places into the course indicated by their test score (e.g., B1002, C1002, C2001, etc.); the B#### test scores are considered "borderline"; EXMPT is used for transfer students.
- LCJP: LANG COURSE PLMT - JAPAN; meaning that student places into the course indicated by their test score (e.g., B1002, C1002, C2001, etc.); the B#### test scores are considered "borderline"; EXMPT is used for transfer students.
- LCLA: LANG COURSE PLMT - LATIN; meaning that student places into the course indicated by their test score (e.g., B1002, C1002, C2001, etc.); the B#### test scores are considered "borderline"; EXMPT is used for transfer students.
- LCRU: LANG COURSE PLMT - RUSSIAN; meaning that student places into the course indicated by their test score (e.g., B1002, C1002, C2001, etc.); the B#### test scores are considered "borderline"; EXMPT is used for transfer students.
- LCSP: LANG COURSE PLMT - SPANISH; meaning that student places into the course indicated by their test score (e.g., B1002, C1002, C2001, etc.); the B#### test scores are considered "borderline"; EXMPT is used for transfer students.
- MA01: MA01, C or above in MATH 0701/2; meaning that student transferred in MATH 0701 to MATH 0702 with a grade of C or higher.
- MA02: MA02, C or above in MATH 1015; meaning that student transferred in MATH 1015 with a grade of C or higher.
- MA03: MA03, C or above in MATH 1021; meaning that student transferred in MATH 1021 with a grade of C or higher.
- MA04: MA04, C or above in MATH 1022; meaning that student transferred in MATH 1022 with a grade of C or higher.
- MA05: MA05, C or above in MATH 1031; meaning that student transferred in MATH 1031 with a grade of C or higher.
- MA06: MA06, C or above in MATH 1041; meaning that student transferred in MATH 1041 with a grade of C or higher.
- MA07: MA07, C or above in MATH 1042; meaning that student transferred in MATH 1042 with a grade of C or higher.
- MA08: MA08, C or above in MATH 2043; meaning that student transferred in MATH 2043 with a grade of C or higher.
- MA09: MA09, C or above in MATH 2101; meaning that student transferred in MATH 2101 with a grade of C or higher.
- MA10: MA10, C or above in MATH 2103; meaning that student transferred in MATH 2103 with a grade of C or higher.
- MA11: MA11, C or above in MATH 2196; meaning that student transferred in MATH 2196 with a grade of C or higher.
- MA12: MA12, C or above in MATH 3138; meaning that student transferred in MATH 3138 with a grade of C or higher.
- MATW: MATH 1041&1042 transfer waiver; meaning that student meets MATH 1041 and MATH 1042 transfer waiver.
- MC2: MATH PLMT CRS 701/702; meaning that student is placed into MATH 0701 or MATH 0702.
- MC2A: AUTO MATH PLMT CRS 701/702; meaning that student is auto-placed into MATH 0701 or MATH 0702.
- MC2D: ADM AUTO MATH PLMT CRS 701/702; meaning that student is auto-placed into MATH 0701 or MATH 0702 via admissions data.
- MC2T: TO AUTO MATH PLMT CRS 701/702; meaning that student is auto-placed into MATH 0701 or MATH 0702 via Temple Option.
- MC3: MATH PLMT GQ/1015/1021and1019; meaning that student is placed into any GQ course, MATH 1015, or MATH 1021 and MATH 1019.
- MC3A: AUTO MATH PLMT CRS GQ/1015; meaning that student is auto-placed into any GQ course, MATH 1015, or MATH 1021 and MATH 1019.
- MC3D: ADM AUTO MATH PLMT GQ/1015; meaning that student is auto-placed into any GQ course, MATH 1015, or MATH 1021 and MATH 1019 via admissions data for non-STEM majors.
- MC3O: TO AUTO MATH PLMT GQ/1015-ST; meaning that student is auto-placed into any GQ course, MATH 1015, or MATH 1021 and MATH 1019 via Temple Option for STEM majors.

- MC3S: AUTO MATH PLMT GQ/1015 - STEM; meaning that student is auto-placed into any GQ course, MATH 1015, or MATH 1021 and MATH 1019 for STEM majors.
- MC3T: TO AUTO MATH PLMT GQ/1015; meaning that student is auto-placed into any GQ course, MATH 1015, or MATH 1021 and MATH 1019 via Temple Option for non-STEM majors.
- MC4: MATH PLMT CRS 1021; meaning that student is placed into MATH 1021.
- MC5: MATH PLMT CRS 1022/1031; meaning that student is placed into MATH 1022 or MATH 1031.
- MC6: MATH PLMT CRS 1041; meaning that student is placed into MATH 1041.
- MC6A: AUTO MATH PLMT CRS 1041; meaning that student is auto-placed into MATH 1041.
- MC6T: TO AUTO MATH PLMT CRS 1041; meaning that student is auto-placed into MATH 1041 via Temple Option.
- MK01: MK01, C or above in MKTG 2101; meaning that student transferred in MKGT 2101 with a grade of C or higher.
- MP1: MATH PLMT SCORE PART 1; math placement test score for part 1.
- MP2: MATH PLMT SCORE PART 2; math placement test score for part 2.
- MP3: MATH PLMT SCORE PART 3; math placement test score for part 3.
- MTP: Music Theory Placement Test; places students into MUST 1711.
- PBH1: PBH1, C or above in PBHL 1101; meaning that student transferred in PBHL 1101 with a grade of C or higher.
- PBH2: PBH2, C or above in PBHL 1104; meaning that student transferred in PBHL 1104 with a grade of C or higher.
- PBH3: PBH3, C or above in PBHL 1105; meaning that student transferred in PBHL 1105 with a grade of C or higher.
- PBH4: PBH4, C or above in PBHL 1106; meaning that student transferred in PBHL 1106 with a grade of C or higher.
- PBH5: PBH5, C or above in PBHL 2101; meaning that student transferred in PBHL 2101 with a grade of C or higher.
- PBH6: PBH6, C or above in PBHL 2102; meaning that student transferred in PBHL 2102 with a grade of C or higher.
- PMC: Math Placement Test Composite; combined score for math placement parts 1, 2 and 3.
- PRAX: PRAXIS TEST 1; score for PRAXIS test 1.
- PSY1: PSY1, C or above in PSY 1061,1001; meaning that student transferred in PSY 1061 or PSY 1001 with a grade of C or higher.
- PSY2: PSY2, C or above in PSY 2201; meaning that student transferred in PSY 2201 with a grade of C or higher.
- PSY3: PSY3, C or above in PSY 2301; meaning that student transferred in PSY 2301 with a grade of C or higher.
- RM01: RM01, C or above in RMI 2101; meaning that student transferred in RMI 2101 with a grade of C or higher.
- SOC1: SOC1, C or above in SOC 1176; meaning that student transferred in SOC 1176 with a grade of C or higher.
- ST1A: AUTO MATH PLMT STAT 1001; meaning that student is auto-placed into STAT 1001.
- ST2A: AUTO MATH PLMT STAT 1102; meaning that student is auto-placed into STAT 1102.
- STA1: MATH PLMT STAT 1001; meaning that student is placed into STAT 1001.
- STA2: MATH PLMT STAT 1102; meaning that student is placed into STAT 1102.
- STT2: STT2, C- or above in STAT 1001; meaning that student transferred in STAT 1001 with a grade of C- or higher.
- STT3: STT3, C- or above in STAT 1102; meaning that student transferred in STAT 1102 with a grade of C- or higher.
- STT4: STT4, C SOC1167, MTH1013, PSY1003; meaning that student transferred in SOC 1167 or MATH 1013 or PSY 1003 or STAT 2101 with a grade of C or higher.
- STT5: STT5, C SC/PSY1167, M1013, ST2101; meaning that student transferred in SOC 1167 or PSY 1167 or MATH 1013 or STAT 2101 with a grade of C or higher.
- STT6: STT6, C SOC/PSY1167, SOC3201; meaning that student transferred in SOC 1167 or PSY 1167 or SOC 3201 with a grade of C or higher.
- SW03: SSWG 5003: Satisfied by exam; meaning that student tested out of SSWG 5003.
- SW05: SSWG 5005: Satisfied by exam; meaning that student tested out of SSWG 5005.
- SW06: SSWG 5006: Satisfied by exam; meaning that student tested out of SSWG 5006.

Course Descriptions

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

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Accounting (ACCT)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ACCT 2101. Financial Accounting. 3 Credit Hours.

Basic concepts and principles underlying the preparation and use of financial statements. Among the topics covered are basic accounting theory, transactional analysis, income determination, asset and liability valuation, and the preparation of financial statements. NOTE: Accounting majors who started as freshmen in fall 2008 need a C or better to progress in the Accounting major.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Facilities Management, Actuarial Science, Business Management, Business, Business Basics, Construction Engr Tech, Construction Mgt Tech, Career and Technical Education, Economics, Economics, Entrprnrship & Innovation Mgt, Engineering Technology, Entrepreneurship, Finance, Financial Planning, General Business Studies, Horticulture, Human Resource Management, International Business, Intrnl Bus - TUJ, Law & Business, Legal Studies, Management Information Systems, Marketing, Pre Business, Real Estate, Risk Management and Insurance, Supply Chain Management, Sport & Recreation Management, Statistical Sci + Data Analyt, Tourism and Hospitality Mgmt, Undeclared-Business & Mngt, Undeclared-University Studies.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 0701 to 0702, SCTC 1021, 'Y' in STA1, 'Y' in STA2, MATH 1011, MATH 1021, STAT 1001 (may be taken concurrently), 'Y' in STT2, any course with attribute "QA", any course with attribute "QB", any course with attribute "GQ", 'Y' in ST1A, or 'Y' in ST2A)

ACCT 2102. Managerial Accounting. 3 Credit Hours.

Basic concepts related to the manager's role in making business decisions using accounting data. Topics include cost classification, behavior, and allocation, cost-volume-profit analysis, operating and capital budgeting, variance analysis, performance evaluation and responsibility accounting. NOTE: The Accounting major changed as of fall semester 2008 for freshmen. The changes are effective for transfer students beginning in fall 2010. Accounting majors admitted as freshmen in fall semester 2008 or after should register for Accounting 2521 instead of Accounting 2102 and need a C or better to progress in the major.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Business, Business Plus, Construction Engr Tech, Construction Mgt Tech, Career and Technical Education, Economics, Economics, Entrprnrship & Innovation Mgt, Engineering Technology, Entrepreneurship, Finance, Financial Planning, General Business Studies, Horticulture, Human Resource Management, International Business, Intrnl Bus - TUJ, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ACCT 2101 or ACCT 2901)

ACCT 2103. Financial and Managerial Accounting for Decision Making. 4 Credit Hours.

This course introduces you to basic concepts in financial accounting and managerial accounting. Financial accounting involves gathering information, summarizing it, and creating reports about an organization's financial activities, financial performance, and financial position. Groups outside of the organization such as investors and lenders analyze this information to make decisions such as whether to invest in or make a loan to the organization. Managerial accounting involves analyzing and communicating financial information to managers, who use the information to make decisions within the organization. Specifically, the course will provide you with an understanding of (1) the nature of the accounting function, (2) gathering, analyzing, and reporting information, and (3) how the information in accounting reports is used by various decision makers in their resource allocation decisions.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 0701 to 0702, 'Y' in STA1, 'Y' in STA2, MATH 1011, MATH 1021, SCTC 1021, STAT 1001 (may be taken concurrently), 'Y' in STT2, any course with attribute "QA", any course with attribute "QB", any course with attribute "GQ", 'Y' in ST1A, or 'Y' in ST2A)

ACCT 2501. Survey of Accounting. 3 Credit Hours.

This is an introductory course that will introduce students to the fundamental concepts of financial accounting and managerial accounting. Financial accounting information is produced, in accordance with generally accepted accounting principles (GAAP). It reports the results of operations to external users (suppliers, customers, investors, regulatory agencies, etc.). Managerial accounting information is produced, in response to specific management needs. It does not follow GAAP. Managerial accounting reports the results of operations of an entity consistent with the needs of internal users (managers, supervisors, etc.). The first half of this course focuses on the accounting cycle, the structure of the financial statements, and profitability analysis. The second half of the course focuses on decision making based on accounting data. Tools for analysis and the ability to apply those tools to various data sets will be developed. NOTE: There is no expectation that students should possess prior accounting knowledge.

College Restrictions: May not be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

ACCT 2521. Cost Accounting. 3 Credit Hours.

The accumulation and analysis of cost accounting information for the valuation of products and services, internal decision making, and measurement of financial performance. NOTE: The Accounting major changed as of fall semester 2008 for freshmen. The changes are effective for transfer students beginning in fall 2010. New freshmen Accounting majors who were admitted in fall semester 2008 or after are not required to take Accounting 2102. You should register for Accounting 2521.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ACCT 2101, ACCT 2901, ACCT 2103, or ACCT 2903)

ACCT 2901. Honors Financial Accounting. 3 Credit Hours.

Course develops knowledge of financial accounting theory, financial statement preparation, and the use of accounting data by managers and external users. Honors version of 2101 (0001). NOTE: May be used to fulfill the first portion of the accounting requirement for the Fox School of Business and Management. Accounting majors who started as freshmen in fall 2008 need a C or better to progress in the Accounting major.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Business, Career and Technical Education, Economics, Economics, Entrprnrship & Innovation Mgt, Engineering Technology, Entrepreneurship, Finance, Financial Planning, General Business Studies, Horticulture, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 0701 to 0702, SCTC 1021, 'Y' in STA1, 'Y' in STA2, MATH 1011, MATH 1021, STAT 1001 (may be taken concurrently), 'Y' in STT2, any course with attribute "QA", any course with attribute "QB", any course with attribute "GQ", 'Y' in ST1A, or 'Y' in ST2A)

ACCT 2902. Honors Managerial Accounting. 3 Credit Hours.

Course provides an introduction to managerial accounting concepts and techniques and their use by decision makers. Honors version of 2102 (0002). NOTE: May be used to fulfill the second portion of the accounting requirement for the Fox School of Business and Management. The Accounting major has changed beginning fall semester 2008 for freshmen. These changes are effective for transfer students beginning in fall 2010. Accounting majors admitted as freshmen in fall semester 2008 or after are not required to take Accounting 2902. You should register for Accounting 2521.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Business, Career and Technical Education, Economics, Economics, Entrprnrship & Innovation Mgt, Engineering Technology, Entrepreneurship, Finance, Financial Planning, General Business Studies, Horticulture, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ACCT 2101 or ACCT 2901)

ACCT 2903. Honors Financial and Managerial Accounting. 4 Credit Hours.

This course introduces you to basic concepts in financial accounting and managerial accounting. Financial accounting involves gathering information, summarizing it, and creating reports about an organization's financial activities, financial performance, and financial position. Groups outside of the organization such as investors and lenders analyze this information to make decisions such as whether to invest in or make a loan to the organization. Managerial accounting involves analyzing and communicating financial information to managers, who use the information to make decisions within the organization. Specifically, the course will provide you an understanding of (1) the nature of the accounting function, (2) gathering, analyzing and reporting information, and (3) how the information in accounting reports is used by various decision makers in their resource allocation decisions.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 0701 to 0702, 'Y' in STA1, 'Y' in STA2, MATH 1011, MATH 1021, STAT 1001 (may be taken concurrently), 'Y' in STT2, any course with attribute "QA", any course with attribute "QB", any course with attribute "GQ", 'Y' in ST1A, or 'Y' in ST2A)

ACCT 3511. Intermediate Accounting I. 3 Credit Hours.

Accounting principles as they relate to financial reporting. Income determination, asset and liability valuation, and the form and content of financial statements are examined. NOTE: This course meets an upper-level major or business-elective requirement.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ACCT 2101, ACCT 2901, ACCT 2103, ACCT 2903, 'Y' in ACC1, 'Y' in CRAC01, or 'Y' in CRAC03)

ACCT 3512. Intermediate Accounting II. 3 Credit Hours.

A continuation of material begun in Accounting 3511. Stockholders' equity, earnings per share, and long-term investments will be covered along with complex revenue-recognition problems, pensions, leases, inter-period tax allocation, and cash flows. NOTE: This course meets an upper-level major or business-elective requirement.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ACCT 3511, ACCT 2511, ACCT 3911, or 'Y' in CRAC04)

ACCT 3526. Accounting Information Systems. 3 Credit Hours.

An introduction to the evaluation and design of accounting information systems and the documentation and analysis of a client's hardware and software needs. Internal controls, networking options and security issues also are examined. Students receive hands-on experience with accounting software.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ACCT 2521 or 'Y' in CRAC02)

ACCT 3531. Federal Taxes on Income. 3 Credit Hours.

An introduction to the concepts and logic underlying federal income tax law. Emphasis is given to the determination of income and allowable deductions for both individual and business entity taxpayers. The course also integrates some financial accounting and finance theory with federal tax law.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ACCT 3511, ACCT 2511, ACCT 3911, or 'Y' in CRAC04)

ACCT 3532. Topics in Taxation. 3 Credit Hours.

This course builds and extends on topics covered in Federal Taxes on Income. It is designed to reflect the need to exercise professional judgement and provide relevant information and advice to individuals and businesses on the impact of major taxes on financial decisions and situations. Problem-solving using the source materials of tax law and tax research are important components of the course.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ACCT 3531 or 'Y' in CRAC07)

ACCT 3533. Advanced Financial Accounting. 3 Credit Hours.

The major topics covered in this course include: business combinations, intercompany transactions, and other aspects of inter-corporate stock ownership necessary for the preparation of consolidated financial statements. Foreign currency transactions, foreign currency translation, partnership accounting, governmental accounting and not-for-profit accounting topics are introduced and discussed.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ACCT 3512 or 'Y' in CRAC05)

ACCT 3534. Information Systems and Controls for Accounting Professionals. 3 Credit Hours.

This course will include topics relating to IT audit, IT governance, controls, risks to accounting information systems, SOC engagements, and Blockchain technology. The course will also cover cybersecurity threats facing organizations and various risk frameworks for managing these threats.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in ACCT 3526 and ACCT 3596.

ACCT 3561. International Accounting. 3 Credit Hours.

The purpose of this course is to provide an understanding of accounting issues arising from the increased globalization of business. Topics covered include: comparative cross-national financial reporting; efforts to harmonize cross-national accounting standards and practices and to develop international accounting standards; taxation and transfer pricing issues; and managerial control of global operations.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ACCT 2521 or 'Y' in CRAC02)

ACCT 3580. Special Topics - Accounting. 1 to 3 Credit Hour.

Special topics in current developments in the field of accounting.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

ACCT 3581. Co-operative Experience in Accounting. 3 Credit Hours.

This course is designed for students who have an Accounting Internship or Co-op Experience, either in the fall, spring or summer session. The course can also be taken by students accepted into the Volunteer Income Tax Assistance program, which runs only in spring semester. Course admittance is selective and requires an interview with the instructor.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (ACCT 3511, ACCT 2511, ACCT 3911, or 'Y' in CRAC04)

ACCT 3582. Independent Study. 1 to 6 Credit Hour.

Students will prepare research papers under supervision of a faculty member. NOTE: Students who want to sit for the CPA exam or other professional designations may have to petition to have independent study credit accepted by the examining authority toward satisfying minimum education requirements.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

ACCT 3596. Auditing. 3 Credit Hours.

A study and critical appraisal of current auditing standards related to the examination of financial statements by an independent auditor. The significance of the audit report; the nature, accumulation, and evaluation of evidence for balances and transaction cycles; and the moral and ethical problems of the auditor are some of the topics covered. An introduction to the provisions of the Sarbanes-Oxley Act and assurance services also is provided. This is a writing intensive course. Students must earn a grade of C in this course if they are using it to fill the writing intensive course requirement for their degree.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (ACCT 3511, ACCT 2511, ACCT 3911, or 'Y' in CRAC04), (ACCT 3526 or 'Y' in CRAC06), and (BA 2196 (C- or higher) or BA 2996 (C- or higher))

ACCT 3911. Honors Intermediate Accounting I. 3 Credit Hours.

Honors version of ACCT 3511 (2511/0011). Accounting principles as they relate to financial reporting. Income determination, asset and liability valuation, and the form and content of financial statements are examined. NOTE: This course meets an upper-level major or business-elective requirement.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Undeclared-Business & Mngt.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ACCT 2101, ACCT 2901, 'Y' in ACC1, 'Y' in CRAC01, or 'Y' in CRAC03) and (ACCT 2521 (may be taken concurrently) or 'Y' in CRAC02)

ACCT 3999. Honors Thesis I. 1 to 3 Credit Hour.

The first of a two-part sequence of courses in which independent research is conducted under the supervision of a thesis advisor from the Accounting department resulting in a substantial piece of original research, roughly 30 to 50 pages in length upon completion of Accounting 4999. The student must publicly present his/her findings at a Temple University Research Forum session or the equivalent during one of the two semesters during which these courses are undertaken.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Accounting.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

ACCT 4501. Accounting Analytics Senior Seminar. 3 Credit Hours.

Capstone course designed to enable students to evaluate generally accepted accounting principles, to relate accounting theory to accounting practice and to examine accounting issues with new technologies. The course is intended to serve as a transition from academe to professional practice.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ACCT 3512 or 'Y' in CRAC05), (ACCT 3531 or 'Y' in CRAC07), and (ACCT 3596 or 'Y' in CRAC08)

ACCT 4502. Strategic Financial Management Accounting. 3 Credit Hours.

The strategic financial management course builds on the base of the substantial knowledge you have acquired in previous courses in accounting. We will identify current issues in accounting, use the textbook as reference, and supplement it with information from other sources. The course has the following specific objectives: (1) Develop the ability to analyze current issues in accounting and their effects on financial statement analysis and management decision making; (2) Develop an understanding of the ethical issues in accounting and the ability to deal with ethical dilemmas; (3) Develop the communication skills necessary for success as an accounting professional; (4) Prepare students to transition from the Fox Business School to the business world; and (5) Prepare students for the Certified Management Accounting exam (CMA).

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ACCT 3511 or 'Y' in CRAC04) and (ACCT 2521 or 'Y' in CRAC02)

ACCT 4999. Honors Senior Thesis II. 1 to 3 Credit Hour.

Independent research conducted under the supervision of a thesis advisor from the Accounting Department resulting in a substantial piece of original research, roughly 30 to 50 pages in length. Student must publicly present his/her findings at a Temple University Research Forum session or the equivalent if this was not done in Accounting 3999.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Accounting.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ACCT 3999.

Actuarial Science (AS)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

AS 1501. Actuarial Probability. 3 Credit Hours.

The course discusses probability theory and its application to insurance and risk management problems. Topics covered include: probability laws, combinatorics, conditional probability and independence, Bayes' Theorem, discrete and continuous random variables, common discrete and continuous distributions and their applications, multivariate discrete random variables, distribution of order statistics, linear combinations of independent random variables, and basic insurance concepts of deductibles, coinsurance, benefit limits, and inflation. Prior to spring 2016, the course title was "Introduction to Actuarial Science." Prior to fall 2022, the course title was "Actuarial Probability and Statistics I."

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1042 (may be taken concurrently), MATH 1942 (may be taken concurrently), any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW)

AS 1601. Introduction to Actuarial Spreadsheets and Programming. 1 Credit Hour.

The course introduces students to the use of spreadsheets and to the fundamentals of programming, as these skills are becoming crucial for entry-level actuarial positions. Topics covered include: managing workbooks, preparing workbooks for collaboration, cell filling, formatting, data validation, advanced conditional formatting and filtering, logical operations in formulas, advanced lookups, advanced date and time functions, data analysis through what-if analysis and forecasting, formula troubleshooting, advanced charting, Pivot Tables, Pivot Charts, create and modify macros, and an introduction to programming concepts.

Repeatability: This course may not be repeated for additional credits.

AS 1901. Honors Introduction to Actuarial Science. 3 Credit Hours.

Honors version of Actuarial Science 1501 (0001). NOTE: Students need to earn a grade of C or better in this course to be eligible to register for all other required courses in the Actuarial Science major.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1042 (may be taken concurrently), MATH 1942 (may be taken concurrently), any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW)

AS 2101. Actuarial Probability and Statistics II. 3 Credit Hours.

In this course, probability theory and its application to insurance and risk management problems are discussed in the context of continuous random variables. Among the topics to be covered are: Random variables, probabilities, and percentiles on a continuum; specific continuous distributions such as Uniform, Gamma and Exponential, Normal, and Beta; moments and moment generating functions; conditional and marginal distributions; transformations of one or two random variables; order statistics; and the Central Limit Theorem.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MATH 2043 (may be taken concurrently), 'Y' in MA08, or 'Y' in CRMA12) and (AS 1501, AS 1901, or 'Y' in CRAS01)

AS 2502. Theory of Interest. 3 Credit Hours.

This course covers one of the foundational concepts of actuarial science: the time value of money. Students learn about simple, compound, and effective interest rates, and use them to calculate present values and future values of deterministic cash flows, both discrete and continuous. These techniques are then applied to value annuities, loans and bonds. The course also includes a thorough discussion of interest rate risk, how it can be measured, and how insurers can mitigate this risk through asset-liability management.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (MATH 1042, MATH 1942, MATH 2043 (C- or higher; may be taken concurrently), 'Y' in MA07, 'Y' in MATW, 'Y' in CRMA09, or 'Y' in CRMA11)

AS 2503. Actuarial Corporate Finance. 3 Credit Hours.

The course develops the conceptual framework for corporate finance and option pricing from an actuarial perspective. Topics include capital budgeting, project analysis, efficient market hypothesis, capital asset pricing model, cost of capital, behavioral finance, capital structure, equity financing and debt financing. The course also provides an introduction to financial options, including option strategies, put-call parity, Binomial trees, the Black-Scholes model and Delta hedging, along with their applications to insurance products. NOTE: This course should be taken in place of Finance 3101. Prior to fall 2022, the course title was "Corporate Finance for Actuarial Science."

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (MATH 1042, MATH 1942, MATH 2043 (C- or higher; may be taken concurrently), 'Y' in MA07, 'Y' in MATW, 'Y' in CRMA09, or 'Y' in CRMA11), (AS 1501 or 'Y' in CRAS01), (ACCT 2101, ACCT 2901, ACCT 2103, ACCT 2903, 'Y' in ACC1, 'Y' in CRAC01, or 'Y' in CRAC03), and (AS 2502 or 'Y' in CRAS03)

AS 2505. Actuarial Statistics. 3 Credit Hours.

The course covers advanced probability concepts and the fundamentals of mathematical statistics, as well as their insurance applications. Topics include multivariate continuous distribution, sampling and central limit theorem, estimation methods, construction of confidence interval, hypothesis testing, analysis of variance, and analysis of categorical data.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MATH 1042, MATH 1942, any MATH course numbered 2043 to 3080, 'Y' in MATW, 'Y' in CRMA09, or 'Y' in CRMA11) and (AS 1501 or 'Y' in CRAS01)

AS 3501. Long-Term Actuarial Modeling. 3 Credit Hours.

The heart of the traditional actuarial science curriculum, this course examines the pricing of life insurance products by integrating concepts from probability and interest theory. It introduces random variables measuring the future lifetime of a person - from distributions or life tables - and the present values of life insurance and life annuity products, in both discrete-time and continuous-time settings. Students learn to calculate and interpret the mean, variance and probability functions for these random variables. In addition, students learn to determine actuarially fair premiums and reserves for long-term insurance products. Prior to fall 2022, the course title was "Actuarial Modeling I."

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (AS 2502 or 'Y' in CRAS03) and (AS 1501 or 'Y' in CRAS01)

AS 3502. Advanced Long-Term Actuarial Modeling. 3 Credit Hours.

The course introduces Markov Chains to extend the pricing and reserving concepts of AS 3501 to multiple lives (e.g. life insurance for a married couple or business partners) and multiple decrements (e.g. modeling different health statuses). The course also includes actuarial applications to pension valuation and profit testing, as well as embedded options in life insurance and annuity products. Prior to fall 2022, the course title was "Actuarial Modeling II."

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (AS 3501 or 'Y' in CRAS05)

AS 3503. Short-Term Actuarial Modeling. 3 Credit Hours.

Focusing on short-term actuarial modeling, the course introduces a variety of frequency, severity, and aggregate loss models. Students learn to select suitable models for a given data set, to parameterize the models to the data, to assess the predictive quality of the models through various measures of confidence, and to estimate losses using credibility theory. Pricing and reserving techniques for short-term insurance products will also be discussed. Prior to fall 2022, the course title was "Actuarial Modeling III."

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (AS 2505 or STAT 2512)

AS 3504. Actuarial Analytics. 3 Credit Hours.

Predictive analytics is a key component of actuarial work. It helps improve solutions to traditional actuarial problems such as forecasting mortality, setting loss reserves, predicting policyholder behavior, and establishing classification ratemaking schemes. Actuaries also use these techniques for improving insurance operations through data-driven decision making. This course introduces students to statistical learning and linear models, with a focus on applying these tools to actuarial business decisions in an insurance or consulting environment. Topics covered include: types of modeling problems, methods of assessing model accuracy, exploratory data analysis, exponential family of distributions, parameter estimation, diagnostic tests of model fit and assumptions, model selection and interpretation, calculation of predicted values and confidence/prediction intervals in the context of ordinary least squares regression, k-nearest neighbors, and generalized linear models. In addition, the course aims to enhance students' programming skills.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (AS 2505 or STAT 2512)

AS 3580. Special Topics: Actuarial Science. 3 Credit Hours.

Special topics in current developments in the field of Actuarial Science and exam preparation.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

AS 3582. Independent Study. 1 to 6 Credit Hour.

Readings and/or research paper under the supervision of a faculty member.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

AS 3596. Actuarial Practice: Property and Liability. 3 Credit Hours.

This highly participative course is designed to broaden perspectives on the business environment in which actuaries work. In addition to analyzing the issues behind daily events, several continuing issues will be analyzed including insurance pricing cycles, regulatory developments, the role of the actuary as an educator, advisor, objective information source and problem solver, insurance company financial rating and solvency issues, accounting fraud and questionable financial transactions, insurance and the financial markets managing insurance operations, professional ethics, and the impact of current developments in underwriting, and reinsurance on the actuarial function. NOTE: This is the writing-intensive course for Actuarial Science majors. Students must earn a grade of C- or better in this course if they are using it to fill the writing intensive course requirement for their degree. Also note: Prior to fall 2017, the course title was "Casualty Contingencies."

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ACCT 2101, ACCT 2901, ACCT 2103, ACCT 2903, 'Y' in CRAC01, or 'Y' in CRAC03), (AS 1501, AS 1901, or 'Y' in CRAS01), (RMI 2101, RMI 2901, 'Y' in RM01, 'Y' in CRRM01, or 'Y' in CRRM02), and (BA 2196, BA 2996, 'Y' in CRBA01, or 'Y' in CRBA02)

AS 3597. Actuarial Practice: Group & Health Benefits. 3 Credit Hours.

This highly participative and writing intensive course is designed to expose students to certain group health and welfare benefits, the legal and regulatory environment in which they operate, and the fundamentals of group insurance pricing, rating and funding. Benefits examined include traditional benefits such as medical and disability insurance in addition to dental and prescription drug plans, HMOs, PPOs, ACOs, and other managed care systems. Emphasis will be on the design and structure of these plans, development and pricing of group products, experience rating and funding methods, and current problems and issues associated with the provision of these benefits. The salient features of state and federal regulation will be examined, along with an examination of the Affordable Care Act (ACA) major provisions of interest to practicing actuaries and employers. Students must earn a grade of C- or better in this course if they are using it to fill the writing intensive course requirement for their degree.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ACCT 2101, ACCT 2901, ACCT 2103, ACCT 2903, 'Y' in CRAC01, or 'Y' in CRAC03), (AS 1501, AS 1901, or 'Y' in CRAS01), (RMI 2101, RMI 2901, 'Y' in CRRM01, or 'Y' in CRRM05), and (BA 2196, BA 2996, 'Y' in CRBA01, or 'Y' in CRBA02)

AS 3999. Honors Thesis I. 1 to 3 Credit Hour.

The first of a two-part sequence of courses in which independent research is conducted under the supervision of a thesis advisor from the Actuarial Science department resulting in a substantial piece of original research, roughly 30 to 50 pages in length upon completion of Actuarial Science 4999. The student must publicly present his/her findings at a Temple University Research Forum session or the equivalent during one of the two semesters during which these courses are undertaken.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Actuarial Science.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

AS 4503. Advanced Short-Term Actuarial Modeling. 3 Credit Hours.

Building on AS 3503, the course continues the discussion of short-term actuarial modeling. It introduces students to advanced frequency, severity, and aggregate claim models, as well as concepts of pricing and reserving. Topics covered include: commonly used severity, frequency distributions, aggregate risk models, coverage modifications, construction and selection of parametric models, estimate losses using advanced credibility procedures, and pricing and reserving methods for short-term insurance contracts.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in AS 3503.

AS 4504. Advanced Actuarial Analytics. 3 Credit Hours.

This course continues the discussion of AS 3504. Statistical analysis has become part of the modern actuary's day-to-day responsibilities as they help improve solutions to traditional actuarial problems and quantify insurance operations and business processes that have traditionally relied largely on managers' judgment. Topics to be covered include: ridge regression, LASSO regression, weighted/partial least squares models, KNN regression, stochastic time series processes, common time series models including predictions, confidence intervals, and interpretation, principal components analysis, decision trees, including classification trees, bagging, boosting, and random forests, k-means and hierarchical clustering, and simulation. The course will further develop students' programming skills in data analytics.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in AS 3504.

AS 4999. Honors Senior Thesis II. 1 to 3 Credit Hour.

Independent research conducted under the supervision of a thesis advisor from the Actuarial Science Department resulting in a substantial piece of original research, roughly 30 to 50 pages in length. Student must publicly present his/her findings at a Temple University Research Forum session or the equivalent if this was not done in Actuarial Science 3999.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Actuarial Science.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in AS 3999.

Adult & Organizational Development (AOD)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

AOD 0836. Interpersonal Communication: Critical Competencies for Professional and Personal Success. 3 Credit Hours.

The primary goal of this course is to help you enhance your interpersonal communication competence so you have successful interpersonal communication with your family, friends and work colleagues. In the first phase of the course you will assess your own communication skills. You will develop and set personal goals and an action plan by which to create the change you wish to see. In the course you will learn the basic components of interpersonal communication situations (communicators, content, and contexts) and you will investigate how interpersonal communication needs and effectiveness change throughout life (in early childhood, adolescence, young adulthood, middle age, and old age). The course includes frequent small group discussions which will allow you to integrate course and research information for personal skill development. The course will provide a reflective and supportive environment in which to expand your communication skills and knowledge. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

AOD 1001. Practical Application in Adult and Organizational Development. 1 Credit Hour.

This course is a 1-credit course aimed at helping students become familiar with the career opportunities, create network contacts and develop a deeper understanding of the breadth and depth of the Adult and Organizational Development Field. Various professionals and industry leaders will speak to the students so that students are able to understand the trends and foreseeable changes in this dynamic field. This course will help students understand the curricula structure of the program. It will also allow students to understand how the curricula structure aligns with their unique career interests.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

AOD 1016. Introduction to Adult Learning and Training. 3 Credit Hours.

Provides a basis for understanding human behavior in professional and personal settings from a communication perspective. Emphasis is given to skills and analytical abilities related to challenges professionals face in a wide range of settings including: interpersonal and professional relationships, public presentations, team leadership roles and responsibilities, and organizational change in management roles.

Repeatability: This course may not be repeated for additional credits.

AOD 1166. Interpersonal Processes through the Life Span. 3 Credit Hours.

Examines the development of effective interpersonal interactions in relationships in family, work, and social settings. Examines how interaction preferences, demands, and skills change across the age spectrum, with an emphasis on talking, thinking, and listening abilities central to interactive situations across life situations. Assists students in developing professional skills needed to manage interpersonal challenges in diverse personal and professional settings.

Repeatability: This course may not be repeated for additional credits.

AOD 2115. Conflict Resolution in Education. 3 Credit Hours.

Introduces students to the broad field of conflict resolution education, including social and emotional learning, anti-bullying programs, peer mediation, negotiation processes, expressive arts and conflict resolution education, restorative justice programs, and bias awareness programs. It provides students with examples of programs, gives them an opportunity to interact with experts in the field, and encourages them to consider how they can support these programs as teachers and administrators.

Repeatability: This course may not be repeated for additional credits.

AOD 2176. Team Process in Education. 3 Credit Hours.

Examines ways of managing the communication process in small group, decision-making settings. The course covers core concepts and theories of group interaction and emphasizes their practical implications for understanding and influencing small group decision-making. Topics include cohesion, social influence, facilitation, group tasks, and group/team development. Students develop their personal skills in being effective team members and team leaders.

Repeatability: This course may not be repeated for additional credits.

AOD 2201. Research Methods. 3 Credit Hours.

Introduces quantitative and qualitative research methods in organizational settings. Covers a variety of study domains including field/descriptive, correlational, survey, clinical, ethnographic, and experimental research designs. Students learn various research methods for addressing particular types of research questions.

Repeatability: This course may not be repeated for additional credits.

AOD 2214. Conflict Processes. 3 Credit Hours.

Covers conflict process in interpersonal and organizational relationships. Concepts examined include conflict styles, phases of conflict, face-saving, attribution and conflict, cooperative and competitive approaches to negotiation, and methods of third party intervention. This course provides a basis for managing and intervening in difficult conflicts that occur in schools, professional organizations, and interpersonal relationships.

Repeatability: This course may not be repeated for additional credits.

AOD 2215. Mediation: Principles and Practice. 3 Credit Hours.

Provides an overview of the development and use of mediation in diverse conflict settings. Students learn the various models of mediation that third parties rely on to intervene in conflicts in organizational, family, school and community settings. Emphasis is placed on the communication skills and practices that form the basis for the mediator's role in two-party or multiparty disputes.

Repeatability: This course may not be repeated for additional credits.

AOD 2218. Leadership in Organizations. 3 Credit Hours.

Examines the theories and research on effective leadership in organizational, school, and community contexts. Concentrates on skills critical for leading change processes in a wide range of organizational environments. Attention is given to the personal leadership development of students enrolled in the course.

Repeatability: This course may not be repeated for additional credits.

AOD 2307. Interaction Analysis. 3 Credit Hours.

This course teaches a system of verbal communications that examines individual style and its effect on the listener. The purpose of the system is to teach those in power positions, such as teachers, supervisors, team leaders, psychologists and other medical professionals, how to communicate with others so that their messages are fully understood and the consequences of misunderstandings and misinterpretations are minimized.

Repeatability: This course may not be repeated for additional credits.

AOD 2900. Honors Special Topics. 3 Credit Hours.

Special topics. Content varies.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

AOD 2915. Honors Mediation: Principles and Practice. 3 Credit Hours.

This is the Honors version of AOD 2215. Provides an overview of the development and use of mediation in diverse conflict settings. Students learn the various models of mediation that third parties rely on to intervene in conflicts in organizational, family, school and community settings. Emphasis is placed on the communication skills and practices that form the basis for the mediator's role in two-party or multiparty disputes.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

AOD 3316. Negotiation Processes. 3 Credit Hours.

Teaches students about collaborative and competitive approaches to negotiation. The emphasis is on the integration of negotiation theory and practice as applied to two-party and multi-party negotiation situations. Students learn to diagnose a conflict situation to prepare an effective negotiation strategy. Examples in the class focus on educational contexts to encourage students to apply class material to their work as teachers and administrators.

Repeatability: This course may not be repeated for additional credits.

AOD 3317. Adult and Workforce Development. 3 Credit Hours.

Adult and Workforce Development is a course that focuses on the lifespan years following young adulthood, with a particular emphasis on adults and their relationship with their work and career. The need for this course is clear: research shows that population aging will be the major demographic phenomenon affecting the nation's health and social institutions over the next half century. Professionals will need to have an understanding of adulthood, aging and workforce development in order to effectively lead and support for-profit and non-profit organizations. This course will help students to understand aging as a dynamic process that is complex and allows adults to choose a wide variety of life paths. The course will cover adult development topics including relationships, learning, problem-solving, coping, adaptation, and spirituality. A continuing thread of discussion and debate will be the social policy implications of aging and career development. Work and career development is a process that is no longer only a young adult developmental milestone. Adults are retiring later and many individuals work well into their older years. The skills of workforce development are no longer only for those in specific career development positions: the skills and knowledge will serve any individual both in terms of their own career development and their abilities to support others as they progress through adulthood. Students will explore the historical, sociological, psychological and ethical implications of work force development. Learners will engage in discussions and in-class activities examining adult development theories about stability and change and how these theories relate to workforce motivation, performance, and professional development planning. The course will also have a focus on the inter-generational workplace which they will be joining as they find their own career path. This course requires 3 to 5 hours of fieldwork and clearances are required.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

AOD 3318. Systems Approach to Organizational Change. 3 Credit Hours.

This course aims to help students understand organizations - the various types (e.g., public, private, profit, non-profit) and to learn to "see" systems, linear and nonlinear in how organizations are managed and changed. Students will explore various roles and how they can be an agent having influence. This class will consist of experiential in-class activities in large and small groups. The aim is to explore how organizations can better serve society and improve social conditions.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

AOD 3319. Skill Building for Social Entrepreneurship and Community Engagement. 3 Credit Hours.

This course is designed for students who want to gain community engagement and leadership skills in a context of social entrepreneurship. Viewing community engagement as an entrepreneurial venture encourages ideas and strategies to be forward thinking, creative and grounded in a business-oriented change model. Utilization of the change model encourages project funding diversity, long-term sustainability, and widespread scalability. This course will prepare students to effect community change through a variety of entry points. These starting points may be current service within or outside of the university, enrollment in a social service related major or minor, or a desire to develop creative solutions to community challenge: now or in the future. Becoming an entrepreneur and/or a community change agent is a challenging task. This course is built on the premise that many of these obstacles can be successfully mitigated if students have developed and practiced a core set of knowledge, skills, and attitudes related to community change. This course will focus on leadership, communication, conflict management, teamwork, community needs, and assets identification, and working within a community change model. A continuous thread throughout the course is the focus on leadership as a starting point of any entrepreneurial, civic engagement initiative.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Course Attributes: SI, SP, SS

Repeatability: This course may not be repeated for additional credits.

AOD 3376. Facilitating Group Decision-Making. 3 Credit Hours.

Focuses on the various approaches to facilitating decision-making in task-oriented groups. Students learn how to facilitate groups that follow voting and consensus decision-making formats and how to meet the challenges of being an internal or external facilitator in any group process. Special attention is given to learning how to lead groups through difficult conflicts in schools and other professional organizational settings.

Repeatability: This course may not be repeated for additional credits.

AOD 3396. Organizational Processes. 3 Credit Hours.

This course examines classical and contemporary theories of organizational structure and management and their relationship to interpersonal and group processes with an emphasis on organizations as cultures and analysis of cases and real life situations. AOD 3396 supports students' ability to act as effective managers and change agents in a wide array of school and organizational settings. We live and work in large and small organizations. As our relationships are intricately interwoven within formal and informal social systems we may be unaware of or challenged by the nature of these relationships and of our capacity to influence how we view and may affect these relationships. Organizational processes shape us and our organizations. Conversely, we shape relationships and organizations through our interactions. Our capacity to be effective in social systems is affected profoundly by our understanding and action. This course is designed to facilitate learning alternate ways of assessing and understanding organizations, so also increasing awareness of varying process/influence possibilities as organizational members in diverse role relationships. Students will examine assumptions about self and social systems that may limit or enhance collective and individual contributions.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

AOD 4016. Advanced Adult Learning and Training. 3 Credit Hours.

This course is an in-depth study of the methods, tools and techniques employed in facilitating adult learning and designing and implementing training programs. The focus is on the preparation and process of delivering leader led effective group training activities in workshops, seminars, and project meetings. Students will gain the advanced knowledge and skills which are necessary for the professional roles of an instructional specialist such as a facilitator, trainer, or teacher of adults. Students will learn the basics of performing as an internal or external trainer. The course requires that students have completed the AOD 1016, Introduction to Adult Learning and Training course.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in AOD 1016.

AOD 4376. Innovation and Mission-Driven Organizations. 3 Credit Hours.

This class will explore the field of Social Entrepreneurship and provide students with a set of skills that will be crucial as participants move into the non-profit sector and become social change agents. We will explore the idea of social entrepreneurship as a way of solving social problems through innovative approaches. Social entrepreneurship is a rapidly developing and changing business field in which business and nonprofit leaders design, grow, and lead mission-driven enterprises. It is important that students understand the opportunities and challenges in this new landscape.

Repeatability: This course may not be repeated for additional credits.

AOD 4382. Independent Study. 1 to 3 Credit Hour.

Provides students an opportunity to explore topics not fully covered in coursework. Under faculty supervision, the student will identify and read relevant literature in the theory and research of the topic area.

Repeatability: This course may be repeated for additional credit.

AOD 4385. Internship in Adult and Organizational Development. 3 Credit Hours.

Work experience in a communication-related job in schools, business, government, or private agency. Analysis of the work experience in light of the skills and abilities obtained in students' prior coursework in AOD.

Repeatability: This course may be repeated for additional credit.

AOD 4396. Field Research: Practice in Professional Settings. 3 Credit Hours.

Provides students an opportunity to discover how their knowledge and skills in relationship, team, and organizational change processes are managed by designated professionals in schools, agencies, organizations or other work settings. Students are guided through the design of an individualized professional development plan and an approach to exploring the link between their own backgrounds and the professional roles they seek to obtain. Special attention is given to development of personal presentation in writing, interviewing, and interning roles.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Advanced Core Medical Science (ACMS)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ACMS 4004. Fundamentals of Physiology for Pre-Health Postbaccalaureates. 4 Credit Hours.

Fundamentals of Physiology addresses important topics including membranes and membrane transport, excitation and contraction of skeletal, smooth and cardiac muscle, the heart and blood flow, renal physiology and lung physiology. Important medically related examples will be discussed. Course syllabus will be provided by the course director.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Postbaccalaureate.

Repeatability: This course may not be repeated for additional credits.

ACMS 4005. Fundamentals of Physiology Lab for Pre-Health Postbaccalaureates. 1 Credit Hour.

This course is designed for pre-Physician Assistant students enrolled in the Advanced Core Health Sciences program and provides hands-on laboratory exercises related to the various body systems. The laboratory exercises will expose students to the cardiovascular, digestive, excretory, hematopoietic, neurological, and respiratory systems. Students will conduct laboratory activities designed to emphasize the function and measurement of outputs of each system. Students are expected to complete both pre- and post-laboratory written exercises.

Co-requisites: ACMS 4004.

Repeatability: This course may not be repeated for additional credits.

ACMS 4006. Cellular and Molecular Basis of Immunology and Microbiology for Pre-Health Postbaccalaureates. 4 Credit Hours.

This course is designed for upper level undergraduates and will cover the fundamentals of human immunology and pathogenic microbiology. Students should have taken as prerequisites college level biology and chemistry. The course does not assume any prior knowledge of either microbiology or immunology. Topics will cover the basic material needed to achieve high scores on the MCAT and other standardized tests required for admission to professional degree programs. A wealth of interesting and relevant areas will be covered in the course including the organization, function, and regulation of innate and adaptive immune responses; diseases associated with malfunction of the immune system such as allergy and autoimmunity, and immune-based therapies (for Cancer and Arthritis). The course will also cover the disease syndromes and the molecular and biochemical characteristics of significant pathogenic bacteria, viruses, fungi and parasites. Topics will include, among others, bacterial toxins, Tuberculosis, sexually transmitted diseases, Malaria, and Lyme disease.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Postbaccalaureate.

Repeatability: This course may not be repeated for additional credits.

Advertising (ADV)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ADV 0853. Advertising and Globalization. 3 Credit Hours.

Explore the current global scope and reach of advertising in our connected, digital age. Study major interdisciplinary themes related to the spread of consumerism, self and social identity, global consciousness, and cross-cultural effects as a result of the worldwide spread of advertising as part of the free market system. Particular attention is given to cross-cultural issues related to cultural imperialism, legal and societal constraints, ethical questions, universal values and green marketing. Course work includes comprehensive survey of print and broadcast advertising found in other countries. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed ADV 0953.

Course Attributes: GG, SI

Repeatability: This course may not be repeated for additional credits.

ADV 0953. Honors Advertising and Globalization. 3 Credit Hours.

Explore the current global scope and reach of advertising in our connected, digital age. Study major interdisciplinary themes related to the spread of consumerism, self and social identity, global consciousness, and cross-cultural effects as a result of the worldwide spread of advertising as part of the free market system. Particular attention is given to cross-cultural issues related to cultural imperialism, legal and societal constraints, ethical questions, universal values and green marketing. Course work includes comprehensive survey of print and broadcast advertising found in other countries. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed ADV 0853.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GG, HO, SI

Repeatability: This course may not be repeated for additional credits.

ADV 1000. Topics in Advertising 1. 3 Credit Hours.

This course number is reserved for Special Topics courses.

Repeatability: This course may be repeated for additional credit.

ADV 1001. Introduction to Digital Design Tools for Advertising. 3 Credit Hours.

This introductory course of study is computer graphics for advertising students and other majors. Focus is on achieving working knowledge of Adobe Photoshop and Illustrator. The Adobe Creative Suite is a major tool of the art direction trade. We use these tools to execute thoughtful advertising concepts. To be a competitive job candidate, graduates will need proficiency in Photoshop, Illustrator and InDesign with working knowledge of Acrobat and Bridge. Over the course of the semester we will spend approximately 6 weeks each with Illustrator and Photoshop and 1.5 weeks with InDesign at an introductory level. Practice makes perfect. Instruction, exposure and experience with software will lead to mastery. We use advertising projects as an opportunity to develop portfolio work while practicing software lessons. Although we will discuss and critique design and concept for personal development, it will not be a part of student evaluation.

Repeatability: This course may not be repeated for additional credits.

ADV 1005. Introduction to Computer Graphics for Advertising. 1 to 3 Credit Hour.

The course of study is an introduction to digital design for projects related to advertising. Focus is on the basics of digital workflows and the Adobe Creative Suite: Illustrator, InDesign and Photoshop.

Repeatability: This course may be repeated for additional credit.

ADV 1010. Topics in Advertising 10. 3 Credit Hours.

Arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic.

Repeatability: This course may be repeated for additional credit.

ADV 1101. Introduction to Media and Society. 3 Credit Hours.

The history, organization, creation, economics, control and effects of mass communications in the United States, including the relationships of media to one another and to the community at large with special emphasis on the roles and responsibilities of advertising, advertisers and agencies.

Repeatability: This course may not be repeated for additional credits.

ADV 1102. Introduction to Advertising. 3 Credit Hours.

This course introduces students to the function of advertising in the economy, to the strategic identification of markets and targets, to the creation and placement of advertising, and to the relationship of advertising agencies to advertisers and the media.

Repeatability: This course may not be repeated for additional credits.

ADV 1103. Digital Media and Advertising. 3 Credit Hours.

Explores the development of digital media and their impact on integrated marketing communications and consumer behavior. Analyzes the use of digital media in brand building, advertising communications, direct response and database marketing, and sales promotions. Includes examinations of strategic planning, and communication aspects of websites, online advertising, email marketing, mobile advertising, interactive kiosks, and more. Provides principles such as user experience, content organization, navigation development, and interface design necessary to develop persuasive digital marketing materials. This course is designed to immerse you in the world of interactive media and user-centered design focusing on digital branding and strategy with extreme focus on how marketers leverage this powerful medium for their brands. NOTE: This class is cross listed with ADV 4101. Students cannot receive duplicate credit for both classes.

Repeatability: This course may not be repeated for additional credits.

ADV 1196. Persuasive Writing. 3 Credit Hours.

Students learn the rhetoric of writing intended to affect behavior. The basic crafts of grammar and composition are reviewed. Students explore consumer motivation as the focus of powerful, exciting advertising and written argument.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ADV 1901. Honors Media and Society. 3 Credit Hours.

This Honors course will provide Honors students with a broad, comprehensive overview of the revolutionary role of media in society throughout history. This course will examine both traditional mass media as well as digital media. We will utilize contemporary sources and examine current events to enhance your understanding of the way media shapes your world. Students will be challenged to think critically about the power, persuasiveness and ethical issues related to the media in general and the advertising industry in particular.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

ADV 2000. Topics in Advertising 2000. 3 Credit Hours.

This course number is reserved for special topics courses.

Repeatability: This course may be repeated for additional credit.

ADV 2001. Intermediate Digital Design Tools for Advertising. 3 Credit Hours.

Focus is on achieving proficiency in Adobe Photoshop, InDesign and Illustrator for advertising art direction majors. The Adobe Creative Suite is a major tool of the art direction trade. We use these tools to execute thoughtful advertising concepts. To be a competitive advertising art direction candidate, graduates need proficiency in Photoshop, Illustrator, and InDesign with working knowledge of Acrobat and Bridge. Over the course of the semester we will spend 4 weeks each with Illustrator and Photoshop at an intermediate level and 6 weeks with InDesign at a beginner level. Practice makes perfect. Instruction, exposure and experience with the software will lead to mastery. We use advertising projects as an opportunity to develop portfolio work while practicing software lessons. Although we will discuss and critique design and concept for personal development, it will not be a part of student evaluation.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ADV 1001 or 'Y' in CRAD01)

ADV 2002. Search Engine Optimization. 3 Credit Hours.

Search Engine Optimization (SEO) has become a fundamental part of the marketing mix. 80 percent of people go to Google first when searching for information online. This gives companies the opportunity to be present in the search engine results with content and solutions. We can use search insights to make smarter marketing decisions and be present with the right content in the moments that matter to users. This improves user experience and allows for more meaningful engagement between brands and their target market. With the right content strategy, a website can also serve as a personal shopper for users and a strong intermediary between potential customers and sales teams. Throughout this course, you will gain a solid understanding of the fundamentals of search and how companies use search to make money and drive leads. You will learn from real world case studies, hear from top search experts in the field, and develop your own strategies in a fast-paced learning environment. Although this is not a social media or PR class, search is a fundamental part of everything we do as digital advertisers and marketers. As such, we will be dipping our toes in social, PR and digital journalism as it relates to search.

Repeatability: This course may not be repeated for additional credits.

ADV 2005. Social Media Marketing. 3 Credit Hours.

Learn the strategy behind social media marketing plans. Topics include examination of social etiquette, organization and operation of social media strategies, and the historical lead-up to this brave new world. Over the last 5 years, social media marketing has grown from a fad to the go-to paradigm for reaching millions of consumers. While corporations, non-profits, and government institutions struggle to successfully connect with larger communities on social channels, it is imperative to understand the challenges, opportunities, and relationships that exist in the social spectrum. Focusing on the "social" and remembering the "marketing" - the class, students, and instructor will all practice what they preach, by incorporating social and digital efforts into their classwork, quizzes and assignments.

Repeatability: This course may not be repeated for additional credits.

ADV 2010. Topics in Advertising 2010. 1 to 3 Credit Hour.

This course number is reserved for special topics courses.

Repeatability: This course may be repeated for additional credit.

ADV 2052. Introduction to Typography. 3 Credit Hours.

This course offers art direction track students an exploration of basic typography. Topics covered include typographic history, specification and recognition of existing typefaces, typographical style, and letterform design covering both print and digital applications. Students will learn through a combination of homework assignments, projects, and class critiques. The primary objective is to master basic typographic principles and apply them in the appropriate context through both hand done and digital executions. It is suggested, but not required, that students take ADV 3052 Art Direction I: Concept and Layout prior to enrolling in this course, as an understanding of concept and layout is expected.

Department Restrictions: Must be enrolled in one of the following Departments: KCMC:Adv and Public Relations.

Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Art Direction.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ADV 1001 (may be taken concurrently), ADV 2001 (may be taken concurrently), 'Y' in CRAD01, or 'Y' in CRAD06) and (ADV 2151 or 'Y' in CRAD11)

ADV 2057. Creating and Filming Advertising from Script to Screen. 3 Credit Hours.

This hands-on course is designed to teach students how to take their advertising concepts through to final execution. Starting from the conceptual ideas for television commercials initially put down on paper, students are guided in following the steps toward visualizing how the idea would actually be shot. Students are coached in developing the skill of using their "mind's eye" in picturing the sequential frames of both short and long form television commercials. In addition to producing shooting boards for the commercials for several brands assigned throughout the course, students will learn the process of casting, location scouting, acquiring clearances and permits, and the basic economics related to making a commercial. The intended end product for each student will be a completed 30-second television commercial.

Repeatability: This course may not be repeated for additional credits.

ADV 2102. Introduction to Pharmaceutical Advertising. 3 Credit Hours.

Many of the advertising and marketing-related jobs in the Philadelphia region are in pharmaceutical ad agencies. This course will introduce students to the pharmaceutical advertising industry and its many opportunities for advertising professionals, and prepares interested students to pursue opportunities in the industry. You'll learn how companies market branded and generic drugs, vaccines, blood products, medical devices and other biologics. You'll learn about targeting health care professionals, patients and other consumers. You'll learn about global conglomerates, Fortune 500 companies, and startups and about vital regulatory issues.

Repeatability: This course may not be repeated for additional credits.

ADV 2103. Introduction to Web Design and Development for Advertising. 3 Credit Hours.

Web Design and Development will give you the necessary tools to get you ahead of the competition when you graduate. In this class, you will take your skills to the next level by creating interactive websites that ad agencies and their clients demand. You will learn the theory of website design: color theory, imagery, layout, typography, etc. and then apply these concepts into a fully functioning website using HTML and CSS. Your final project will become a key component of your advertising portfolio.

Repeatability: This course may not be repeated for additional credits.

ADV 2104. Personal Branding. 3 Credit Hours.

This course will look at the new channels of communication that make up the social media and Web 2.0 space. The Internet is making personal branding accessible to everyone. Personal branding means promoting your own skills and strengths. Blogging and social networks are ways of reaching your target audience. Through the use of case studies and real-life media examples, you will learn how to embrace social networks, user generated content, and blogs, to name just a few channels. These channels will enable you to manage your online reputations and create your own "personal buzz."

Repeatability: This course may not be repeated for additional credits.

ADV 2111. Introduction to Marketing. 3 Credit Hours.

This course will introduce students to the marketing process, including creating customer value and building profitable customer relationships. Students will learn how organizations develop a strong value proposition to enable them to win, retain and grow their customer base. This course will also examine the relationship between marketers and advertising agencies, and will focus on the role of advertising in the marketing process. Note: Students cannot receive duplicate credit for this course and ADV 1004.

Repeatability: This course may not be repeated for additional credits.

ADV 2121. Introduction to Copywriting. 3 Credit Hours.

This course focuses on writing effective advertising messages for print and broadcast media. Emphasis is on craft, writing ability and style. Composition and the integration of graphic elements are explored. Practical assignments teach students how to use the most common copy techniques effectively to create advertising with stopping power.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ADV 1196 or 'Y' in CRAD05)

ADV 2131. Introduction to Media Planning. 3 Credit Hours.

In this basic course, students learn the analysis and understanding of communication vehicles as advertising media, the concepts and resources involved in developing media objectives and strategies, as well as media selection criteria and vehicle purchasing. Note: Prior to fall 2015, the course title was Advertising Media Planning I.

Repeatability: This course may not be repeated for additional credits.

ADV 2141. Introduction to Brand Strategy and Research. 3 Credit Hours.

The course covers the range of areas in which advertising research participates, or has the primary responsibility for, in the advertising process. Focus is on the role of research in the development of strategic advertising messages and the design of research using various methods to acquire useful insights. We will explore how these insights lead to strategies that inform effective and dynamic creative communications, and ultimately be the foundation of lasting successful brands. Students will have the unique opportunity to learn the fundamentals of branding (from theory to creative execution), how to build brand equity through proper brand positioning, how to use creative brief and strategy documents, and how to guide and inspire the creation of effective advertising. Note: Students cannot receive duplicate credit for this class and ADV 2101. Also note: Prior to fall 2017, the course title was "Introduction to Advertising Research and Strategy."

Repeatability: This course may not be repeated for additional credits.

ADV 2151. Introduction to Art Direction: Visual Communication. 3 Credit Hours.

This course develops an understanding of the methods employed in solving communications problems in advertising with visuals. Students will explore the creative process of making images that can move ideas and information to the minds of others. (Prior to fall 2015, the course title was Visual Communication.)

Repeatability: This course may not be repeated for additional credits.

ADV 2451. The Influence of Media on Children. 3 Credit Hours.

How are children affected by the media they consume? This course will explore the key areas in which media affect children, including consumerism, violence, sexuality, representation of body image, gender, race, ethnicity, etc. The course will analyze the research on how media affects children and will include basic child development. This course will incorporate a production assignment to introduce students to production for children as an audience.

Repeatability: This course may not be repeated for additional credits.

ADV 3000. Topics in Advertising 3000. 3 Credit Hours.

This course number is reserved for special topics courses.

Repeatability: This course may be repeated for additional credit.

ADV 3001. Advanced Digital Design Tools. 1 to 3 Credit Hour.

This advanced course of study is web design for advertising majors. Focus is on achieving working knowledge of Adobe Dreamweaver, HTML and CSS. We use these advanced tools to execute thoughtful concepts. The web is a major discipline of advertising art direction. To be a competitive job candidate, graduates need mastery of Photoshop, Illustrator and InDesign as well as a proficient working knowledge of HTML and CSS. As the third in the Digital Design Tools sequence, this challenging course offers a professional level tutorage in mastering the requisite software and platform packages one needs in order to enter the digital realm of advertising. Over the course of the semester we will spend 4 weeks each with Dreamweaver and HTML at an intermediate level and 6 weeks with CSS at a beginner level. Practice makes perfect. Instruction, exposure and experience with the software will lead to mastery. We will use course projects as an opportunity to develop portfolio work while practicing software lessons. Although we will discuss and critique design and concept for personal development, it will not be a part of student evaluation.

Department Restrictions: Must be enrolled in one of the following Departments: KCMC:Adv and Public Relations.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Advertising.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Media & Comm, Klein College.

Repeatability: This course may not be repeated for additional credits.

ADV 3002. Advertising and Society. 3 Credit Hours.

Advertising plays an important role in driving business success, but its impact can extend beyond the corporate bottom line. Advertising is also not created in a vacuum but is instead shaped by a myriad of social forces. As such, this course examines the dynamic and interactive relationship between advertising and its broader societal context. In particular, the course will direct students to consider the merits and critiques of a variety of advertising practices and product categories from cultural, economic, and ethical perspectives.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ADV 1101 or 'Y' in CRAD02), (ADV 1102 or 'Y' in CRAD03), (ADV 1196 or 'Y' in CRAD05), (ADV 1103 or 'Y' in CRAD04), and Complete 3 of the following: (ADV 2111 (may be taken concurrently) or 'Y' in CRAD07), (ADV 2121 (may be taken concurrently) or 'Y' in CRAD08), (ADV 2131 (may be taken concurrently) or 'Y' in CRAD09), (ADV 2141 (may be taken concurrently) or 'Y' in CRAD10), and (ADV 2151 (may be taken concurrently) or 'Y' in CRAD11)

ADV 3003. National Student Advertising Competition Preparation. 3 Credit Hours.

This elective is only offered in the fall semester. Students conduct research and develop strategic plans in preparation for the spring semester class ADV 4103 National Student Advertising Competition (NSAC). In the fall class, students analyze the case study provided by the American Advertising Federation (AAF), conduct market research (both primary and secondary) on the target brand, competitive brands, and consumer behavior related to the category. The objective for the class is to master a comprehensive knowledge of the brand and its position in the marketplace to uncover insights that lead to a successful strategy for the NSAC advertising campaign. Permission of the instructor is required. NOTE: Enrollment in this class does not guarantee a place in ADV 4103 and on the NSAC team. Students must apply for a place in that class and are chosen by the spring instructor following a highly competitive process. Selected students will be notified before the start of the spring semester. This course is not required for students who wish to enroll in ADV 4103.

Department Restrictions: Must be enrolled in one of the following Departments: KCMC:Adv and Public Relations.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (ADV 2141 or 'Y' in CRAD10)

ADV 3004. Klein Online Marketing Challenge. 3 Credit Hours.

The Klein Online Marketing Challenge is a unique opportunity for students to experience and create online marketing campaigns using Google AdWords and Google+. Students develop and run an online advertising campaign for a business or non-profit organization over a three week period. Students compete against other teams of Temple students. There is a \$30 fee per student to enroll in this course to offset the cost of Google AdWords, but this is in place of a textbook.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ADV 1102 or 'Y' in CRAD03), (ADV 1103 or 'Y' in CRAD04), ADV 2002, ADV 2005, and (ADV 2131 or 'Y' in CRAD09)

ADV 3006. Representation in the Media. 3 Credit Hours.

What are media representations, and why do they matter? What is the relationship between media representations and stereotypes? How do media represent diversity and its issues? What responsibility do we have - as media consumers, scholars, and future practitioners - to think about and address the problems of representation? This course will explore these questions by examining the relationship between media and representation. Looking at media such as advertising, news, TV, music, and social media, we will explore how media representations get created and circulated, how stereotypes are formed and understood, and what might be done to challenge or dismantle negative representations.

Repeatability: This course may not be repeated for additional credits.

ADV 3007. Psychology of Advertising. 3 Credit Hours.

This course provides an overview of key underlying psychological theories and research that can explain how advertising affects people. The focus is on psychological theories over more socially oriented approaches. Understanding psychological perspectives on how advertising works offers a critical foundation for developing advertising strategy and making decisions as a consumer.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ADV 1101 or 'Y' in CRAD02), (ADV 1102 or 'Y' in CRAD03), (ADV 1196 or 'Y' in CRAD05), (ADV 1103 or 'Y' in CRAD04), and Complete 3 of the following: (ADV 2111 or 'Y' in CRAD07), (ADV 2121 or 'Y' in CRAD08), (ADV 2131 or 'Y' in CRAD09), (ADV 2141 or 'Y' in CRAD10), and (ADV 2151 or 'Y' in CRAD11)

ADV 3008. Television Promotion: On-Air, Online, On Social. 3 Credit Hours.

The course will allow students to develop advertising strategy, produce and air promos, teases, and advertising campaigns for TUTV shows under deadline pressure. Students will also learn to master social media to promote and brand various shows.

Repeatability: This course may not be repeated for additional credits.

ADV 3009. ECHO Competition. 3 Credit Hours.

Now in its 32nd year, the Collegiate ECHO Marketing Challenge gives students the special opportunity to turn theory into practice. It provides hands-on learning and real-world experience. Students are challenged to combine their knowledge, research, and creativity as they work in teams on a marketing assignment from a corporate sponsor, their client.

Department Restrictions: Must be enrolled in one of the following Departments: KCMC:Adv and Public Relations.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ADV 1101 or 'Y' in CRAD02), (ADV 1102 or 'Y' in CRAD03), (ADV 1196 or 'Y' in CRAD05), (ADV 1103 or 'Y' in CRAD04), and Complete 3 of the following: (ADV 2111 or 'Y' in CRAD07), (ADV 2121 or 'Y' in CRAD08), (ADV 2131 or 'Y' in CRAD09), (ADV 2141 or 'Y' in CRAD10), and (ADV 2151 or 'Y' in CRAD11)

ADV 3010. Topics in Advertising 30. 3 Credit Hours.

Arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic.

Repeatability: This course may be repeated for additional credit.

ADV 3011. Data Visualization and Advertising. 3 Credit Hours.

The purpose of this course is to teach you how to communicate effectively using data. You'll learn how to do explanatory analysis and use storytelling techniques to engage, inform, and persuade an audience. In this course, you will be required to present publicly (using data to establish credibility and charts to support your arguments) in efforts to sell your ideas. This course builds on the exploratory analysis techniques taught in Digital Analytics and Reporting, which is a prerequisite for this course. Upon completion of this course, you will be a stronger presenter with a firm handle on data visualization best practices.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ADV 3031 or 'Y' in CRAD14)

ADV 3012. Legal and Moral Issues in Advertising. 3 Credit Hours.

The focus of this course is on the legal and ethical constraints on advertising practice. Federal laws and regulations, media standards and practices and professional ethics establish what can or cannot be said or done in advertising but, after all that, there is corporate and personal social responsibility and morality. Topics include deception, copyright infringement, right of publicity, comparative advertising and moral philosophy. Do not take this course if you have previously successfully completed Advertising 4196.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ADV 1101 or 'Y' in CRAD02), (ADV 1102 or 'Y' in CRAD03), (ADV 1196 or 'Y' in CRAD05), (ADV 1103 or 'Y' in CRAD04), and Complete 3 of the following: (ADV 2111 or 'Y' in CRAD07), (ADV 2121 or 'Y' in CRAD08), (ADV 2131 or 'Y' in CRAD09), (ADV 2141 or 'Y' in CRAD10), and (ADV 2151 or 'Y' in CRAD11)

ADV 3013. The User Experience. 3 Credit Hours.

The User Experience course will explore the art of designing usable, useful and enjoyable human-computer interfaces, with an emphasis on user-centered design techniques. The importance and necessity of effective interaction design techniques will be highlighted, and current design methodologies and principles across multiple platforms will be discussed.

Repeatability: This course may not be repeated for additional credits.

ADV 3022. Copywriting for Print and Web. 3 Credit Hours.

The emphasis of this advanced writing course is on perfecting copywriting skills, encompassing the web, newspapers, magazines, direct mail, and outdoor posters. Students will learn both short and long body copy applications. Students will also learn the characteristics of each medium allowing them to create compelling advertising for these media. Students will learn to combine words and visuals into one coherent message. A knowledge of Adobe InDesign, Adobe Photoshop and/or Adobe Illustrator is suggested. NOTE: Advertising majors and Content Creation minors only.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Advertising, Content Creation.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ADV 2121 or 'Y' in CRAD08)

ADV 3023. Copywriting for Radio, TV and Video. 3 Credit Hours.

The emphasis of this advanced writing course is on perfecting copywriting skills specifically for radio and television and video applications. Students are taught conceptual and production aspects of the broadcast media, including the importance of message, music, sound effects and visual storytelling. The course also enhances students' creative abilities with techniques of script writing, storyboarding and production vocabulary. NOTE: Advertising majors only.

Department Restrictions: Must be enrolled in one of the following Departments: KCMC:Adv and Public Relations.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Advertising.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ADV 2121 or 'Y' in CRAD08)

ADV 3030. Innovations in Advertising Tech. 3 Credit Hours.

This course will provide students with the opportunity to learn data-driven forms of marketing and media planning. Students will learn how digitization is shifting media buying from mass media to personal media, how data powers these transactions and how data can be used to help identify and optimize audiences.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (ADV 2131 or 'Y' in CRAD09) and (ADV 3031 or 'Y' in CRAD14)

ADV 3031. Digital Analytics and Reporting. 3 Credit Hours.

This course will examine how traditional, internet and mobile advertising differ in their ability to track and analyze responses. What key measurement metrics are used by each form of media? What analytic tools are used? What is the impact of social media and electronic word-of-mouth marketing, and how can these be measured? Students will learn key digital measurement terms and methods of analysis.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Account Management, Brand Strategy and Research, Digital Media Engagement, Media Planning, Research and Strategy.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ADV 2111 (may be taken concurrently), ADV 2131 (may be taken concurrently), ADV 2141 (may be taken concurrently), 'Y' in CRAD07, 'Y' in CRAD09, or 'Y' in CRAD10)

ADV 3033. Advertising Sales. 3 Credit Hours.

This course focuses on the development and positioning of media franchises for print and video products, plus the marketing and sale of broadcast and web-based products to consumers and advertisers. All media types are addressed. Students will learn how to articulate and present media vehicles, the conduct of sales calls, and negotiation techniques. For students in the Advertising major's Media Planning and Account Management concentrations only. (Prior to fall 2015, the course title was "Marketing Media Products.")

Department Restrictions: Must be enrolled in one of the following Departments: KCMC:Adv and Public Relations.

Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Account Management, Media Planning.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ADV 2131 (may be taken concurrently), ADV 2111 (may be taken concurrently), 'Y' in CRAD09, or 'Y' in CRAD07)

ADV 3042. Quantitative Advertising Research. 3 Credit Hours.

Delving more closely into the planning and execution of effective quantitative advertising research, the objective of this course is to provide students with direct learning experience through the use of discussion, case studies and projects. Focus is on understanding the uses of quantitative research in the advertising development and tracking process, and executing projects with a specific goal in mind. This course will investigate the design, execution, and analysis of various kinds of surveying, including copy tests and campaign tracking, and is a foundation for students who wish to pursue a career in advertising research and planning. NOTE: Advertising majors only. Must have prerequisite: ADV 1141 (0070).

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ADV 2141, ADV 1141, or 'Y' in CRAD10)

ADV 3043. Qualitative Advertising Research. 3 Credit Hours.

This course will concentrate on the role of qualitative research in advertising. Through the use of discussion, case studies and projects, it focuses on how advertisers and agencies use qualitative methods like focus groups, in-depth interviews, and ethnography to uncover consumer insights. This course will investigate the design and execution of these various kinds of qualitative research techniques, and is a foundation for students who wish to pursue a career in advertising research and planning.

Department Restrictions: Must be enrolled in one of the following Departments: KCMC:Adv and Public Relations.

Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Brand Strategy and Research, Research and Strategy.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ADV 2141 or 'Y' in CRAD10)

ADV 3050. Advanced Topics in Art Direction. 3 Credit Hours.

This course gives upper level art direction students a chance to more deeply explore specific topics in advertising that will help prepare them for a wider range of opportunities post graduation. Students will be given a chance to experience a variety of subject matter, such as creating multimedia advertising specifically on social media, creating motion media and other topics that will give students a creative edge. Topics will vary each semester.

Department Restrictions: Must be enrolled in one of the following Departments: KCMC:Adv and Public Relations.

Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Art Direction.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (ADV 1001 or 'Y' in CRAD01), ADV 2101, and (ADV 3052 or 'Y' in CRAD17)

ADV 3052. Art Direction I: Concept & Layout. 3 Credit Hours.

As the first in the Advertising Art Direction track, students gain a comprehensive understanding of how ideas become branded visual communications that engage, capture and persuade audiences. Through regular lecture, reading and project critique, emphasis is placed on combining the fundamental tools of graphic design with creative brainstorming to arrive at fresh, branded concepts. This course focuses primarily on concept and layout for the print medium, and lays the foundation for Art Direction II. NOTE: Students are expected to be proficient in the computer graphics programs (Adobe Photoshop, Illustrator and InDesign) necessary to produce print work for this course. Students are encouraged to take a computer graphics course before or concurrently with 3052. NOTE: Advertising majors only. REQUIREMENTS: Students must have a working knowledge of Adobe PhotoShop in order to enroll in this course. An overall knowledge of the Adobe Creative Suite is recommended.

Department Restrictions: Must be enrolled in one of the following Departments: KCMC:Adv and Public Relations.

Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Art Direction.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ADV 2151 or 'Y' in CRAD11) and (ADV 1001 (may be taken concurrently), ADV 2001 (may be taken concurrently), 'Y' in CRAD01, or 'Y' in CRAD06)

ADV 3053. Art Direction II: Narrative and Multimedia. 3 Credit Hours.

This course is designed to increase your fluidity with advertising design and conceptualizing in multiple mediums. As the second level course for your Art Direction concentration, this course again focuses on thinking creatively, cleverly, and unconventionally. We will focus on applying these strengths toward working in a variety of both traditional and non-traditional mediums.

Department Restrictions: Must be enrolled in one of the following Departments: KCMC:Adv and Public Relations.

Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Art Direction.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ADV 2151 or 'Y' in CRAD11), (ADV 3052 or 'Y' in CRAD17), and (ADV 1001 (may be taken concurrently), ADV 2001 (may be taken concurrently), 'Y' in CRAD01, or 'Y' in CRAD06)

ADV 3082. Special Projects. 1 to 4 Credit Hour.

A special course of study in a particular area of advertising. Student works under the supervision of faculty, who approves and guides the study.

Repeatability: This course may be repeated for additional credit.

ADV 3101. Creative Thinking for Advertising. 3 Credit Hours.

This course uses team oriented sessions to develop the creative skills necessary for solving advertising problems. A cross discipline approach is utilized and "creatives" from various advertising and non-advertising disciplines participate as guest facilitators and speakers.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (any 2000-level ADV course (may be taken concurrently), CMST 2111, 'Y' in CRAD19, or 'Y' in CRCM02)

ADV 3171. Diamond Edge Communication. 3 Credit Hours.

Student operation of an advertising agency for nonprofit accounts in the Philadelphia market area with advertising faculty supervision. Hands-on learning in creative, media, research and management. Students work in teams to solve real world advertising and marketing communication problems for real clients.

Department Restrictions: Must be enrolled in one of the following Departments: KCMC:Adv and Public Relations.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in ((ADV 3052 and ADV 3053), (ADV 3022 and ADV 3023), (ADV 3031 and ADV 3033), (ADV 3031 and ADV 3043), (ADV 3052 and 'Y' in CRAD18), (ADV 3053 and 'Y' in CRAD17), (ADV 3022 and 'Y' in CRAD13), (ADV 3023 and 'Y' in CRAD12), (ADV 3031 and 'Y' in CRAD15), (ADV 3033 and 'Y' in CRAD14), (ADV 3031 and 'Y' in CRAD16), (ADV 3043 and 'Y' in CRAD14), ('Y' in CRAD17 and 'Y' in CRAD18), ('Y' in CRAD12 and 'Y' in CRAD13), ('Y' in CRAD14 and 'Y' in CRAD15), or ('Y' in CRAD14 and 'Y' in CRAD16))

ADV 3185. Advertising Internship. 1 to 4 Credit Hour.

This course offers hands-on, organized, professional work, under supervision in selected advertising agencies, marketing communications or advertising departments within corporations. NOTE: This course may be substituted for ADV 3171. Open to juniors and seniors only.

Department Restrictions: Must be enrolled in one of the following Departments: KCMC:Adv and Public Relations.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

ADV 3900. Honors Special Topics. 3 Credit Hours.

Honors Special Topics Course in Advertising.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

ADV 4034. Account Management. 3 Credit Hours.

This course teaches the management of the agency-client relationship, involving account executives and brand managers. Students will learn how to adapt to client corporate cultures, cooperative strategy development, account coordination, profit management, people management and the evaluation, presentation and sale of advertising concepts, executions and services. Note: Account Management majors only.

Department Restrictions: Must be enrolled in one of the following Departments: KCMC:Adv and Public Relations.

Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Account Management.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ADV 2111 (may be taken concurrently) or 'Y' in CRAD07), (ADV 3031 (may be taken concurrently) or 'Y' in CRAD14), and (ADV 3033 (may be taken concurrently) or 'Y' in CRAD15)

ADV 4044. Account Planning. 3 Credit Hours.

This course will concentrate on the roles and responsibilities of account planners in advertising. It will focus on how research uncovers consumer insights, and probe how these findings are applied throughout the process of developing marketing communications. The course addresses how account planners work with the creative and management teams to ensure that the voice of the consumer is a constant focus in the advertising process. The course replicates this experience in a brand's lifespan, and provides a hands-on exposure to this multi-faceted career.

Department Restrictions: Must be enrolled in one of the following Departments: KCMC:Adv and Public Relations.

Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Brand Strategy and Research, Research and Strategy.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ADV 2141 or 'Y' in CRAD10), (ADV 3031 (may be taken concurrently) or 'Y' in CRAD14), and (ADV 3043 or 'Y' in CRAD16)

ADV 4054. Advanced Media Planning. 3 Credit Hours.

This advanced course focuses on the art and craft of media planning for large budget brands competing in today's complex media environment. Rooted in a concrete understanding of social communications as economic communications, students explore the conceptual foundations of media planning and produce professional quality media plans. Note: The student cannot receive duplicate credit for this course and ADV 3032.

Department Restrictions: Must be enrolled in one of the following Departments: KCMC:Adv and Public Relations.

Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Media Planning.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ADV 2131 or 'Y' in CRAD09), (ADV 3031 (may be taken concurrently) or 'Y' in CRAD14), and (ADV 3033 (may be taken concurrently) or 'Y' in CRAD15)

ADV 4064. Advertising Portfolio. 3 Credit Hours.

This course brings together copywriters and art directors in two person teams. They work together to create exciting examples of advertising from initial conceptual schemes to comprehensive finished ads. The ads include full treatments of copy and art executed as take-home assignments and discussed in class.

Department Restrictions: Must be enrolled in one of the following Departments: KCMC:Adv and Public Relations.

Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Art Direction, Copywriting.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in ((ADV 3052 and ADV 3053), (ADV 3022 and ADV 3023), (ADV 3052 and 'Y' in CRAD18), (ADV 3053 and 'Y' in CRAD17), (ADV 3022 and 'Y' in CRAD13), (ADV 3023 and 'Y' in CRAD12), ('Y' in CRAD17 and 'Y' in CRAD18), or ('Y' in CRAD12 and 'Y' in CRAD13))

ADV 4102. Advertising Campaigns. 3 Credit Hours.

This capstone course involves the preparation and production of an advertising campaign for a brand or service. Competing teams of students produce marketing analysis, consumer research, advertising strategies, media plans, and design and produce print advertisements and broadcast commercials.

Department Restrictions: Must be enrolled in one of the following Departments: KCMC:Adv and Public Relations.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in ((ADV 3031 and ADV 3033), (ADV 3022 and ADV 3023), (ADV 3031 and ADV 3043), (ADV 3052 and ADV 3053), (ADV 3031 and 'Y' in CRAD15), (ADV 3033 and 'Y' in CRAD14), (ADV 3022 and 'Y' in CRAD13), (ADV 3023 and 'Y' in CRAD12), (ADV 3031 and 'Y' in CRAD16), (ADV 3043 and 'Y' in CRAD14), (ADV 3052 and 'Y' in CRAD18), (ADV 3053 and 'Y' in CRAD17), ('Y' in CRAD14 and 'Y' in CRAD15), ('Y' in CRAD12 and 'Y' in CRAD13), ('Y' in CRAD14 and 'Y' in CRAD16), or ('Y' in CRAD17 and 'Y' in CRAD18))

ADV 4103. National Student Advertising Competition. 3 Credit Hours.

Students develop a comprehensive marketing and advertising campaign for a major advertiser and compete with universities across America for first place in this National College Competition. Teams work under supervision of advertising faculty in researching the account and in developing strategy, creative and media. This is an alternative Capstone course. NOTE: Selection for the NSAC team is a highly competitive process. Students must apply and are registered only with the permission of the instructor. Students are not required to take the NSAC Strategy and Positioning course (ADV 3003: NSAC Preparation) to enroll in ADV 4103.

Department Restrictions: Must be enrolled in one of the following Departments: KCMC:Adv and Public Relations.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (2 3000-level ADV courses (may be taken concurrently) or 'Y' in CRAD20)

ADV 4196. Morality, Law and Advertising. 3 Credit Hours.

The focus of this course is on the legal and ethical constraints on advertising practice. Federal laws and regulations, media standards and practices and professional ethics establish what can or cannot be said or done in advertising but, after all that, there is corporate and personal social responsibility and morality. Topics include deception, copyright infringement, right of publicity, comparative advertising and moral philosophy.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (2 3000-level ADV courses (may be taken concurrently), CMST 2111, 'Y' in CRAD20, or 'Y' in CRCM02)

ADV 4197. Advanced Writing for Academic and Professional Communication. 3 Credit Hours.

Throughout your career, you will discover that your ability to evaluate arguments, write persuasively and communicate clearly will help determine how successful you are in your chosen profession. In this course, we will explore and study a variety of writing styles including both academic writing and business communication. You will learn how to readily switch from one voice or writing style to another. This course will build on the knowledge students acquired in ADV 1196, Persuasive Writing.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ADV 1101 or 'Y' in CRAD02), (ADV 1102 or 'Y' in CRAD03), (ADV 1196 or 'Y' in CRAD05), (ADV 1103 or 'Y' in CRAD04), and Complete 3 of the following: (ADV 2111 or 'Y' in CRAD07), (ADV 2121 or 'Y' in CRAD08), (ADV 2131 or 'Y' in CRAD09), (ADV 2141 or 'Y' in CRAD10), and (ADV 2151 or 'Y' in CRAD11)

ADV 4571. International Studies in Media and Communication. 1 to 6 Credit Hour.

This course is an immersive study of media and communication institutions, practices, norms, societal, governmental, and legal structures in a culture outside of the U.S. that is conducted during a Klein GO! program. Klein faculty lead students, while living abroad, in media consumption, in comparative analysis and evaluation of media and non-mediated communication, in interaction with local media and communication leaders in the program location. The specific aspects of media and communication to be covered will vary from city to city, and semester to semester, depending on the events of the day. Available only to student participating in a Klein GO! Program.

Repeatability: This course may be repeated for additional credit.

ADV 4882. Independent Study. 1 to 4 Credit Hour.

Supervised reading, research, report or special project on an advanced level related to advertising management, media, research or creative.

Repeatability: This course may be repeated for additional credit.

Aerospace Studies - Air Force ROTC (AIRF)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

AIRF 1011. Foundations of the United States Air Force I. 1 Credit Hour.

A survey course designed to introduce students to the United States Air Force and Air Force Reserve Officer Training Corps. Featured topics include: mission and organization of the Air Force, officership and professionalism, military customs and courtesies, Air Force career opportunities, group leadership problems, and an introduction to communication skills. Leadership Laboratory is mandatory for Air Force ROTC cadets, and it complements this course by providing cadets with hands-on experience. NOTE: This course is taken at Saint Joseph's University. There is a \$100 per semester hour fee payable to Saint Joseph's University. Please call 610-660-3190 or visit www.sju.edu/academics/cas/afrotc for more information.

Repeatability: This course may not be repeated for additional credits.

AIRF 1012. Air Force Leadership Laboratory I. 0 Credit Hours.

LLAB is an interactive environment that constitutes up to 50 percent of the contact hours of the AFROTC college curriculum. It is an integral part of preparing cadets to serve as Air Force officers. LLAB provides the opportunity for cadets to practice their officership and develop leadership and management techniques. LLAB centers on the organized cadet wing where activities are planned and conducted by cadets and supervised by detachment officers. NOTE: This course is taken at Saint Joseph's University. Please call 610-660-3190 or visit www.sju.edu/academics/cas/afrotc for more information.

Repeatability: This course may be repeated for additional credit.

AIRF 1021. The Foundation of the United States Air Force II. 1 Credit Hour.

A survey course designed to introduce students to the United States Air Force and Air Force Reserve Officer Training Corps. Featured topics include: Air Force Core Values, teambuilding, interpersonal communications, diversity, and the Oath of Office. Leadership Laboratory is mandatory for Air Force ROTC cadets, and it complements this course by providing cadets with followership experiences. NOTE: This course is taken at Saint Joseph's University. There is a \$100 per semester hour fee payable to Saint Joseph's University. Please call 610-660-3190 or visit www.sju.edu/academics/cas/afrotc for more information.

Repeatability: This course may not be repeated for additional credits.

AIRF 1022. Air Force Leadership Laboratory II. 0 Credit Hours.

LLAB is an interactive environment that constitutes up to 50 percent of the contact hours of the AFROTC college curriculum. It is an integral part of preparing cadets to serve as Air Force officers. LLAB provides the opportunity for cadets to practice their officership and develop leadership and management techniques. LLAB centers on the organized cadet wing where activities are planned and conducted by cadets and supervised by detachment officers. NOTE: This course is taken at Saint Joseph's University. Please call 610-660-3190 or visit www.sju.edu/academics/cas/afrotc for more information.

Repeatability: This course may be repeated for additional credit.

AIRF 2031. The Evolution of U.S. Aerospace Power I. 1 Credit Hour.

A survey course designed to facilitate the transition from Air Force ROTC cadet to Air Force ROTC officer candidate. Featured topics include: Air Force heritage, Air Force leaders, an introduction to ethics and values, introduction to leadership, group leadership problems, and continuing application of communication skills. Leadership Laboratory is mandatory for Air Force ROTC cadets, and it complements this course by providing cadets with their first opportunity for applied leadership experiences discussed in class. NOTE: This course is taken at Saint Joseph's University. There is a \$100 per semester hour fee payable to Saint Joseph's University. Please call 610-660-3190 or visit www.sju.edu/academics/cas/afrotc for more information.

Repeatability: This course may not be repeated for additional credits.

AIRF 2041. The Evolution of U.S. Aerospace Power II. 1 Credit Hour.

A survey course designed to facilitate the transition from Air Force ROTC cadet to Air Force ROTC officer candidate. Featured topics include: Air Force heritage, Air Force leaders, an introduction to ethics and values, introduction to leadership, group leadership problems, and continuing application of communication skills. Leadership Laboratory is mandatory for Air Force ROTC cadets, and it complements this course by providing cadets with their first opportunity for applied leadership experiences discussed in class. NOTE: This course is taken at Saint Joseph's University. There is a \$100 per semester hour fee payable to Saint Joseph's University. Please call 610-660-3190 or visit www.sju.edu/academics/cas/afrotc for more information.

Repeatability: This course may not be repeated for additional credits.

AIRF 3011. Air Force Leadership Studies I. 3 Credit Hours.

This course is a study of leadership and quality management fundamentals, professional knowledge, Air Force doctrine, leadership ethics, and communication skills required of an Air Force junior officer. Case studies are used to examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts being studied. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences in officer-type activities, giving students the opportunity to apply leadership and management principles of this course. NOTE: This course is taken at Saint Joseph's University. There is a \$100 per semester hour fee payable to Saint Joseph's University. Please call 610-660-3190 or visit www.sju.edu/academics/cas/afrotc for more information.

Repeatability: This course may not be repeated for additional credits.

AIRF 3021. Air Force Leadership Studies II. 3 Credit Hours.

This course is a study of leadership and quality management fundamentals, professional knowledge, Air Force doctrine, leadership ethics, and communication skills required of an Air Force junior officer. Case studies are used to examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts being studied. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences in officer-type activities, giving students the opportunity to apply leadership and management principles of this course. NOTE: This course is taken at Saint Joseph's University. There is a \$100 per semester hour fee payable to Saint Joseph's University. Please call 610-660-3190 or visit www.sju.edu/academics/cas/afrotc for more information.

Repeatability: This course may not be repeated for additional credits.

AIRF 4031. National Security Affairs I. 3 Credit Hours.

This course examines the national security process, regional studies, advanced leadership ethics, and Air Force doctrine. Special topics of interest focus on the military as a profession, officership, military justice, civilian control of the military, preparation for active duty, and current issues affecting military professionalism. Within this structure, continued emphasis is given to refining communication skills. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences, giving students the opportunity to apply the leadership and management principles of this course. NOTE: This course is taken at Saint Joseph's University. There is a \$100 per semester hour fee payable to Saint Joseph's University. Please call 610-660-3190 or visit www.sju.edu/academics/cas/afrotc for more information.

Repeatability: This course may not be repeated for additional credits.

AIRF 4041. National Security Affairs II. 3 Credit Hours.

This course examines the national security process, regional studies, advanced leadership ethics, and Air Force doctrine. Special topics of interest focus on the military as a profession, officership, military justice, civilian control of the military, preparation for active duty, and current issues affecting military professionalism. Within this structure, continued emphasis is given to refining communication skills. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences, giving students the opportunity to apply the leadership and management principles of this course. NOTE: This course is taken at Saint Joseph's University. There is a \$100 per semester hour fee payable to Saint Joseph's University. Please call 610-660-3190 or visit www.sju.edu/academics/cas/afrotc for more information.

Repeatability: This course may not be repeated for additional credits.

Africology and African American Studies (AAAS)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

AAAS 0829. The History & Significance of Race in America. 3 Credit Hours.

Why were relations between Native Americans and whites violent almost from the beginning of European settlement? How could slavery thrive in a society founded on the principle that "all men are created equal"? How comparable were the experiences of Irish, Jewish, and Italian immigrants, and why did people in the early 20th century think of them as separate "races"? What were the causes and consequences of Japanese Americans' internment in military camps during World War II? Are today's Mexican immigrants unique, or do they have something in common with earlier immigrants? Using a variety of written sources and outstanding documentaries, this course examines the racial diversity of America and its enduring consequences. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: African American Studies 0829, Africology and African American Studies 0829, Anthropology 0829, Geography and Urban Studies 0829, History 0829, Political Science 0829/0929, Sociology 0829, 0929, 1376, 1396, R059, or X059.

Course Attributes: GD, SI

Repeatability: This course may not be repeated for additional credits.

AAAS 0834. Representing Race. 3 Credit Hours.

From classical Greeks and Romans, who saw themselves under siege by the "barbarian hordes," to contemporary America and its war on "Islamic extremism," from "The Birth of a Nation" to "Alien Nation," Western societies have repeatedly represented some group of people as threats to civilization. This course will examine a wide range of representations of non-Western people and cultures in film, literature, scientific and legal writings, popular culture and artistic expression. What is behind this impulse to divide the world into "us" and "them"? How is it bound up with our understanding of race and racial difference? And what happens when the "barbarian hordes" talk back? NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed African American Studies 0834, Anthropology 0834/0934, Asian Studies 0834, English 0834/0934, or History 0834.

Course Attributes: GD, SI

Repeatability: This course may not be repeated for additional credits.

AAAS 0857. Sport & Leisure in American Society. 3 Credit Hours.

Explore the complexity and diversity of American society through the study of sport and leisure. To what extent does the way we play or spectate sports, the way we plan or experience leisure time, reflect American values? As we trace a brief history of the United States through the lens of sport and leisure, we will observe how concepts of freedom, democracy and equality are tested through time. Issues of race, ethnicity, gender, age, disability, and socio-economic class will be prominent as we observe American ideals both upheld and contradicted in the context of the way Americans recreate. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed AAS 0857, STHM 0857, SOC 0857 or REL 0957.

Course Attributes: GU

Repeatability: This course may not be repeated for additional credits.

AAAS 1124. Elementary Yoruba. 3 Credit Hours.

An introductory course in the understanding, reading, and speaking of Yoruba, an African language that has had a major impact on the African cultures of Brazil, Haiti, Cuba, Puerto Rico, Jamaica, and the United States. Students will be taught grammar, vocabulary, and conversation in the language.

Repeatability: This course may not be repeated for additional credits.

AAAS 1125. Elementary Hausa. 3 Credit Hours.

An introductory course in the understanding, reading and speaking of Hausa, a language spoken by more than 70 million people in West Africa. Students will be taught grammar, vocabulary, and conversation in the language.

Repeatability: This course may not be repeated for additional credits.

AAAS 1152. Introduction to African Aesthetics. 3 Credit Hours.

An overview of the cultural experience of African peoples. An examination of the culture of peoples in Africa, America, and the Caribbean in a comprehensive and structurally integrated manner. An introduction to Black aesthetics and the interrelationship of the humanities in African American Studies. Designed to acquaint students with important historical and philosophical investigations of the creative process and to explore interrelationships, similarities, and differences in the various cultural expressions of African peoples.

Repeatability: This course may not be repeated for additional credits.

AAAS 1253. Blacks in World History. 3 Credit Hours.

Prerequisite for all history courses to be applied to the major. An introduction to the entire field of Black history, both in Africa and the New World. A basic course, comprehensive in scope, to provide a firm grounding for students interested in taking subsequent history courses.

Repeatability: This course may not be repeated for additional credits.

AAAS 1261. Africa in the 20th Century. 3 Credit Hours.

A summary of the major political, economic, social, and cultural developments in Africa since 1900. The impact of indigenous and foreign philosophies on industrialization, urbanization, and peasantization during the 20th century. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors.

Course Attributes: IS

Repeatability: This course may not be repeated for additional credits.

AAAS 1268. African American History Since 1900. 3 Credit Hours.

A general treatment of the turbulent 20th century in African American history. Attention given to the rise of the Ku Klux Klan, the anti-lynching campaigns, northern migration, the Marcus Garvey Movement, the Harlem Renaissance, and the Civil Rights Movement. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AC, SI

Repeatability: This course may not be repeated for additional credits.

AAAS 1271. Urban Black Politics. 3 Credit Hours.

This course examines Black political activity in cities--the socio-historical condition of Blacks in cities; the city within the larger political arena; the nature of urban politics/politicians, and the place and future of Blacks in urban politics with a particular emphasis on Philadelphia.

Repeatability: This course may not be repeated for additional credits.

AAAS 1500. Special Topics. 3 Credit Hours.

Arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic.

Repeatability: This course may be repeated for additional credit.

AAAS 1968. Honors Africa in the 20th Century. 3 Credit Hours.

A summary of the major political, economic, social, and cultural developments in Africa since 1900. The impact of indigenous and foreign philosophies on industrialization, urbanization, and peasantization during the 20th century. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, IS

Repeatability: This course may not be repeated for additional credits.

AAAS 2044. The Black Church. 3 Credit Hours.

This course is an exploration of the significant role the Black Church has played in creating an African American response to social, political, and economic obstacles and barriers in America. "Black Church" is defined broadly as African descended communities of spiritual worship, including but not limited to Christian, Islamic and Indigenous/African-derived religious groups. Students will be introduced to some of the African cosmologies that informed the worldview of people who were forcibly removed from their homelands and dispersed across the globe and enslaved in the Americas.

Repeatability: This course may not be repeated for additional credits.

AAAS 2058. African American Music I. 3 Credit Hours.

An overview of the history, spirituality and sociology of African/African-American music, with main emphasis on important and dynamic forms, styles and concepts that have formed the core of African and African American music culture. Distinct themes and phenomena that define African/Black music will be presented and discussed. The goal of this course is to develop critical thinking and writing skills during our exploration of the origins, themes, and direction of African/African-American music in the context of Black politics, history and culture.

Repeatability: This course may not be repeated for additional credits.

AAAS 2100. Special Topics. 3 Credit Hours.

Arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic.

Repeatability: This course may be repeated for additional credit.

AAAS 2111. Tupac Shakur and the Hip Hop Revolution. 3 Credit Hours.

Rapper, Tupac Amaru Shakur (June 16, 1971 - September 13, 1996) has been described as one of the most influential personalities in the history of Hip-Hop music and culture. His early years as a child of The Black Panther Party for Self Defense provided a unique political insight and edge to his music. Posthumously, Shakur continues to sell millions of records and inspire millions of listeners internationally and his increasing reputation as a pivotal figure has been acknowledged by some of the major African American philosophers. This course will explore the charismatic, conscious and controversial artist in terms of his poetic influence on issues such as Black Power, pain, poverty, and the rhetoric of Black Consciousness.

Repeatability: This course may not be repeated for additional credits.

AAAS 2131. Creative Writing Workshop. 3 Credit Hours.

This course provides an opportunity for students to explore and develop their writing talents under the influence and direction of an established writer. African and African American subjects, themes, and materials used. Students read works of African American writers.

Repeatability: This course may not be repeated for additional credits.

AAAS 2133. The African American Lesbian, Gay, Bisexual, Transgender Experience. 3 Credit Hours.

With advancement made through the modern civil rights movement and the emergence of progressive views on sexuality in contemporary society, African American lesbian, gay, bisexual, transgender, and questioning LGBTQs individuals have made gains in social mobility and recognition. However, homophobia, heterosexism, sexism, and racism continue to intersect within the lives of African American LGBTQs, shaping the way in which they are perceived and interact within the larger society. This upper level undergraduate course explores the experiences of African American (LGBTQ) individuals through an interdisciplinary approach. The course enlists both narratives and empirically based research in conceptualizing the experiences of African American LGBTQs within the United States. While not limited to a specific theoretical perspective; students will be expected to understand the experiences of African American LGBTQs using conceptual frameworks informed by the use of an intersectional analysis.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

AAAS 2134. The Literature of American Slavery. 3 Credit Hours.

Slaves, slave owners, and abolitionists, men and women, perceived slavery in distinctive ways and recorded those perceptions in songs and poems, folk tales, autobiographical narratives and novels, speeches and tracts, travel accounts, journals, diaries, and letters. Through an examination of this rich oral and written literature, such themes as the character of slave culture, the relations between slaves and masters, the oppression of women under slavery, and the connection between abolitionism and feminism are explored. Lectures provide historical background and a context in which to read the selections.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

AAAS 2142. The Black Male Experience. 3 Credit Hours.

This course will review and analyze experiences of African American men from a variety of perspectives. This will allow students to look at contemporary African American male and examine factors that have contributed to his present condition including: examination of the black male within the present social system, their role in ghetto and street culture, the status and role performances of black fathers and the historical and contemporary myths about the physiology and biology of African American males.

Repeatability: This course may not be repeated for additional credits.

AAAS 2151. History of Blacks in Cinema. 3 Credit Hours.

An overview of the history of Black Cinema and the portrayals of persons of African descent in cinema from the early 1900s to the present, including developments from Hollywood, independent filmmakers, and experimental foreign films. Treats in depth the story of race movies and contemporary trends such as the independent Black film movement in the African Diaspora and the United States.

Repeatability: This course may not be repeated for additional credits.

AAAS 2165. History and Culture of the Caribbean. 3 Credit Hours.

This course presents a historical survey of the cultural, economic, and political developments of the Caribbean people from the enslavement and colonial periods to independence and post-independence with particular emphasis on Haiti, Jamaica, Guyana, Trinidad-Tobago, Barbados, and the Bahamas. Students will explore the historical and cultural roots of contemporary Caribbean societies, as well as the main discourses on Caribbean identity, nationality, and culture. It is expected that by the end of the semester students should have a sound knowledge of the history and culture of the Caribbean and should be able to establish parallels between the Caribbean experiences and that of other Diasporic Africans.

Repeatability: This course may not be repeated for additional credits.

AAAS 2168. African Americans in Sports. 3 Credit Hours.

This course examines the issues surrounding African Americans in the world of sports. The course will highlight African American pioneers in sports and the historical context of their struggle, study the events which helped break racial barriers in sports, examine the socio-cultural influence of the African American Athletes, study African American culture and the role and significance of sports in it, and observe current African American Athletes. The course will also study the contribution of sports in facilitating change in the larger racial and social context of African Americans in American Society.

Repeatability: This course may not be repeated for additional credits.

AAAS 2175. Hip Hop and Black Culture. 3 Credit Hours.

Hip Hop and Black Culture will lead its students into an in-depth analysis of hip-hop culture, hip-hop music, other cultural expressions that contributed to the culture's development and evolution, as well as the relevance of hip-hop's role as the preeminent modern black aesthetic. The primary focus of the course is to provide a comprehensive foundation for understanding the relevance of hip-hop's role in the modern African-American experience, its representation and misrepresentation of African Americans as well as its role as a vehicle of expression that articulates cultural norms translated into socially acceptable sounds.

Repeatability: This course may not be repeated for additional credits.

AAAS 2200. Topics in African-American Studies. 3 Credit Hours.

Arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic.

Repeatability: This course may be repeated for additional credit.

AAAS 2201. African Civilization. 3 Credit Hours.

A survey of Africa's contributions to world history and civilization from 5000 B.C. to 1800 A.D. An intensive analysis of the major issues in African civilization.

Repeatability: This course may not be repeated for additional credits.

AAAS 2205. Black Politics in America. 3 Credit Hours.

An introduction to the fundamental concepts and principles of American government and politics, with a focus on the ways in which American political institutions have influenced and have been influenced by Black Americans' quest for political self-determination.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

AAAS 2208. Black Folklore: African and African-American. 3 Credit Hours.

An overview of the folk literature and oratory of African peoples on the African continent and in the Americas. Covers tales, stories, myths, and proverbs, and their function in society. Brer Rabbit, Ananse, the Flying African, High John de Conquerer, John Henry, Shine, and many other characters are examined.

Repeatability: This course may not be repeated for additional credits.

AAAS 2211. African Politics. 3 Credit Hours.

This course is intended to provide students with the necessary historical background to understand and analyze socio-political issues in African society. Topics to be covered will include: the pre-colonial political systems, causes and effects of enslavement and colonialism, liberation movements, and independence.

Repeatability: This course may not be repeated for additional credits.

AAAS 2218. Psychology of the African American Experience. 3 Credit Hours.

Examines contemporary perspectives and research on the African experience in America and the relationship of that experience to social and psychological functioning among African Americans. The course also examines the origins of some of the traditional psychological theories about persons of African descent, and examines emerging theories shaped by new perspectives.

Repeatability: This course may not be repeated for additional credits.

AAAS 2242. Afrocentricity. 3 Credit Hours.

This is an intellectual inquiry into the origin, critiques, and arguments surrounding African agency in social, political, psychological, and economic contexts. Consequently the course concentrates on the concepts of centeredness, cultural location, orientation, and historical disorientation. Students will study the origin and evolution of Afrocentricity and its relationship to Negritude, Quilombismo, Kawaida, Pan Africanism, and Postmodernism. Students engage in an expansive reading and location of theoretical and critical texts such as responses to forms of intellectual marginalization and cultural oppression. Authors such as Asante, Chinweizu, Diop, Karenga, and Mazama are analyzed in the contexts of on-going African and African American struggles for liberation from all hegemony. Note: This course was previously offered as AAAS 1252 and students will not be able to receive duplicate credit for both courses.

Repeatability: This course may not be repeated for additional credits.

AAAS 2248. Public Policy and the Black Community. 3 Credit Hours.

This course examines the various dimensions of public policies and their impacts on the Black community in the United States. Using historical, economic, political, sociological and psychological analytic lenses, students will analyze policy within a systems framework, being sure to engage the domains of economics, education, criminal justice, housing and health care. Students will engage/interact with Philadelphia participants in the policy-making process, and will debate key policy issues highlighted during this course.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

AAAS 2251. Mass Media and the Black Community. 3 Credit Hours.

An examination of the role mass media plays in the African American community. Ownership, access, and image making are a few of the topics discussed. The aim is to develop an appreciation and awareness of the role media play in shaping opinions.

Repeatability: This course may not be repeated for additional credits.

AAAS 2255. Introduction to Research Methods. 3 Credit Hours.

Introduction to basic methods of research and methodological issues in African American Studies. This course provides an overview of social research methods, addresses sociocultural issues in research conceptualization, operationalization and design, and introduces basic analytic concepts and operations. Students work in small groups to design an original, IRB-compliant multi-method study to address an issue that local communities deem important to their quality of life. NOTE: Offered during Fall semester only. Students should complete AAAS 4096 in the Spring immediately after this course.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (AAAS 1296 or AAAS 2296)

AAAS 2296. Introduction to Africology. 3 Credit Hours.

This course offers a multidimensional and critical discussion of the history, philosophy and seven core subject areas, [i.e., (1) history; (2) religion; (3) sociology; (4) politics; (5) economics; (6) creative production - art, music, literature; and (7) psychology] of the discipline of Africology (Black Studies, African American Studies, Africana Studies). In its dedication to cultural grounding, academic excellence and social responsibility, the discourse and practice of the discipline are informed by four basic concerns: (1) the critical and persistent search for meaning and truth in history and social reality; (2) a rigorous intellectual challenge to established ways of viewing social and human reality; (3) a moral critique of the social constraints of human freedom, especially those rooted in race, class and gender considerations; and (4) cultivation of commitment to the historical project of creating a truly multicultural, democratic and just society based on mutual respect of persons or peoples and mutual cooperation for mutual benefit. Undergirding these four basic concerns is the insistence on discovering the agency of African people within their own experiences. Note: This course was previously offered as AAAS 1296, and credit for this course will only be given one time. Students who take 2296 after completing 1296 will not receive duplicate credit.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

AAAS 2405. Introduction to Afro-Jewish Studies. 3 Credit Hours.

This course will introduce students to the study of African and African-Diaspora Jews. Students will examine and critically assess the various past and present methods used to study Africana Jewish communities. The research and readings will provide students with a basic introduction to Afro-Jewish history, culture and religion. It will also analyze the effects of race and racism on the construction of Afro-Jewish identities.

Repeatability: This course may not be repeated for additional credits.

AAAS 2934. Honors Literature of American Slavery. 3 Credit Hours.

Slaves, slave owners, and abolitionists, men and women, perceived slavery in distinctive ways and recorded those perceptions in songs and poems, folk tales, autobiographical narratives and novels, speeches and tracts, travel accounts, journals, diaries, and letters. Through an examination of this rich oral and written literature, themes such as the character of slave culture, the relations between slaves and masters, the oppression of women under slavery, and the connection between abolitionism and feminism are explored. Lectures provide historical background and a context in which to read the selections. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, RS, SI

Repeatability: This course may not be repeated for additional credits.

AAAS 3000. Special Topics. 3 Credit Hours.

Topics vary from semester to semester. Please check with the faculty advisor for a course description and topic.

Repeatability: This course may be repeated for additional credit.

AAAS 3010. Special Topics in African Languages. 3 Credit Hours.

Languages vary by semester. Please consult with the instructor and/or check the course schedule for specific topic.

Repeatability: This course may be repeated for additional credit.

AAAS 3176. Contemporary Black Poets. 3 Credit Hours.

An examination of the major works of contemporary poets of African descent. Students are introduced to the writings of poets such as Sonia Sanchez, Amiri Baraka, Rita Dove, Askia Toure, Audre Lorde, June Jordan, Quincy Troupe, Michael Harper, Atukwei Okai, Haki Madhubuti, Gwendolyn Brooks, Mari Evans and other selected African American poets.

Repeatability: This course may not be repeated for additional credits.

AAAS 3205. The Black Woman. 3 Credit Hours.

This course will review and analyze experience and representation of African American women from a variety of feminist, psychological, and African-centered perspectives. Students will apply theoretical and research findings from selected scholarly and anecdotal sources to understanding the unique challenges of African-American women's treatment and methods of coping, resistance, and survival in legal, educational and social systems steeped in racism, sexism, homophobia and patriarchy. Class assignments (e.g., reaction, papers, group project.) will help students develop the skills necessary to communicate effectively and professionally, in both oral and written form, about these important issues.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

AAAS 3215. Languages and Cultures of West Africa. 3 Credit Hours.

This course is an introduction to the indigenous languages and cultures of West African peoples. Aspects of their geographical locations, history, social organization, worldview, values, customs, oral traditions, and communities will be discussed. A review of the impact of major historical events on these languages, and on their speakers' life styles, identity, and customs will be undertaken. The role of these languages in the development of African and African-Caribbean languages and cultures will also be examined. In the latter part of the course, students will be introduced to the basic structure of these languages, and will be taught how to read, write, and speak some phrases in each language. The course will focus on location, worldview, history and culture as contexts for the three major languages chosen from Akan, Bamanankan (Bambara/Mande/Mandinka/Mandingo), Ewe, Fulfude (Fulani), Ga, Hausa, Wolof, and Yoruba. This is not a languages course per se, but a course about the relationship between culture, customs, and language.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in AAAS 2201.

AAAS 3257. Black Social and Political Thought. 3 Credit Hours.

The thoughts and philosophies of Black leaders as they relate to the struggle of Black people for liberation. Covers individuals such as Frederick Douglass, Booker T. Washington, W.E.B. DuBois, Huey P. Newton, Ella Baker, Angela Davis, Ida B. Wells, Fannie Lou Hamer, Malcolm X, Marcus Garvey, Nkrumah, Toure, Shirley Chisolm, A. Philip Randolph and Dr. Martin Luther King, Jr. and other Black thinkers.

Repeatability: This course may not be repeated for additional credits.

AAAS 3268. Critical Readings in African American History. 3 Credit Hours.

Using primary source material and with special attention to the United States, students will examine the African experience in the Americas from the 14th century to the present. Movements, periods, events and people that represent major social, economic and political African American thought will be surveyed.

Repeatability: This course may not be repeated for additional credits.

AAAS 3271. History of Pan-African Thought. 3 Credit Hours.

A study of the works and thoughts of Sylvester Williams, W.E.B. DuBois, Kwame Nkrumah, Julius Nyerere, M.K.O. Adiola, and others. Analysis of the Pan African Congresses from 1919 to 1987.

Repeatability: This course may not be repeated for additional credits.

AAAS 3296. The Black Family. 3 Credit Hours.

This course examines historical and contemporary issues relevant to the functioning of African American families. Students write critiques of selected text chapters and work in small groups to interview local community members; use interview and other research sources to develop and implement a community action plan (CAP) for improving some aspect of family life.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

AAAS 4000. Special Topics. 3 Credit Hours.

Topics vary from semester to semester. Please check with the faculty advisor for a course description and topic.

Repeatability: This course may be repeated for additional credit.

AAAS 4082. Independent Study. 3 Credit Hours.

Field research in an African American Studies issue. Each student identifies a task in a problem area and develops a research project around it. Student must first find a faculty member to supervise the project and must submit written details about the project to the department chair for approval in advance of registration for the course.

Repeatability: This course may be repeated for additional credit.

AAAS 4091. Junior/Senior Directed Research. 1 to 3 Credit Hour.

In-depth study of a specific topic central to the discipline of African American Studies for two consecutive semesters. Culminates in a concise, well-documented senior essay paper.

Repeatability: This course may be repeated for additional credit.

AAAS 4096. Senior Seminar. 3 Credit Hours.

A seminar-style course in which seniors demonstrate, through their participation in a variety of activities, their mastery of knowledge bases, skills and concepts central to the discipline and critical to post-baccalaureate opportunity. Students also work in small groups to conduct, analyze, write and publicly present the social research studies they designed in AAS 2255 or AAAS 2255: Introduction to Research Methods and each student submits a Senior Portfolio that contains documents and demonstrates skills commonly expected/demanded of new college graduates. NOTE: Capstone course for majors. Offered in Spring only.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Africology + African Amer St, African American Studies.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in AAAS 2255.

AAAS 4115. Black Aesthetics. 3 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

AAAS 4146. Women Writers in Black Literature. 3 Credit Hours.

A comparative exploration of the nature, form, themes, and techniques of major Black women writers from Africa, the U.S., and the Caribbean.

Repeatability: This course may not be repeated for additional credits.

AAAS 4161. Studies in African-American Literature. 3 Credit Hours.

This course is an examination of African American literary forms with certain emphasis on poetry, drama, fiction, and autobiography. Texts from earlier decades and contemporary movements are included. The aim is to develop an understanding and appreciation of African American literary experience. Phillis Wheatley, Zora Neale Hurston, Langston Hughes, Richard Wright, Amiri Baraka, Maya Angelou, Toni Morrison, Chester Himes, James Baldwin, Henry Dumas, Paul Laurence Dunbar, John Killens, Wallace Thurman, Ann Petry, Alice Walker, Bebe Moore Campbell, and Nikki Giovanni are among writers whose works are studied.

Repeatability: This course may not be repeated for additional credits.

AAAS 4221. The Black Child: Development and Socialization. 3 Credit Hours.

A study of the development and socialization of the African American child. Discussion of family, peer group relationships, formal and informal education, and early racial consciousness.

Repeatability: This course may not be repeated for additional credits.

AAAS 4248. Dimensions of Racism. 3 Credit Hours.

The course will explore interracial interactions from an African centered conceptual framework. It will examine various theoretical approaches to racial prejudice and will analyze the prejudiced personality. The course will examine the historical growth of racism and racist thought as well as seek common explanations for and effects of racism on African Americans. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: RS, SI

Repeatability: This course may not be repeated for additional credits.

AAAS 4389. Seminar in Community Service. 3 Credit Hours.

Seminar in Community Service allows African American Studies majors to acquire hands-on experience in, and provide unpaid on-site services to, a community-based agency, organization, or program selected and pre-screened by the instructor. The selected community site must provide a significant social service to the larger community. Students will spend Phase I of the course in class reading and discussing empirical and theory-based literature relevant to the services provided by the instructor-selected site. Students will spend Phase II in service to the agency, and will return to the classroom in Phase III to deliver the final report--an empirically-based research report analyzing agency goals and processes, and where appropriate, making evidence-based suggestions for improving agency policy as it affects successful delivery of services.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (AAAS 2248 and AAAS 2255)

American Studies (AMST)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

AMST 0801. Philadelphia Arts & Culture. 4 Credit Hours.

What and where is the real Philadelphia? How can we get past the clichés to better understand and experience the city's historic and legendary sense of itself? For more than three centuries, Philadelphia's unique identity has been defined and redefined by a prodigious and prolific creative community: painters, sculptors, writers, performers, architects, planners, thinkers, and more. We'll explore Philadelphia's evolving sense of itself through a broad range of examples of creative works from the 17th through the 20th centuries. And through this prism of expression, and the institutions that present and protect it, we'll develop a deep understanding of Philadelphia as one of the nation's most creative cities. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed American Studies 0901.

Course Attributes: GA

Repeatability: This course may not be repeated for additional credits.

AMST 0847. American Military Culture. 3 Credit Hours.

You live in a country that possesses the world's strongest military forces. Up through the Vietnam War, Americans viewed military service in wartime as a basic obligation for all adult male citizens - the ultimate test of their patriotism and manhood - but a temporary sacrifice that ceased for most on the return of peace. Today, the American people have outsourced their awesome war-making power to a restricted number of men and women - many of whom consider military service their career. We will explore the distinctive culture that shapes the composition and behavior of America's armed forces and probe how it reflects the strengths and weaknesses of American society. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed History 0847.

Course Attributes: GU

Repeatability: This course may not be repeated for additional credits.

AMST 0848. American Revolutions. 3 Credit Hours.

From the first encounters with Native Americans to the present, a series of pivotal moments have had an enduring influence on American society, culture, and politics. In each class, three modules will focus on three pivotal moments, such as King Philip's War, Nat Turner's Rebellion, the Scopes trial, the Civil Rights movement, the women's movement, the emergence of Elvis Presley, the sexual revolution, the rise of environmentalism, the Reagan Revolution, and 9-11. In each module, students will first place the main subject of the module in context, and then seek to understand how it changed American society. The last week of each module will be devoted to a consideration of how the subject of that module has become part of American collective memory. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0848 or History 0848.

Course Attributes: GU, SI

Repeatability: This course may not be repeated for additional credits.

AMST 0855. Why care about College: Higher Education in American Life. 3 Credit Hours.

You have decided to go to college. But why? What role will college and in particular Temple University play in your life? Reflect on this important question by looking at the relationship between higher education and American society. What do colleges and universities contribute to our lives? They are, of course, places for teaching and learning. They are also research centers, sports and entertainment venues, sources of community pride and profit, major employers, settings for coming-of-age rituals (parties, wild times, courtship, etc.), and institutions that create lifetime identities and loyalties. Learn how higher education is shaped by the larger society and how, in turn, it has shaped that society. Become better prepared for the world in which you have chosen to live for the next few years. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed Educational Administration 0855 or English 0855.

Course Attributes: GU

Repeatability: This course may not be repeated for additional credits.

AMST 0859. The Making of American Society: Melting Pot or Culture Wars?. 3 Credit Hours.

Terrorism, illegal immigration, gay marriage, religious conflict, political in-fighting, corporate corruption, racial animosities, civil liberties assaults, media conglomeration, Wal-Mart goes to China and the rich get richer. America in the 21st Century is a contentious society. How did we get to this place in time? Examine what makes American society distinctive from other advanced industrial democracies as we study the philosophical origins of America, the development of social and economic relationships over time, and the political disputes dominating contemporary American life. The course relies heavily on perspectives from History, Sociology and Political Science to explain the challenges facing contemporary American society. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: History 0859, PHIL 0859, POLS 0859, or SOC 0859.

Course Attributes: GU, SI

Repeatability: This course may not be repeated for additional credits.

AMST 0862. First Person America. 3 Credit Hours.

Examine the private and public lives of a diverse cast of Americans over a long sweep of the nation's history. Along the way, look at how fundamental conflicts - between the local and the national, freedom and equality, inclusion and exclusion, community and the individual - have driven U.S. history from its very beginnings, how they have shaped these individual lives and how these individuals have molded the debates. Learn to use a range of sources - including autobiographies, biographies, memoirs, personal narratives, profiles, bio-pics, self-portraits, visual and performance pieces - as you investigate these American stories and American tensions. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed AMST 0962.

Course Attributes: GU

Repeatability: This course may not be repeated for additional credits.

AMST 0901. Honors: Philadelphia Arts and Culture. 4 Credit Hours.

What and where is the real Philadelphia? How can we get past the clichés to better understand and experience the city's historic and legendary sense of itself? For more than three centuries, Philadelphia's unique identity has been defined and redefined by a prodigious and prolific creative community: painters, sculptors, writers, performers, architects, planners, thinkers, and more. We'll explore Philadelphia's evolving sense of itself through a broad range of examples of creative works from the 17th through the 20th centuries. And through this prism of expression, and the institutions that present and protect it, we'll develop a deep understanding of Philadelphia as one of the nation's most creative cities. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed American Studies 0801.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GA, HO

Repeatability: This course may not be repeated for additional credits.

AMST 0962. Honors: First Person America. 3 Credit Hours.

Examine the private and public lives of a diverse cast of Americans over a long sweep of the nation's history. Along the way, look at how fundamental conflicts - between the local and the national, freedom and equality, inclusion and exclusion, community and the individual - have driven U.S. history from its very beginnings, how they have shaped these individual lives and how these individuals have molded the debates. Learn to use a range of sources - including autobiographies, biographies, memoirs, personal narratives, profiles, bio-pics, self-portraits, visual and performance pieces - as you investigate these American stories and American tensions. (This is an Honors course.) NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed AMST 0862.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GU, HO

Repeatability: This course may not be repeated for additional credits.

AMST 1042. Work in America. 3 Credit Hours.

A broad discussion of work in the United States, which takes a historical look at worker-management relationships, the organization of workplaces, the experiences of ordinary workers, and the experiences of different groups of people (e.g., ethnic minorities) in the workplace. The course will provide students with a perspective on major historical and cultural developments in the U.S. from the late 19th century to the present, using primary documents, literature, and secondary readings on the nature of work in America. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AC

Repeatability: This course may not be repeated for additional credits.

AMST 1901. Honors American Lives. 3 Credit Hours.

This course is an introduction to American Studies through the study of autobiographical writings--life stories--that give us insight into American values, conditions, aspirations, and conflicts. By looking closely at these American lives, students will meet people of various periods and backgrounds and become familiar with the way history has shaped lives, and the way individuals have both created and resisted the forces of change. The conflicting images and realities of American society will be explored. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: AC, HO

Repeatability: This course may not be repeated for additional credits.

AMST 2001. Tourism in America. 3 Credit Hours.

A booming multinational industry, tourism is a powerful medium of transnational encounter. There is hardly a place on earth not part of the recreational geography of tourism. In practical terms, tourism is seen as an engine of economic growth both in the cities and in the countryside. While it moves people from one place to another, tourism produces itself with ever-greater complexity. This course will undertake an analysis of tourist productions, including tourist discourse, settings, events, experiences, and artifacts. An exemplary case of cultural invention and commodification, tourism is implicated in the histories of pilgrimage, travel, colonialism, and ethnography, retracing their trips and replicating their discourse. As a result, tourism offers some of the richest material for exploring the semiosis of cultural production on a global scale. In this course, therefore, we will pay special attention to the political economy of tourism as seen through a close analysis of actual sites.

Repeatability: This course may not be repeated for additional credits.

AMST 2003. The American Sexual Past. 3 Credit Hours.

This course will explore the history of sexuality in America. The purpose of this course is to familiarize the student with important historical events/periods in the development of sexuality in the United States and major themes and issues in the American cultural history of sex and sexuality. Its purpose is to survey the ways in which sexuality has changed and shifted over the course of colonial and American history. It will also connect sexuality to the social, political, and economic realities that helped to shape it in different eras. The focus of the course will consist of major themes that illuminate aspects of sexuality in colonial and American culture and history. These may include, but are not limited to: censorship, family and sex, marriage and sex, female sexuality, male sexuality, homosexuality, birth control, bisexuality, the state use of sterilization, transgender/transsexual sexuality, sex workers, sexually transmitted infections, and sex in the media and arts. The approach taken in the class will cut across racial, class, gender, transgender, and ethnic boundaries. In order to better understand our own society, it is necessary to be aware of events that shaped the world as we know it today.

Repeatability: This course may not be repeated for additional credits.

AMST 2011. The Arts in America. 3 Credit Hours.

This course will examine the place of the arts in contemporary America, with an emphasis on the politics of culture. We will take a broad view of "art," encompassing popular arts, high arts, and what's in between. And we will look at some examples of how artists and writers have functioned within the contemporary art environment, and within a popular culture and material environment that undermines distinctions between reality and fantasy and between past and present (e.g., Disneyland). Representative figures will be examined from various art forms (literature, music, architecture, painting, photography) within an interdisciplinary context.

Repeatability: This course may not be repeated for additional credits.

AMST 2012. American Things: Introduction to Material Culture. 3 Credit Hours.

The things we produce are fraught with cultural meaning, from the household object to the building to the automobile. This course explores the meanings of things through a historical examination of objects, both handmade and manufactured. The way things have served as repositories of meaning, and as expressions of social class, gender, and ethnicity, will be explored through discussion and observation.

Repeatability: This course may not be repeated for additional credits.

AMST 2021. Philadelphia Neighborhoods. 3 Credit Hours.

Students will be introduced to the development of the city of Philadelphia as seen from a neighborhood perspective. From Colonial times to the present, neighborhood and community are the primary means by which the city's residents experienced the growth and change of the Philadelphia metropolitan area. Using archival resources over the World Wide Web, as well as the rich historical legacy of the region's museums, students will explore the development of the city's neighborhoods.

Repeatability: This course may not be repeated for additional credits.

AMST 2022. Museums and American Culture. 3 Credit Hours.

The museum holds itself to the preserver of cultural memory, yet museums as we know them are a 19th century invention. Their function as shapers of cultural practice and national identity will be explored through this course, which takes us up to the present, when museums have reached out to represent communities that were previously excluded from the elite culture of museums. How museums work as classifiers of knowledge, how they represent culture, as commodity and experience, will also form part of the course. Cross-Listed with ANTH 2022. Students may only receive credit for one of the following course numbers: ANTH 2022 or AMST 2022.

Repeatability: This course may not be repeated for additional credits.

AMST 2031. Radicalism in the United States. 3 Credit Hours.

A study of issues and traditions in the history of radical thought and behavior. Emphasizing the 20th century, the course focuses on major social contexts and ideologies such as anarchism, militant unionism, socialism, and communism, each of which has had a long and vibrant history in the U.S.

Repeatability: This course may not be repeated for additional credits.

AMST 2041. Technology and American Culture. 3 Credit Hours.

This course explores the way American values have shaped technology and how technology has shaped American life, placing contemporary problems in a historical perspective. Materials are drawn from social history, literature, visual arts, film, advertising, and polemical prose. May also include working with collections at the Franklin Institute.

Repeatability: This course may not be repeated for additional credits.

AMST 2051. American Places: Home, City, Region. 3 Credit Hours.

This course explores the importance of place in determining the character of American culture. A variety of materials, visual and textual, are used to examine the way our lives are shaped by the home, the design of the city, and the suburban and regional areas beyond the city. The extent to which places hold their identities in the face of mass culture and megalopolis is also explored.

Repeatability: This course may not be repeated for additional credits.

AMST 2052. The Class Experience in America. 3 Credit Hours.

This course surveys the enduring importance of class in the United States as well as the enduring myth of American classlessness. We will start with the myths themselves, where they came from and how they were constructed. From there, we will examine theories of social class (in some ways attempts to explain why the myths weren't true) and efforts to objectively measure poverty, inequality, and the distribution of wealth. At the outset, we will also examine social mobility patterns and how these objective categories of class are related to race, region, sex, and gender. We will then spend time looking at how class is lived and how it is represented in the larger culture. We will explore how social class shapes the daily lives of ordinary Americans in cities, suburbs, small towns, and rural hinterlands through such things as housing, community, work, leisure activities, shopping tastes, dress, diet, language, education, and family. We will examine how class has been represented, reproduced, and contested, in literature, art, music, film, television, and the broader popular culture.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

AMST 2061. American Music. 3 Credit Hours.

This class is designed as a survey course that looks at the cultural, historical, technological, industrial, artistic, and mythic attributes of American Music, primarily from after the Civil War until the present. The 20th century is highlighted, with special emphasis on the period from the 'Tin Pan Alley' era to today. Definitions of 'American' music and 'Popular' music will be discussed and analyzed. Movie musicals, soundies, concert films, and videos will be studied as well as audio recordings. Attention will be paid to socio-historical ramifications of American popular music as a cultural force and cultural expression.

Repeatability: This course may not be repeated for additional credits.

AMST 2065. Global America. 3 Credit Hours.

This distance-learning course is designed to help students examine the United States' role in the modern, industrial, and then, post-industrial world. At the same time, we will look at how the larger world shaped the United States and individual citizens. We will do this through a topics based approach. Each week, moving in roughly chronological order, we will explore a discreet and revealing interaction between the United States - whether this side of the equation is represented by the government, corporate leaders, or culture brokers - and another part of the world - and this side might be other nations, groups of people, or intellectual concepts. Not only will students encounter a broad range of contacts on a wide front, but they will also be asked to write and think about each of these topics and moments from a broad and wide range of different vantage points.

Repeatability: This course may not be repeated for additional credits.

AMST 2071. Immigrant Experiences in America. 3 Credit Hours.

A study of major issues concerning immigrant experience in the U.S., such as legislation regarding immigration, anti-immigrant social and political movements, immigrant efforts to assimilate (or to resist assimilation, or to accommodate to one degree or another). Students will be provided with basic history of the subject. They will also read accounts of life in the U.S. by immigrants and fiction about immigrant experiences. Most of the course will stress 20th century immigration.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

AMST 2072. Puerto Ricans in Philadelphia. 3 Credit Hours.

Puerto Ricans constitute the second largest Hispanic group in the country. This course examines the specific community of Puerto Ricans in Philadelphia and its relationship with other racial and ethnic groups and the social, political, and economic situation of Puerto Ricans in the city. Note: This course is equivalent to LAS 2072; students may receive credit for either AMST 2072 or LAS 2072.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

AMST 2098. Reading Culture. 3 Credit Hours.

As an introduction to the methods and scope of American Studies, Reading Culture will present an in-depth, interdisciplinary look at either a defined period in the American past, or a specific social or political movement or moment. Subjects could include, for example, the 1920s, the American Civil War era, the Civil Rights movement, McCarthyism, or the AIDS epidemic in the US. Our purpose will be to explore how culture in its many forms and manifestations shaped how people lived their daily lives and created meaning in a specific moment or set of circumstances. How was culture formed by the context, and how was the context created by cultural production? Particular emphasis will be placed on looking at the relationship, and even the disconnect, between different kinds of culture - knowledge production and education, visual culture, including art, photography, and film, music, landscapes, and built environments. In order to do that, we will learn how to read, broadly construe, and understand how different cultural forms convey messages and how distinct ways of seeing and hearing relate to other cultural forms. Through discussion, research, and writing, class members will investigate these varied dimensions of culture. They will learn to understand them in their broader social, aesthetic, ethical, and political contexts. In addition, this class, as an introduction, will prepare students to take more advanced courses in American Studies. This is also a writing-intensive class, so students will be engaged in extensive and varied writing (and rewriting) assignments and projects that will help them to hone these crucial skills.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CLA 2096 or any AMST course numbered 2000 to 4999)

AMST 2107. Asian American Experiences. 3 Credit Hours.

An introduction to the varied historical and contemporary experiences of Chinese, Japanese, Filipino, Korean, South, and Southeast Asian immigrants and their descendants in the United States. Explores economic, social, political, and cultural developments, beginning with the arrival of the Chinese in the 1830s and ending with the experiences of Asian-American immigrants and their communities today. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. Note: This course is cross-listed with Asian Studies 2107, History 2107, and Sociology 3223. Students may only receive credit for one of these courses: ASST 2107, AMST 2107, HIST 2107, or SOC 3223.

Course Attributes: RS

Repeatability: This course may not be repeated for additional credits.

AMST 2108. Growing Up in America. 3 Credit Hours.

This course will examine the changing perception and experience of growing up in the United States from colonial times to the present, assuming that childhood and adolescence are social constructions that change over time. The course will explore the emergence of childhood and adolescence as distinct stages in the life cycle, the evolving role of the family in the process of growing up, and the increasing importance of social institutions other than the family in the lives of the young. Particular attention will be paid to the difference between growing up rich or poor, black or white, male or female, and rural or urban. Finally, it will consider the reciprocal relationship between popular culture and the lives of young Americans.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

AMST 2120. Topics in American Culture. 3 Credit Hours.

A special topics course, used for materials and approaches to American Studies that are either experimental in nature or not yet a regular part of the curriculum. NOTE: Course content varies and students can obtain a description of the current version at the American Studies office.

Repeatability: This course may be repeated for additional credit.

AMST 2217. The Vietnam War. 3 Credit Hours.

An attempt to probe one of the most significant and controversial episodes of American history. Beginning with the history of Vietnam since the 19th century, including the preceding Indochina Wars, this course will explore the impact of the Vietnam War of the '60s and '70s on the domestic and international scenes, together with its multiple legacies to later American culture. Will make use of television and film from the period. Note: This course is cross-listed with Asian Studies 2217 and History 2217. Students may only receive credit once for these courses: AMST 2217, ASST 2217, or HIST 2217.

Repeatability: This course may not be repeated for additional credits.

AMST 2742. Work in America. 1 Credit Hour.

Work - labor - stands at the very center of the American story. The nation was settled by people looking for work. That was true in the past and it is true today. This class, then, examines work and the meaning of work from Jamestown to the advent of McWorld. How has work changed over time? How have perceptions of laborers shifted over the last 300 hundred years? Students will explore labor-management relations, the organization of work, the experience of ordinary workers, and the lives of different groups of workers - millhands, immigrant farm laborers, clerical workers, and fast food employees. In the end, this course will use primary and secondary sources to provide students with a broad historical and cultural understanding of the nature of work and the American experience. NOTE: Offered at Temple University Japan only.

Repeatability: This course may not be repeated for additional credits.

AMST 2818. American Icons. 3 Credit Hours.

The Statue of Liberty. Lincoln. Barbie. Route 66. Disneyland. Elvis. Ali. These are all American Icons. This course will explore iconic images of America as a way to understand the central myths, promises, and ideas behind the nation - ideas about freedom, individuality, democracy, mobility, second chances, masculinity and femininity, race and class. Each unit will focus on an individual icon, its origins, what it represented, and how this representation has changed over time and place. The course will invite a critical analysis of these icons and their economic and cultural impact in a global context.

Repeatability: This course may not be repeated for additional credits.

AMST 2900. Honors Topics in American Culture. 3 Credit Hours.

A special topics course, used for materials and approaches to American Studies that are either experimental in nature or not yet a regular part of the curriculum. NOTE: Course content varies and students can obtain a description of the current version at the American Studies office.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

AMST 2901. Honors Quest for the American Dream. 3 Credit Hours.

This class examines the quest for the American dream among the many populations of America by looking at its consequences for the Native American, for the African American, and for the immigrant Chinese, Italians, and Puerto Ricans. Members of all these ethnic groups will be interviewed to try to understand their perspectives.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

AMST 2941. Honors Technology and American Culture. 3 Credit Hours.

This course explores the way American values have shaped technology and how technology has shaped American life, placing contemporary problems in a historical perspective. Materials are drawn from social history, literature, visual arts, film, advertising, and polemical prose. May also include working with collections at the Franklin Institute. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, SB

Repeatability: This course may not be repeated for additional credits.

AMST 2951. Honors American Places: Home, City, Region. 3 Credit Hours.

This course explores the importance of place in determining the character of American culture. A variety of materials, visual and textual, are used to examine the way our lives are shaped by the home, the design of the city, and the suburban and regional areas beyond the city. The extent to which places hold their identities in the face of mass culture and megalopolis is also explored.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

AMST 3006. The American Woman: Visions and Revisions. 3 Credit Hours.

An examination of images and roles of women in American culture. Using fiction, poetry, and autobiography, we develop an understanding of stereotypes and myths and we relate these images to the real-life experiences of American women. The readings include all classes and many ethnic groups, and focus primarily on the 20th century. NOTE: Students will receive credit only once for either AMST 3096, AMST 3006, GSWS 3096, or GSWS 3006.

Repeatability: This course may not be repeated for additional credits.

AMST 3011. Photography in America. 3 Credit Hours.

An overview of the history of photography in America from its beginning in the 1840s to the present, emphasizing its relation to society and the arts. The course will cover both documentary and aesthetic movements, including such figures as Brady, Muybridge, Riis, Hine, Evans, Stieglitz, Steichen, Strand, Robert Frank, Diane Arbus, Duane Michals, Cindy Sherman, etc. The cultural meaning of the Civil War, of westward expansion, of the Great Depression, of the Civil Rights movement, will be studied in relation to photography. Slides and readings on photography and American culture and on how the camera affects our seeing and thinking.

Repeatability: This course may not be repeated for additional credits.

AMST 3012. Film and American Society. 3 Credit Hours.

This course explores the way visual media (film, video, television) have in various ways recorded or documented the social and historical "reality" of American life. A number of issues will be explored: What is the place of documentary within American society, as information and as entertainment? And why are we so attracted to it? How close to "reality" can visual media come? How does documentary compare with non-documentary film in its effort to represent American culture and history?

Repeatability: This course may not be repeated for additional credits.

AMST 3021. Historic Preservation in Philadelphia. 3 Credit Hours.

This course uses Philadelphia as a case study to show how history can be read from the fabric of a city and why and how we go about preserving these buildings and structures. We will trace Philadelphia history from the counting houses and markets of the Colonial period through the factories of the 19th century, up to the automobile-oriented architecture of today. Students will become familiar with the battles to save our built history with the use of tax credits, easements, and the historic registers. NOTE: The class may include several walking tours of Philadelphia.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

AMST 3022. Architecture, Urban Design, and American Culture. 3 Credit Hours.

An exploration of ways U.S. cities have been physically shaped over the past 100 years, paying special attention to the leading movements and theories concerning the growth and design of urban space. Readings are from topics such as: Olmsted and the park movement; the city beautiful movement; the modern city and the skyscraper; Lewis Mumford and the garden city movement; the organic city of Jane Jacobs; the postmodern city of Robert Venturi; the dystopian city. In addition to studying the literature of cities, the class explores Philadelphia as a case study, with students developing techniques of observation and analysis, in an effort to understand the city of Philadelphia within the broader framework of thinking about American cities.

Repeatability: This course may not be repeated for additional credits.

AMST 3031. Political Protest and Culture in the '60s. 3 Credit Hours.

Many see the 1960s as a time America fell apart - drugs, sex, anti-Americanism, and the loss of the work ethic. Yet the '60s produced the Civil Rights Movement, the anti-Vietnam War Movement, a revolution in music, Vatican II, and the Counterculture. Martin Luther King, the Kennedys, Marilyn Monroe, and the astronauts - fame and untimely death. What was it like when America still had hope? How did it change us as a society and not change us? Why are so many still so angry about all that or miss it?

Repeatability: This course may not be repeated for additional credits.

AMST 3032. Literature and Political Change. 3 Credit Hours.

A study of significant works of fiction, poetry and non-fiction that voice concerns of the alienated and the dispossessed with emphasis on the struggle against conformity and for social and economic justice from the Great Depression to the election of Ronald Reagan. Some research required. NOTE: Equivalent to English 2114 (0152).

Repeatability: This course may not be repeated for additional credits.

AMST 3033. Courtroom in American Society. 3 Credit Hours.

This course will examine the relationship between our legal system and American society. Does the law shape social mores or is it merely a reflection of them? What role should the court play in protecting individual rights? We will study the evolution of American jurisprudence in the area of abortion, affirmative action, freedom of expression, separation of church and state, and examine emerging areas of legal debate including the right to same sex marriage, the legalization of prostitution and the constitutionality of Megan's law.

Repeatability: This course may not be repeated for additional credits.

AMST 3041. Contemporary Trends in the American Workplace. 3 Credit Hours.

This course will focus on the development of new work arrangements, the attitudes of employees toward their jobs or careers, work expectations and rewards, and issues having to do with the meanings of work in the lives of individuals. "Contemporary trends" is intended to provide students with a clear perspective on what they can expect in their years at work.

Repeatability: This course may not be repeated for additional credits.

AMST 3051. American Frontiers. 3 Credit Hours.

Reexamined from the perspective of the late 20th century, the American frontier becomes contested terrain between diverse groups of settlers and natives. With a geographic focus on America west of the Mississippi, this course looks at elements that were used to construct the myth of the frontier and the many elements that were left out. It incorporates Euro-American women, and persons of Latin American heritage, Asians, African Americans, and especially Native Americans into the story of the frontier of the 19th century and the west of the 20th.

Repeatability: This course may not be repeated for additional credits.

AMST 3061. Media and American Popular Culture. 3 Credit Hours.

This course will explore the role of media in the development of American popular culture, with particular emphasis on the cultural transformations brought about by mass media after 1880. Historical analysis will demonstrate the profound shift in media roles within the past century; from media expressions of popular culture before 1889, to media as generators of popular culture after that point. A by-product of this analysis will be the formulation of a critical definition of mass media in terms of a specific relationship between the media and the audience.

Repeatability: This course may not be repeated for additional credits.

AMST 3071. African American Experiences. 3 Credit Hours.

A survey of historical, social, political, and cultural developments in African American experience in the U.S. Topics include: enslavement, the Civil War and Reconstruction, Harlem Renaissance, Garveyism, the great migration, depression and labor unions, the New Deal and the WPA, African-American involvement in the nation's wars, Civil Rights, Black Power, black arts movement, and Black Panthers. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: RS

Repeatability: This course may not be repeated for additional credits.

AMST 3074. Introduction to Asian American Literature. 3 Credit Hours.

Asian American literature will be considered from the perspective of the social, political, and economic experiences of Asian Americans. Prose, poetry, fiction, and plays will be read from an interdisciplinary perspective, through examinations of writers such as Sui Sin Far, Carlos Bulosan, Toshio Mori, Mary Paik Lee, Frank Chin, Bharati Mukherjee, Maxine Hong Kingston, Amy Tan, and Sara Suleri.

Repeatability: This course may not be repeated for additional credits.

AMST 3075. Literature of American Slavery. 3 Credit Hours.

What kinds of arguments did people use to attack - and support - slavery, and what difference did those literatures make? This course examines the intersection of persuasive writing and the institution of slavery from 1680 to the Civil War, with a special focus on the antebellum period, when the problem of slavery came to occupy a central role in American politics and American literature. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: RS

Repeatability: This course may not be repeated for additional credits.

AMST 3082. Independent Study. 1 to 4 Credit Hour.

The student devises a program for independent study with his advisor and an instructor. Designed for those students whose research interests are not met in any established course. NOTE: Special authorization required for all students. Interested students should first consult with the Director of American Studies.

Repeatability: This course may be repeated for additional credit.

AMST 3089. Field Work in American Studies. 1 to 4 Credit Hour.

The Field Study internship offers students the opportunity to relate academic interests to a variety of cultural and civic institutions in the Philadelphia area. Individual readings and a final report or research paper provide a perspective on American culture. NOTE: Each three credits earned normally requires ten hours of work per week (during the summer sessions the number of hours is doubled) under faculty and institutional supervision. Interested students should first consult with the Director of American Studies.

Repeatability: This course may be repeated for additional credit.

AMST 3101. Latino Identity in the United States. 3 Credit Hours.

Latino Identity in the U.S. is a general survey of the cultural-historical experiences of Latinos in the United States from pre-colonization to the present with concentration on the time period of the civil rights movement to the present. The course will explore the impact of Latinos in U.S. cultural-history and artistic expressions, across all disciplines; specifically on how this impact has reflected itself in the development of Latino identity formation and how Latinos fit within race/ethnic/gender cultural politics in the United States. Note: This course is equivalent to LAS 3101; students may receive credit for either AMST 3101 or LAS 3101.

Repeatability: This course may not be repeated for additional credits.

AMST 3120. Topics in American Culture. 3 Credit Hours.

A special topics course, used for presenting material and approaches to American Studies that are either experimental in nature or not yet a regular part of the curriculum. NOTE: Course content varies and students can obtain a description of the current version at the American Studies office.

Repeatability: This course may be repeated for additional credit.

AMST 3931. Honors Political Protest and Culture in the 60's. 3 Credit Hours.

Many see the 1960s as a time America fell apart - drugs, sex, anti-Americanism, and the loss of the work ethic. Yet the '60s produced the Civil Rights Movement, the anti-Vietnam War Movement, a revolution in music, Vatican II, and the Counterculture. Martin Luther King, the Kennedys, Marilyn Monroe, and the astronauts - fame and untimely death. What was it like when America still had hope? How did it change us as a society? And not change us? Why are so many still so angry about all that or miss it!

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

AMST 4097. Senior Seminar in American Studies. 3 Credit Hours.

The capstone class required of all American Studies majors. Open to others with permission of the Director of American Studies. Students write a major paper. Should be taken in the Fall of the senior year. NOTE: This is a Capstone writing course. Special authorization required for all students. Interested students should first consult with the Director of American Studies.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

AMST 4098. Senior Independent Study. 1 to 4 Credit Hour.

Students who, because of special circumstances, are unable to take 4097 (formerly W393) in the Fall of senior year may fulfill the Capstone requirement through an independent study. The senior essay will be written on a topic or theme related to the student's program of study. NOTE: American Studies majors only. Special authorization required for all students. Interested students should first consult with the Director of American Studies.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Anthropology (ANTH)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ANTH 0814. Human Ecology. 3 Credit Hours.

The study of human ecology focuses on understanding how ecosystems affect, and are affected by, human biology, behavior, technology and social organization. Students will learn about basic ecological principles, and the way humans have adapted both culturally and biologically to different ecosystems. We will explore ecological models for the origin of human cooperation, human cultural diversity and social complexity - and investigate how limited ecosystem resources ignite competition among humans and human groups. We will review the evidence for significant past environmental changes caused by people living in simple societies; and how ancient civilizations often caused irreparable collapses of their ecosystem. We will conclude by examining modern climate change, and the impact that recent changes have had on resources in different ecosystems, as well as on the sustainability of local indigenous societies and nation states. NOTE: Students cannot receive credit for this course if they have successfully completed GUS 0814.

Course Attributes: GB, SE, SF, SS

Repeatability: This course may not be repeated for additional credits.

ANTH 0815. Language in Society. 3 Credit Hours.

How did language come about? How many languages are there in the world? How do people co-exist in countries where there are two or more languages? How do babies develop language? Should all immigrants take a language test when applying for citizenship? Should English become an official language of the United States? In this course we will address these and many other questions, taking linguistic facts as a point of departure and considering their implications for our society. Through discussions and hands-on projects, students will learn how to collect, analyze, and interpret language data and how to make informed decisions about language and education policies as voters and community members. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0915, Asian Studies 0815, Chinese 0815, CSCD 0815, EDUC 0815/0915, English 0815, Italian 0815, PSY 0815, Russian 0815, or Spanish 0815.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

ANTH 0817. Youth Cultures. 3 Credit Hours.

Do you listen to hip hop, spend all your time in Second Life, dress up like a cartoon character and go to anime fairs, or go skateboarding every day with your friends? Then you're part of the phenomenon called youth culture. Often related to gender, race, class and socio-economic circumstances, youth cultures enable young people to try on identities as they work their way to a clearer sense of self. Empowered by new technology tools and with the luxury of infinite virtual space, young people today can explore identities in ways not available to previous generations. Students in this class will investigate several youth cultures, looking closely at what it means to belong. They will also come to appreciate how the media and marketing construct youth identities and define youth cultures around the world. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed ASST 0817, EDUC 0817/0917 or SOC 0817.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

ANTH 0825. Quantitative Methods in the Social Sciences. 4 Credit Hours.

Psychological, political, social, and economic arguments and knowledge frequently depend on the use of numerical data. A psychologist might hypothesize that I.Q. is attributable to environmental or genetic factors; a politician might claim that hand gun control legislation will reduce crime; a sociologist might assert that social mobility is more limited in the United States than in other countries, and an economist might declare that globalization lowers the incomes of U.S. workers. How can we evaluate these arguments? Using examples from psychology, sociology, political science, and economics, students will examine how social science methods and statistics help us understand the social world. The goal is to become critical consumers of quantitative material that appears in scholarship, the media, and everyday life. NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed SOC 0825, SOC 0925, POLS 0825, POLS 0925, or PSY 0825.

Course Attributes: GQ

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 0701, MATH 0702, 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC3A, 'Y' in MC6A, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

ANTH 0829. The History & Significance of Race in America. 3 Credit Hours.

Why were relations between Native Americans and whites violent almost from the beginning of European settlement? How could slavery thrive in a society founded on the principle that "all men are created equal"? How comparable were the experiences of Irish, Jewish, and Italian immigrants, and why did people in the early 20th century think of them as separate "races"? What were the causes and consequences of Japanese Americans' internment in military camps during World War II? Are today's Mexican immigrants unique, or do they have something in common with earlier immigrants? Using a variety of written sources and outstanding documentaries, this course examines the racial diversity of America and its enduring consequences. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: African American Studies 0829, Africology and African American Studies 0829, Anthropology 0829, Geography and Urban Studies 0829, History 0829, Political Science 0829/0929, Sociology 0829, 0929, 1376, 1396, R059, or X059.

Course Attributes: GD, SI

Repeatability: This course may not be repeated for additional credits.

ANTH 0831. Immigration and the American Dream. 3 Credit Hours.

As a Temple student, you go to school and live in a city full of immigrants. Perhaps your own relatives were immigrants to the United States. But have you ever listened to their stories? With an historical and sociological framework as a basis, we will take an in-depth and more personal look at the immigrant experience as expressed through the immigrants' own voices in literature and film. Topics explored include: assimilation, cultural identity and Americanization, exploitation and the American Dream, ethnic communities, gender, discrimination and stereotyping. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: CRIT 0831, History 0831, Italian 0831/0931, Russian 0831, SOC 0831, or SPAN 0831/0931.

Course Attributes: GD, SI

Repeatability: This course may not be repeated for additional credits.

ANTH 0833. Race & Poverty in the Americas. 3 Credit Hours.

The transatlantic slave trade was one of the most brutal and momentous experiences in human history. Attitudes toward Latino, Caribbean, African, and Asian immigrants in the United States today can only be fully understood in the contexts of slavery and the "structural racism," "symbolic violence" (not to mention outright physical violence), and social inequalities that slavery has spawned throughout the region. Although focusing primarily on the United States, we will also study the present entanglements of poverty and race in Brazil, Haiti, and other selected nations of "The New World," placing the U.S. (and Philadelphia in particular) experience in this historical context. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed LAS 0833/0933, REL 0833/0933, or SOC 0833.

Course Attributes: GD, SI

Repeatability: This course may not be repeated for additional credits.

ANTH 0834. Representing Race. 3 Credit Hours.

From classical Greeks and Romans, who saw themselves under siege by the "barbarian hordes," to contemporary America and its war on "Islamic extremism," from "The Birth of a Nation" to "Alien Nation," Western societies have repeatedly represented some group of people as threats to civilization. This course will examine a wide range of representations of non-Western people and cultures in film, literature, scientific and legal writings, popular culture and artistic expression. What is behind this impulse to divide the world into "us" and "them"? How is it bound up with our understanding of race and racial difference? And what happens when the "barbarian hordes" talk back? NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed African American Studies 0834, Africology & African American Studies 0834, Anthropology 0934, Asian Studies 0834, English 0834/0934, or History 0834.

Course Attributes: GD, SI

Repeatability: This course may not be repeated for additional credits.

ANTH 0856. Evolution of Culture. 3 Credit Hours.

The roots of many contemporary cultures around the globe reach deep into human history. This course examines the evolution of these cultures through the use of paleoanthropological and archaeological data ranging from 2.5 million years ago through the beginnings of written history. Topics include the initial emergence and development of culture, the growth and expansion of human populations, the origins and dispersals of food production (particularly agriculture) and the rise and collapse of early civilizations. In addition we will examine the persistence of hunter-gatherers and other small-scale societies into the 19th and 20th centuries using ethnological data as well as the lessons to be learned from the successes and failures of early civilizations for predicting the future of the modern world. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

ANTH 0867. World Regions and Cultures: Diversity and Interconnections. 3 Credit Hours.

What is globalization? Are we now all citizens of a global capitalist economic and truly international political order? Or do we still live mostly under the economic constraints and governmental policies of the nation states of which we are citizens? How do different regions of the world experience and negotiate cultural continuity and change in different ways due to their distinctive historical and political-economic experiences? Focusing on different regions of the world, we will investigate how cultures and societies are connected to each other, how they relate to each other, and how they compare or contrast with each other. In particular, we will examine topics such as economic development, urbanization, immigration, labor, neoliberalism, citizenship, religion, gender, democracy and human rights. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: Anthropology 0867, 1061, C061, Geography and Urban Studies 0867, or Sociology 0867.

Course Attributes: GG, SF

Repeatability: This course may not be repeated for additional credits.

ANTH 0915. Honors Language in Society. 3 Credit Hours.

How did language come about? How many languages are there in the world? How do people co-exist in countries where there are two or more languages? How do babies develop language? Should all immigrants take a language test when applying for citizenship? Should English become an official language of the United States? In this course we will address these and many other questions, taking linguistic facts as a point of departure and considering their implications for our society. Through discussions and hands-on projects, students will learn how to collect, analyze, and interpret language data and how to make informed decisions about language and education policies as voters and community members. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Anthropology 0815, Asian Studies 0815, Chinese 0815, CSCD 0815, EDUC 0815/0915, English 0815, Italian 0815, PSY 0815, Russian 0815, or Spanish 0815.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GB, HO

Repeatability: This course may not be repeated for additional credits.

ANTH 0934. Honors Representing Race. 3 Credit Hours.

From classical Greeks and Romans, who saw themselves under siege by the "barbarian hordes," to contemporary America and its war on "Islamic extremism," from "The Birth of a Nation" to "Alien Nation," Western societies have repeatedly represented some group of people as threats to civilization. This course will examine a wide range of representations of non-Western people and cultures in film, literature, scientific and legal writings, popular culture and artistic expression. What is behind this impulse to divide the world into "us" and "them"? How is it bound up with our understanding of race and racial difference? And what happens when the "barbarian hordes" talk back? NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed African American Studies 0834, Africology & African American Studies 0834, Anthropology 0834, Asian Studies 0834, English 0834/0934, or History 0834.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GD, HO, SI

Repeatability: This course may not be repeated for additional credits.

ANTH 1009. Discovering Anthropology. 1 Credit Hour.

This course is designed to allow students to explore Anthropology as a possible major and/or career path. It introduces the field of Anthropology in general and, subsequently, the sub-fields of the discipline (Sociocultural Anthropology, Linguistics, Biological Anthropology, Archaeology), and the specialized tracks that exist within the department (Human Biology and Visual Anthropology) in addition to the general anthropology major. Career paths and opportunities will be discussed and students will develop hypothetical course plans for a B.A. in Anthropology and subsequent career plans in conjunction with the faculty member/advisor in charge of the course. Students will sample departmental functions, may sit in on a class of a selected course, participate in a field trip, or attend a relevant lecture or public presentation at area museums or professional gatherings.

Repeatability: This course may not be repeated for additional credits.

ANTH 1055. Introduction to Physical Anthropology. 4 Credit Hours.

An anthropological perspective of scientific knowledge about humans as physical systems, will be used to assess a variety of issues in human biology related to vital current or future student interests and concerns. The purpose is to alert you to these important issues and to provide you with a sufficient background in the basics of human biology and methods of scientific inquiry that will enable you to understand the causes for their occurrence and to be able to apply this knowledge for your own benefit. NOTE: (1) This course cannot be taken to satisfy any of the requirements for majors in the Human Biology Track. (2) This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement.

Course Attributes: SB

Repeatability: This course may not be repeated for additional credits.

ANTH 1061. Cultures of the World. 3 Credit Hours.

An introductory survey of various cultures from different regions of the world. Ethnographic case studies will be compared to show diversity and continuity in human lifestyles. A major emphasis will be placed on the impact of transglobal economic, political, and sociocultural change in the 20th century. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors.

Course Attributes: IS

Repeatability: This course may not be repeated for additional credits.

ANTH 1062. Introduction to Anthropology. 3 Credit Hours.

This introductory Anthropology course is designed to introduce students to important scholarly and practical concepts in the study of race and racism historically and across cultures. It builds upon the important contributions of four-field anthropological practice to our understanding of the ways societies have constructed racial categories and meanings and deployed racialized hierarchies. Students will be asked to read a variety of basic materials in linguistics, biological anthropology, ethnology, and archaeology. This will be supplemented with student efforts to analyze popular representations of race to acquire a familiarity with the important debates in contemporary social science and politics. NOTE: This course can be used to satisfy the university Core Studies in Race and Individual & Society (RN) requirements. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: RN

Repeatability: This course may not be repeated for additional credits.

ANTH 1064. American Culture. 3 Credit Hours.

This course will introduce students to an anthropological perspective on the changing character and complexity of American culture. We will examine the key symbols and core values of American society and how these are differentially understood and encountered in everyday life by diverse peoples in the United States. Topics include the experience of race, ethnicity, and gender in various local settings and how these categories intersect with economic, political, and historic forces. The course will examine the role of patriotism, migration, and social class in shaping the life worlds of Americans. We will ask, how are ideas about race made and unmade? Why is it often so difficult to speak of social class? What influences does "American culture" have and how is it shaped by material and symbolic practices beyond the borders of the United States? NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AC

Repeatability: This course may not be repeated for additional credits.

ANTH 1065. Origins of Cultural Diversity. 3 Credit Hours.

Many non-U.S. cultures have long, distinguished histories which can be traced ultimately to a common origin. This course examines the evolution of these cultures through the use of archaeological and paleoanthropological data, which ranges from four million years ago to the time of recorded history. Topics include the emergence of culture, the spread of human populations throughout the world, the origins of agriculture, and the rise of cities, states, and civilizations. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors.

Course Attributes: IS

Repeatability: This course may not be repeated for additional credits.

ANTH 1074. Anthropology through Film. 3 Credit Hours.

An introductory survey course employing the medium of ethnographic film to address the diverse issues that anthropologists engage with. Through watching and analyzing films on issues as varied as Azande witchcraft, Trobriand cricket, and Balinese water-temples, students will gain understanding not only of the issues that anthropologists study, but also of anthropological film and filmmaking. The course is organized as a film presentation followed by discussion of the film based upon critical understanding of the film combined with the reading material for that aspect of the course.

Repeatability: This course may not be repeated for additional credits.

ANTH 1079. Anthropology of Food. 3 Credit Hours.

This class will examine the interrelationship of biological, cultural, and historical influences on what we eat and how we eat it. Topics will link biological, ecological, social and symbolic cultural perspectives and examine the dietary implications of foraging, crop domestication, state formation and industrial capitalism. We will look at the sociocultural practices relating to the uses of food in marking social differences, maintaining social relationships, and dealing with cultural constructions of health, illness, and the body. Throughout the class we will examine the impact of globalization on the transformation of food meanings, practices and availability.

Repeatability: This course may not be repeated for additional credits.

ANTH 1261. Cultures of the World. 1 Credit Hour.

A companion course to Anthropology 1061 (C061) for first-term freshmen. This course provides guidance with the assignments of the core course. Emphasis is on reading, listening, speaking, and writing within the context of the core course. Assistance is also given in the continued development of English-language skills, especially academic reading and the acquisition of a general academic vocabulary. NOTE: Offered at Temple University Japan only.

Repeatability: This course may not be repeated for additional credits.

ANTH 1262. Introduction to Anthropology. 1 Credit Hour.

A companion course to Anthropology 1062 (R060) for first-term freshmen. This course provides guidance with the assignments of the core course. Emphasis is on reading, listening, speaking, and writing within the context of the core course. Assistance is also given in the continued development of English-language skills, especially academic reading and the acquisition of a general academic vocabulary. NOTE: Offered at Temple University Japan only.

Repeatability: This course may not be repeated for additional credits.

ANTH 1961. Honors Cultures of the World. 3 Credit Hours.

An introductory survey of various cultures from different regions of the world. Ethnographic case studies will be compared to show diversity and continuity in human life styles. A major emphasis will be placed on the impact of transglobal economic, political, and sociocultural change in the 20th century. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, IS

Repeatability: This course may not be repeated for additional credits.

ANTH 2001. Evolution and Human Environments. 3 Credit Hours.

This course traces the story of humans beginning with the fossil evidence for human ancestors and the earliest evidence for cultural behavior, through the spread and adaptation of human populations to almost all parts of the world. We will consider how ancient societies adapted to their environments, and reasons that cultures changed and became more complex over time. We will review the evidence for significant past environmental changes caused by people living in simple societies; and how ancient civilizations often caused irreparable collapses of their ecosystem. We will conclude by examining modern climate change, and the impact that recent changes have had on human societies living in different ecosystems, as well as on the sustainability of local indigenous societies and nation states.

Course Attributes: SE, SF, SS

Repeatability: This course may not be repeated for additional credits.

ANTH 2002. Mobility and Global Inequality. 3 Credit Hours.

Mobility and inequality are fundamental realities of human life that underlie myriad social processes and institutions. Examining them raises a variety of anthropological questions both old and new: How do people negotiate unevenly distributed resources? Why do people move to new places? As people move, what is lost and what is retained? What effects will large-scale human migration have on prevailing political and economic systems? Is radical social change possible under capitalism? This course considers mobility and inequality as grounded, embodied processes and experiences in order to introduce students to a range of foundational concepts, questions, and problems in anthropology.

Repeatability: This course may not be repeated for additional credits.

ANTH 2022. Museums and American Culture. 3 Credit Hours.

The museum holds itself to the preserver of cultural memory, yet museums as we know them are a 19th century invention. Their function as shapers of cultural practice and national identity will be explored through this course, which takes us up to the present, when museums have reached out to represent communities that were previously excluded from the elite culture of museums. How museums work as classifiers of knowledge, how they represent culture, as commodity and experience, will also form part of the course. Cross-Listed with AMST 2022. Students may only receive credit for one of the following course numbers: ANTH 2022 or AMST 2022.

Repeatability: This course may not be repeated for additional credits.

ANTH 2087. Practicum in Curation and Collections Management. 1 Credit Hour.

This is an applied course emphasizing acquisition of practical skills in curation and collections management. Students enrolled will participate in a variety of projects (i.e. cataloging archaeological collections, developing digital collections, artifact photography and documentation, developing new exhibits) related to the long-term care and preservation of ethnographic and archaeological collections housed in the Anthropology Laboratory. Because the specific skillsets learned will vary by project and semester, students may enroll in the course more than once.

Repeatability: This course may be repeated for additional credit.

ANTH 2098. The Legacy of Mesoamerica. 3 Credit Hours.

The course briefly reviews the nature of Prehispanic Mexico and Central America by examining its earliest manifestations in the Pre-Classic Period through the Late Post-Classic Period, right before European contact. Cultures examined will include the Maya, Nahua, Tarascan, and Mixtec among others. We will then study the Spanish Conquest of the region and how the indigenous peoples adapted to Spanish rule during the Colonial period. Following independence from Spain, indigenous peoples of Mesoamerica dealt with a new sort of adaptation. Specifically, that of integration into the new nation-states of Mexico and Guatemala will be examined. Modern Mesoamerica will also be discussed, particularly in terms of how the indigenous peoples have adapted to a new "globalized" world.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ANTH 2102. Frauds, Myths, and Pseudoscience in Archaeology. 3 Credit Hours.

This course critically examines pseudoscience, cult archaeology, and creationism from a scientific perspective. We will consider how a strong adherence to scientific investigation can uncover facts about prehistory that are as interesting as the myths, but we will also discuss the appeal and root causes of these myths about human history. We will focus on why it is important to separate pseudoscience from science, and the very different and often complementary roles that are served by faith and evidence. We will specifically address questions about evolution vs. creationism in a cross-cultural context, the archaeology of climate change and climate change skepticism, and how archaeology is sometimes used by nationalist movements to misrepresent the past in the service of controlling narratives in the present.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

ANTH 2104. Introduction to Archaeology. 3 Credit Hours.

An introduction to the theories and methods used in archaeological anthropology and the ways in which questions about life in the past are framed and investigated. Topics include the nature of archaeological evidence, the importance of context, excavation techniques, analysis of material remains, and reconstruction of ancient cultural patterns. (Formerly known as "Fundamentals of Archaeology." Students will not receive additional credits for taking this course under the new title.)

Repeatability: This course may not be repeated for additional credits.

ANTH 2169. South American Archaeology. 3 Credit Hours.

A survey of prehistoric cultures of South America. Concentrates on (1) the initial entry and spread of human populations into South America and the West Indies, (2) origins of tropical and highland agriculture, (3) the rise of urbanism, civilization, and the state in the Andes, and (4) the impact of prehistoric cultures on the environment.

Repeatability: This course may not be repeated for additional credits.

ANTH 2172. Archaeology of North America. 3 Credit Hours.

This course surveys the cultural development of native peoples from the time of the initial colonization of North America to the historic period and the arrival of European explorers and settlers. Coverage is organized by cultural/geographic regions, or areas, and chronological periods. Common and contrasting themes in cultural development are stressed. The course develops an appreciation of: the debates and data surrounding the initial colonization of North America; the cultural diversity and complexity evident in Native American cultures across space and through time; the interaction of Native cultures with different and changing environments, and the impact that each had on the other; the range of environmental, social, and cultural issues capable of being addressed with archaeological data.

Repeatability: This course may not be repeated for additional credits.

ANTH 2173. Ancient Mesoamerica. 3 Credit Hours.

Ancient Mesoamerica is a general survey of the pre-Columbian cultures of Mexico and Middle America before the Spanish Conquest of the Aztec Empire in A.D. 1521. In this course we will examine the long history of Mesoamerica beginning with the first peopling of the Americas at least 15,000 years ago and ending with the Spanish Conquest and the creation of "Latin America."

Repeatability: This course may not be repeated for additional credits.

ANTH 2227. Popular Culture in Modern Italy. 3 Credit Hours.

The course explores popular culture in Italy, starting from the Italian historical awareness of popular culture that emerged in the 19th century foundation of the nation up to the present day. The course focuses especially on popular culture in the 20th century using a variety of approaches, from lectures to readings, from the screening of video material to the study of audio recordings. By the end of the course, students will have attained a significant understanding of the variety of popular culture in modern Italy and will have mastered an analytical framework for understanding these phenomena. The course carries up to contemporary times with an exploration of the impact global trends have had on popular culture, making particular reference to contemporary popular music.

Repeatability: This course may not be repeated for additional credits.

ANTH 2238. Visual Anthropology of Modern Japan. 3 Credit Hours.

An anthropological approach to systems of visual communication that are central to understanding Japanese society and culture. Visual sign systems of everyday life such as writing, food, and clothes plus visual aspects of popular culture such as comic books and ads. Ethnographic films, feature films, and network TV programs plus field trips to Japanese cultural sites. Duplicate credit warning: This course is regularly cross-listed with ASST 2238. Students may receive credit for only one course, either ASST 2238 or ANTH 2238.

Repeatability: This course may not be repeated for additional credits.

ANTH 2305. Introduction to Cultural Anthropology. 3 Credit Hours.

An introduction to the basic concepts, methods, and theories of cultural anthropology. Through a variety of case studies from different parts of the world, the course will focus on the connections between culture, power, and representation. Emphasis will be placed on analyzing the process of ethnographic fieldwork and producing ethnographic texts. (Formerly known as ANTH 2396 Fundamentals of Cultural Anthropology; students who earned credits under the original title will not receive additional credits for this course.)

Repeatability: This course may not be repeated for additional credits.

ANTH 2310. Topics in Cultural Anthropology. 3 Credit Hours.

Varies each semester. Contact instructor for more information.

Repeatability: This course may be repeated for additional credit.

ANTH 2319. Anthropology of Food. 3 Credit Hours.

This class will examine the interrelationship of biological, cultural, and historical influences on what we eat and how we eat it. Topics will link biological, ecological, social and symbolic cultural perspectives and examine the dietary implications of foraging, crop domestication, state formation and industrial capitalism. We will look at the sociocultural practices relating to the uses of food in marking social differences, maintaining social relationships, and dealing with cultural constructions of health, illness, and the body. Throughout the class we will examine the impact of globalization on the transformation of food meanings, practices and availability.

Repeatability: This course may not be repeated for additional credits.

ANTH 2322. Outlaws, Law and Culture. 3 Credit Hours.

This class conceptualizes law from an anthropological and sociological perspective. The course acquaints students with key concepts in the anthropology of law and develops an introduction to theories that continue to guide an ethnographic approach to formal and informal dispute processes. We will learn what qualitative research methods can reveal about why and when people do or do not conform to law. In lectures, discussions, readings, and films, we will explore the critical and complex relationships between culture and law, crime, policing, and punishment. The course provides students with examples of field research in a variety of legal, illegal, and extralegal arenas in our own and in other societies.

Repeatability: This course may not be repeated for additional credits.

ANTH 2332. Medical Anthropology. 3 Credit Hours.

This course explores both biocultural and sociocultural approaches within the rapidly expanding interdisciplinary anthropological field of critical medical anthropology (CMA). Topics addressed include evolutionary approaches to understanding health and disease (including diet and nutrition), as well as sociocultural CMA approaches to such topics as ethnomedicine, medicine and social control, international health development, medical pluralism, science and technology studies, and the anthropology of the body.

Repeatability: This course may not be repeated for additional credits.

ANTH 2358. Anthropology of American Culture. 3 Credit Hours.

This course may serve as a starting point for undergraduate majors in Visual Anthropology. We will question the idea that American culture is best characterized as a variety of many immigrant cultures; specific institutions have produced a shared conception of the American Dream and how fault lines based on race, ethnicity, gender, and generation have come to be "made in America." Emphasis will be given to the contrast between the ways in which American popular culture is represented through media and the way in which ethnographic studies present insights into the ways in which Americans live. Special emphasis will be given to the ways in which fault lines between groups have been socially and culturally constructed and transcended over time and the role that overarching institutions like schools, public policies and media representations play in producing both the diversity and homogeneity of American culture. NOTE: Course is appropriate for students in American Studies, Media Studies, Sociology and Education.

Repeatability: This course may not be repeated for additional credits.

ANTH 2361. Peoples of Latin America. 3 Credit Hours.

Starting in 1492, Native American isolation from Europe and Africa ended in the region of the Americas that became Latin America. Despite five hundred years of colonial and nation-state domination, indigenous peoples in Latin America continue to assert their basic human right to resist cultural hegemony. Not only have indigenous populations survived, they are also growing. Today they constitute a majority in Bolivia, Ecuador, Guatemala, and Peru and a substantial plurality in Brazil, Mexico, and Colombia. The focus here is on this remarkable struggle for physical and cultural survival. Attention will be given to the lived experiences of people struggling for human dignity on the lowest strata of regional class structures. Issues of land rights, environmental, health, political, and economic self-determination will be examined.

Repeatability: This course may not be repeated for additional credits.

ANTH 2362. Peoples and Cultures of the Caribbean. 3 Credit Hours.

Shaped by conquest and colonial transnational desires, first of sugar and then of tourism, the Caribbean has been wrought since its very inception by the displacement of people, goods and ideas from Africa, Asia, Europe, and Latin America, presenting a challenge for the anthropological study of socio-cultural change through time and space. In this introductory course on the Caribbean we will critically examine "creolization" processes at social, religious, political, economic, and artistic levels as they were driven by various groups, from pirates, privateers, maroons, exiles, to tourists, in the context of colonialism, nation building, and globalization. Examining specific sites such as music, display events, folklore, and religion we will ponder about, for instance, the effects of European revolutions on the creation of elites in the Caribbean, and the impact of slave cultures and peasantries on the formation of creole religions. How has the image of the sensuous/threatening mulatta evolved since the plantation? On what kind of histories and emotions do "zombies" feed upon? Why did Reggae and Merenge succeed on the global stage? How does the display of national icons in Trinidadian carnival reflect on their socio-political conflicts? How is the colonial past re-packaged for global consumption?

Repeatability: This course may not be repeated for additional credits.

ANTH 2364. People and Cultures of the Middle East and North Africa. 3 Credit Hours.

This course examines the major aspects of social life in the Middle East and North Africa from an anthropological perspective. Selected topics to be investigated include: kinship, social stratification, urbanization, colonialism, nationalism, migration, the state, violence, gender, sexuality, religious practice, popular culture, and neoliberalism. Emphasis will be placed on understanding the connections between cultural practices and political, economic, and social power. (Formerly titled as "People and Culture of the Middle East"; students may not earn additional credit under the new title.)

Repeatability: This course may not be repeated for additional credits.

ANTH 2366. Urban America: An Anthropological Perspective. 3 Credit Hours.

This course offers both an introduction to the dominant questions in urban Anthropology and provides an opportunity to do fieldwork in the city, to explore how anthropologists do urban work. The purpose of this course is to connect students' field experiences with ideas and readings from the academic perspective of anthropology. Students will write a final paper for the course in which they incorporate material from the academic readings, their own field notes and any other relevant sources (agency reports, news articles, etc.).

Repeatability: This course may not be repeated for additional credits.

ANTH 2367. Peoples of South Asia. 3 Credit Hours.

An introduction to the peoples and cultures of the Indian subcontinent. The course will focus on the indigenous religions of India: Hinduism, Jainism, and Buddhism as well as Islam, Christianity, and Zoroastrianism as brought to western India by migrants. Note: This course is cross-listed with Asian Studies 2367. Students may only receive credit once for these courses: ASST 2367 or ANTH 2367.

Repeatability: This course may not be repeated for additional credits.

ANTH 2368. Peoples of the Pacific. 3 Credit Hours.

This is an upper level undergraduate course designed to engage students in studying the indigenous cultures of Australia, Melanesia, Polynesia, and Micronesia. There will be two primary emphases: first, the major issues in cultural anthropology that have been formed and informed by ethnographic data from Pacific societies; and second, the processes of change experienced by Pacific peoples in the last few decades. Specific topics include: (1) How the complexity of kin-based social organization among Australian aborigines influenced anthropological understanding of relationships among individuals and the formation of communities; (2) How and why the traditional sacred art of aboriginal Australia became a valued commodity in the global art market; (3) How the complex ceremonial exchange networks of Melanesia influenced theory in anthropology; (4) The dimensions and range of Melanesian ideas and behavior concerned with gender and sexuality; (5) How class stratification and political hierarchy developed in traditional Polynesian states such as Tahiti, Tonga, and Hawai'i; and (6) How colonialism and post-colonialism has been experienced across the Pacific. The course will be conducted as a seminar with some lectures by the instructor but with proportionately more discussions based on a core of shared readings and students' shared and individual explorations of Pacific cultures.

Repeatability: This course may not be repeated for additional credits.

ANTH 2373. Japanese Culture. 3 Credit Hours.

Introduction to traditional and contemporary Japanese culture. Topics covered include: early literature, aesthetic principles as expressed in art and architecture, religion, gender roles, Japan's shifting relationships with the outside world, rural communities and urban centers in the 20th century, and the construction of the self in modern Japan. Note: This course is equivalent to Asian Studies 2373. Students will only receive credit for one of these courses: ANTH 2373, ASST 2373.

Repeatability: This course may not be repeated for additional credits.

ANTH 2374. The Anthropology of Modern China. 3 Credit Hours.

This course offers an introduction to the culture and society of the contemporary People's Republic of China. The first half of the course provides a historically and ethnographically contextualized examination of the dramatic transformations undergone by Chinese society over the last century, juxtaposing the pre-1949 Republican period against the tumultuous sociocultural and political economic changes in China in the decades immediately following the 1949 Chinese Communist Revolution, and, in particular, examining the impact of Maoist period and post-Mao period political-economic and sociocultural movements on the everyday lives of Chinese people in both rural and urban contexts. During the second half of the course, we will focus on recent ethnographic writings published by China anthropologists which, taken together, encompass such key issues as the contours of China's distinctive narrative of socialist modernity, the profound significance of the rural/ urban divide in the post-1949 PRC; shifting PRC constructions of gender and sexuality and the impact of Maoist and post-Mao transformations on women's status, the statuses and representations of the more than 55 minority peoples who reside in China alongside Han Chinese and the emergence of ethnic tourism, the politics of rural health care, the nature of the relationship between Traditional Chinese Medicine and biomedicine, and the politics of HIV/ AIDS in the PRC. We will also utilize a number of excellent ethnographic films throughout the course.

Repeatability: This course may not be repeated for additional credits.

ANTH 2408. Introduction to Visual Anthropology. 3 Credit Hours.

A survey of theoretical approaches to an anthropological understanding of visual/pictorial communication. Among the topics explored: theories of culture and communication, models of both social and visual communication, perception, cross-cultural aesthetics, non-verbal communication as well as photography, film, and mass media. Emphasis will be placed on the value of constructing ethnographies of visual/pictorial communication. This course has been designed for anthropology majors specializing in the studies of visual communication, but it is also useful for Sociology, FMA, and Mass Communication majors. Course consists of required readings, screenings, and active class participation. No exams. Students keep a journal and write several short papers. Formerly known as "Fundamentals of the Anthropology of Visual Communication." Students who earned credits under the original title will not receive additional credits for this course.

Repeatability: This course may not be repeated for additional credits.

ANTH 2409. Introduction to the Production of Anthropological Media. 3 Credit Hours.

Formerly known as Introduction to Visual Production. Students who have completed Introduction to Visual Production will not receive additional credit for taking Introduction to the Production of Anthropological Media.

As the decreasing cost and increasing accessibility to visual technologies, such as DSLR cameras and video cameras, makes their inclusion in research projects a given rather than a rarity, the importance of training in their use increases proportionately. Through a series of lectures and practical exercises, students will gain skills in the uses and techniques of several important visual technologies, such as photography, videography (shooting footage), and video editing. Further, this course will contextualize these techniques within qualitative research (e.g. documentary filmmaking) more generally and anthropological and ethnographic research (e.g. participant-observation) more specifically. As the ethical and disciplinary demands of anthropology necessitate specific aesthetic and technical implementations by the visual anthropologist, the latter aspect is a crucial part of the course and will be of significant benefit to students wishing to conduct ethnographic research integrating visual methods and technologies.

Repeatability: This course may not be repeated for additional credits.

ANTH 2432. Indigenous Media. 3 Credit Hours.

This course critically reviews the relationships between ethnographic film and indigenous forms of self-representation in diverse media. Visual texts from several societies will be compared with each other and with examples of visual representation in contemporary Western societies. In the course we will examine pictorial forms by viewing and analyzing films and video programs made by indigenous individuals and associations. Examples will come from North and South America, Australia, and New Zealand. Through these examples issues of authorship and authority, the politics of representation and autonomy, and the values and limits of indigenous self-representation will be analyzed.

Repeatability: This course may not be repeated for additional credits.

ANTH 2434. Anthropology of Feature Films. 3 Credit Hours.

Formerly known as Anthropology in Feature Films. Students who have completed Anthropology in Feature Films will not receive additional credit for taking Anthropology of Feature Films.

Students will critically review a series of feature films that include topics, themes, and subject matter often treated within anthropology. It is clear that American feature films usually thought of as "Hollywood films" can be very influential in establishing or reinforcing social and cultural stereotypes of "states of knowledge" about peoples living in various parts of the world. The potential for influence and false senses of familiarity is enormous. In today's globalized community that is influenced by feature films from all regions of the world, this course attempts to incorporate many expressions of the feature film genre to form a composite whole. Japanese, Indian, Indonesian and other national cinemas will be shared, as will the emergent films made by the Naliput peoples of the 4th world. Peoples who are frequently known as natives, aborigine, local, indigenous, primitive, underdeveloped and tribal, are now makers of feature films and bring new dynamism to the genre to foster new perspectives of culture and communication.

Repeatability: This course may not be repeated for additional credits.

ANTH 2501. Language, Power, & Identity. 3 Credit Hours.

This course focuses on recent research by leading scholars in linguistic anthropology, examining the crucial role of language in issues of power, representation, and identity. The primary goal is to cultivate critical thinking about the complex relationships among language, society, and culture.

Repeatability: This course may not be repeated for additional credits.

ANTH 2507. Language and Culture. 3 Credit Hours.

An introduction to linguistic anthropology, one of the four subdisciplines of American anthropology. This course takes an ethnographically informed approach to the relationships among language, culture, and society. It also examines the diversity of the world's 6,000+ languages as well as the enormously varied ways in which groups of people around the world use language and other communicative resources in their everyday lives. (This course was formerly entitled "Fundamentals of Linguistic Anthropology"; students who earned credit under the original title are not eligible to repeat it for additional credits.)

Repeatability: This course may not be repeated for additional credits.

ANTH 2522. Spanish Conquest of the Americas. 3 Credit Hours.

In 1492, Columbus sailed the ocean blue and ... either discovered or destroyed America, depending on your point of view. By 1542, Spain had claimed most of the Americas and Lopez de Gomara, the private secretary of Hernan Cortes, wrote, "The greatest event since the creation of the world." Later, in the 18th and 19th centuries, both Adam Smith and Karl Marx would make the same claim in their writings. From the very beginning, not only the magnitude but also the meaning of the Conquest of the Americas has been a point of controversy and acclaim. In this class, we will examine the Indigenous societies of the Americas and the Iberian Peninsula on the eve of their cataclysmic encounter, the processes by which the Spanish Conquistadors overran Indigenous territories, the ways in which each of these distinct societies impacted one another, and the hybrid societies that emerged on the other side. **DUPLICATE CREDIT WARNING:** Students can receive credit only once for either HIST 2522, ANTH 2522, or LAS 2522.

Repeatability: This course may not be repeated for additional credits.

ANTH 2525. Maya Language and Culture. 3 Credit Hours.

This course will introduce students to the language and cultures of the Maya area of Mesoamerica. Students will acquire basic conversational elements of one of the Maya languages, study Maya culture, including the indigenous literature of the area where applicable, and generally gain a deeper understanding of this diverse part of Latin America.

Repeatability: This course may not be repeated for additional credits.

ANTH 2535. Language, Thought, and Reality. 3 Credit Hours.

This course will examine the role of language in shaping thought and individuals' experiences of reality. We will build on linguistic anthropology, linguistics, and sociolinguistics in order to explore linguistic relativity and various interpretations of the "Sapir-Whorf Hypothesis." Does language shape our habits of thinking and affect our view of reality, our emotions, and our actions? This course will draw on studies of various regions and cultural contexts in order to examine the complex interactions between language, culture, and thought.

Repeatability: This course may not be repeated for additional credits.

ANTH 2536. Language in the City. 3 Credit Hours.

This course examines the linguistic and cultural diversity of contemporary global cities from ethnographic perspectives. Drawing on the work of anthropologists as well as sociologists, geographers, sociolinguists, and others, we consider such issues as immigration, transnationalism, assimilation, multiculturalism, and the politics of space and place in urban environments, in addition to such classic linguistic anthropological issues as bilingualism and multilingualism, language contact, language socialization, and language maintenance, shift, and revitalization. Seminar participants will conduct small-scale fieldwork in local settings. Note: Formerly known as ANTH 3536 Urban Dialects and ANTH 3536 Language in the City prior to Summer 2018. Students will not receive credit for both courses (ANTH 3536 or ANTH 2536).

Repeatability: This course may not be repeated for additional credits.

ANTH 2705. Introduction to Evolutionary Anthropology. 3 Credit Hours.

An introduction to evolutionary theory and its applications to understanding the biology of past and present human populations. Includes basic principles of inheritance and molecular genetics, the genetics of human groups, and genetic models used to explain human biological variability and change. Our place in nature is illustrated by comparison with our non-human primate relatives and a consideration of evolutionary changes in human lineage illustrated by the fossil record. Evolutionary aspects of human development and an evolutionary perspective on epidemiology are also covered. NOTE: Students should complete this course before enrolling in any other upper-level biological anthropology course. Formerly known as "Fundamentals of Biological Anthropology." Students who earned credits under the original title will not receive additional credits for this course.

Repeatability: This course may not be repeated for additional credits.

ANTH 2763. Anthropological Genetics. 3 Credit Hours.

This course is designed to acquaint the undergraduate major in Anthropology (especially those in the Human Biology specialization) with the fundamental concepts of population genetics with particular relevance to human genetics. Although the course, as indicated, has a particular emphasis on genetics, the influence of environmental effects will be especially appreciated in this course, as the impact of culture is so dramatic, even with respect to human genetic evolution. Formerly known as "Human Population Genetics". Students who earned credits under the original title will not receive additional credits for this course.

Repeatability: This course may not be repeated for additional credits.

ANTH 2764. Primate Behavior. 3 Credit Hours.

This course provides an overview of the social behavior of our closest living relatives, and presents principles and current thinking in the field of behavioral ecology. We review the great taxonomic diversity of living primates, their geographic distribution, general ecology, and conservation status. The course introduces the theoretical approaches used to interpret non-human primate life-ways and social behavior and considers the application of evolutionary theory to interpreting human behavior.

Repeatability: This course may not be repeated for additional credits.

ANTH 2765. Human Osteology. 4 Credit Hours.

This course, presented in lecture/lab format, is designed to train advanced undergraduates to identify all of the components of the human skeleton. Students will learn the uses of the human skeleton in physical anthropology and archaeology and, for those going on to clinical health programs, the course will provide a detailed understanding of the morphology and variation in the human skeleton that will be highly valuable in the gross and dental anatomy courses taught in clinical post-graduate programs. Also included are discussions of bone growth, kinesiology, individual reconstruction, forensic anthropology, and the use of regression analysis and discriminate functions. Some comparative (between-species) skeletal anatomy is also included.

Repeatability: This course may not be repeated for additional credits.

ANTH 2801. Grant Writing in the Social and Health Sciences. 3 Credit Hours.

How can undergraduate students generate funding to undertake interesting summer research? How can students learn to become Grant Writers for non-profit organizations? The key is to learn the art of Grantsmanship! Learning the components of a grant proposal, research methodology, and the peer-review process are the keys to success. Students will learn how to develop a research question, research hypotheses, the development of a literature review, and how to develop a research design and data analysis for their grant proposal. For those students interested in working for a non-profit organization, designing evaluation research will be emphasized. Overall, this course will provide students with the knowledge and skill to develop grant proposals for academia and the private sector.

Repeatability: This course may not be repeated for additional credits.

ANTH 2907. Honors Language and Culture. 3 Credit Hours.

Linguistic anthropology, one of the four subfields of anthropology, is the interdisciplinary study of the relationships among language, culture, and society. Linguistic anthropology shares many of its basic units of analysis, and some of its working concepts, with linguistics, especially the subfield of sociolinguistics. However, unlike most linguistic approaches, which are mainly concerned with language structure, linguistic anthropology is rooted in ethnography and is primarily concerned with how the everyday use of language structures, and is structured by, socio-cultural forces. In Fundamentals of Linguistic Anthropology, we will pose, and seek to answer, a variety of questions about language and its relationships to culture and society. Possible questions include: Why do children all over the world acquire their first languages at about the same rate and age? How do children learn to use language in culturally specific, culturally appropriate ways? Why do groups of people who apparently share "the same language" speak and use it very differently? Does the language that one speaks affect the ways in which one thinks and experiences the world? How and why does a particular language variety come to be regarded as the "standard" variety, while others are regarded as "non-standard"? How and why does language use relate to important social variables, such as ethnicity, class, gender, age, education, and religion? What is the relationship between language and power? Why and how does cross-cultural miscommunication occur and what are its consequences? Formerly known as Honors Fundamentals of Linguistic Anthropology; students who earned credit for the prior title may not repeat this course for credit.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

ANTH 3170. Techniques in Archaeology. 3 Credit Hours.

A series of practical, topical courses that deal with aspects of archaeological fieldwork and laboratory analysis. The topic or focus of the course varies by semester and includes: field methods; pottery analysis; lithic analysis; sediments, soils and stratigraphy. Because the topic changes by semester, students may take Anthropology 3170 more than once.

Repeatability: This course may be repeated for additional credit.

ANTH 3171. Comparative Early Civilizations. 3 Credit Hours.

This comparative analysis of the rise of early civilizations uses archaeological and historical information to examine the development of ancient societies. It focuses on problems of the Neolithic revolution, the autochthonous transformation of kin-based communities into stratified societies and the subsequent formation and development of early class-based societies/states.

Repeatability: This course may not be repeated for additional credits.

ANTH 3172. Seminar in Northeastern Prehistory. 3 Credit Hours.

The archaeology and prehistory of the native peoples of the Middle Atlantic Region are examined in detail, and in the broader context of cultural developments in the Northeast and Eastern Woodlands of the United States. Although the seminar employs cultural historical periods as a way to present information, cultural diversity across time and space are emphasized. Basic descriptive data dealing with prehistoric cultures are presented, as well as the variety of interpretations of native lifeways upon which they are based. Included in the course is information derived from cultural resource management studies, the results of which are infrequently published.

Repeatability: This course may not be repeated for additional credits.

ANTH 3175. Heritage Management in Archaeology. 3 Credit Hours.

The United States and other governments of the world have legal mandates to manage cultural resources on behalf of the public. This course focuses on the archaeological component of cultural resources management in the United States and its linkage with environmental and developmental planning. Participants are given a working knowledge of how the system works, and how to work within it as a professional through a series of readings, classroom discussions, and hands-on exercises. Topic coverage includes: relevant legislation; the phased approach to archaeological and historical research; state and federal review procedures; proposal writing; interacting with clients, native peoples, and the public; professional ethics and standards. The nature of heritage management in other countries is considered for comparative purposes and as a way of illuminating the historical, socio-economic, and legal factors that have shaped the practice in the United States. NOTE: This course helps to satisfy topical requirements in the Anthropology major and the Environmental Studies major.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

ANTH 3177. Approaches to Historical Sites in Archaeology. 3 Credit Hours.

Students examine the central questions, values, and goals of historical archaeology, gaining a working knowledge of its basic concepts and methods. A material culture approach is used as archaeological objects are presented in sites where they express a series of concepts related to our understanding of status, wealth, self identity, consumerism, and symbolism. A holistic framework is used to present material evidence together with documentary, oral, and other data. A variety of sites will be examined in order to introduce many important subfields of historical archaeology such as battlefield archaeology, urban archaeology, industrial archaeology, and underwater archaeology. The course will also demonstrate how such evidence illuminates the modern world and its relevance to our own time and place.

Repeatability: This course may not be repeated for additional credits.

ANTH 3180. Topics in Archaeology. 3 Credit Hours.

A variable topic course that highlights the specialized interests and research of faculty and current trends in archaeological analysis, interpretation, and theory. Some examples of anticipated topics include: Northeastern Native American Prehistory, Origins of Food Production, Battlefield Archaeology, and the Archaeology of Philadelphia.

Repeatability: This course may be repeated for additional credit.

ANTH 3189. Field Session in Archaeology. 3 Credit Hours.

Techniques and concepts of field archaeology. Students will be expected to spend the greatest part of the session in the field during the excavation of prehistoric and historic sites. During summer sessions this course is taught in conjunction with Methods in Archaeology (Anthropology 3170).

Repeatability: This course may be repeated for additional credit.

ANTH 3196. Methods in Environmental Archaeology. 3 Credit Hours.

This course introduces the student to the techniques and disciplines used in conjunction with archaeology to understand the environmental context and paleo-ecology of prehistoric cultures, as well as the nature of the archaeological record itself. Included in this survey are geology, soil and sediment analysis, geomorphology, palynology, ethnobotany and general floral analysis, phytolith analysis, zooarchaeology, and the analysis of blood and other residues found on artifacts. The range of contributions possible from interdisciplinary research will be explored in addition to how to design such research, how to communicate with specialists in other fields, and how to use existing sources of data to solve archaeological problems.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ANTH 3301. History of Anthropological Theory. 3 Credit Hours.

This course historicizes, contextualizes, and explores the major theoretical schools in anthropology from the mid-19th century up through the present, including social evolutionism, historical particularism, structural-functionalism, cultural materialism, structuralism, symbolic anthropology, political-economy approaches, postcolonial critiques, feminist critiques, the crisis in ethnographic representation, and poststructuralist approaches.

Repeatability: This course may not be repeated for additional credits.

ANTH 3321. Folklore and Culture. 3 Credit Hours.

Far from being hidden or "dying," folklore thrives in public and private spheres both in everyday life and in extraordinary situations. It is invoked in nationalist and post-colonialist practices and, lately, also in global cultural productions. This course will explore the cultural attributes and functionings of folklore in its own terms and as a part of anthropology in various spaces, times, and groups. We will begin with a brief theoretical discussion on the connection between folklore, nationalism, and ethnic and regional identity, as well as popular and mass culture. Placing special emphasis on the emergent, unofficial aspects of vernacular culture, we will then examine how different groups communicate and construct their identity through folk narratives, proverbs, and jokes; folk art; spontaneous memorials; displays of the body, yards; the exchange of food; and the performance of music and dance during festivals, parades, and processions. In light of the currency of "tradition" and "heritage" in the public sphere - in school curricula, state sponsored programs, advertisement and museums - we will also look critically at the production of culture in the context of multiculturalism and identity politics, and the often ambiguous relation established between dominant or elite cultures and unofficial, vernacular cultures. Class discussions will be conducted in a seminar style and complimented with audio-visual materials. Short research exercises will provide students with first hand experiences with the cultural-anthropologist's craft of documenting and analyzing current folklore materials.

Repeatability: This course may not be repeated for additional credits.

ANTH 3322. Anthropology of the Global Economy. 3 Credit Hours.

Formerly known as Economic Anthropology. Students who have completed Economic Anthropology will not receive additional credit for taking Anthropology of the Global Economy.

Anthropology of the Global Economy is the study of how economic systems articulate with culture on a variety of scales. This class examines basic paradigms of study in economic anthropology, theories of money and value, and ethnographies of exchange. We will look at how the commodification, production and/or sale of goods in formal, informal and black markets affect people in very different ways. We think through the role of the state, of religion, power struggles and advertising in shaping these markets. Format includes readings, lectures, film screenings, and discussions.

Repeatability: This course may not be repeated for additional credits.

ANTH 3324. Anthropology and Art. 3 Credit Hours.

This course examines the anthropology of art and "artworlds." While its emphasis is on non-western art, it maintains a comparative stance between unfamiliar and familiar visual traditions. Thus, by implication it raises questions about western arts and their cultural contexts. Specific topics and cultures vary according to the interests and expertise of the instructor. Topics can include comparative aesthetics, authenticity and "primitiveness," the commodification of art, tourist art, gender in the production and consumption of art, the influence of non-Western art objects and performances on European and North American cultures, conceptual systems and modes of viewing, the circumstance of encounter with objects, the modes of production and how objects are shared and valued, both in the culture in which they are initially made and in the culture they may be in now. Cultural contexts may include people and art from Aboriginal Australia, Africa, India, Indonesia, Japan, and Native America.

Repeatability: This course may not be repeated for additional credits.

ANTH 3325. Political Anthropology. 3 Credit Hours.

This course will examine anthropological approaches to political structure, political organization, and political action. We will begin by familiarizing ourselves with some of the basic attributes and cultural commitments of Enlightenment projects as well as liberal political theory. Topics may include anthropological analyses of colonialism, nationalism, state formation, development, corruption, social movements, and human rights. We will consider the culture of politics and the politics of culture in disparate contexts around the world. Throughout the course we will remain attentive to how anthropologists historically have studied politics, and how anthropological notions of politics have changed through time.

Repeatability: This course may not be repeated for additional credits.

ANTH 3326. Religion in Non-Western Cultures. 3 Credit Hours.

This course examines Creole religions in the Americas and the Caribbean, focusing on the often-misunderstood practices of Cuban Santería, Haitian Voodoo, Brazilian Candomblé, and U.S Orisha-Voodoo. By exploring their colonial, national, and transnational trajectories, differences in Portuguese, Spanish, and French colonial rule will become evident as we look at the historical, political, and religious conditions shaping processes of syncretism and mimesis. The unique multi-channeled, performative aspects of these creole religions will be explored in great detail and illustrated through video and music recordings of spiritual events in which divination, drumming, myth, dance, trance and healing come to life. Confronting practitioners' insider experiences with outsiders' exoticizing perceptions - stemming from either frightening Hollywoodian representations or romanticizing state and tourist productions - we will critically address the problematic, highly contested place that these heterodox religions and their practitioners occupy in contemporary societies.

Repeatability: This course may not be repeated for additional credits.

ANTH 3327. Globalization and Localization. 3 Credit Hours.

This course addresses issues of theory and method by means of an examination of cultural globalization processes and current debates about their effects on local cultures - one of the key tropes shared by both anthropological and nationalist projects. One of the main aims of this course is to question the unidirectionality implied in most global theories, and assess via combined macro and micro lenses not only the impact of global processes on particular local histories, but also how the sets of voices that are marginalized by global discourses re-enter them, speaking in them and to them. In other words, we will explore the relation between structured choices and agency. From this vantage point we will examine selected issues on nationalism, postcolonialism, modernity, transnationalism, and diaspora, as well as consumption, technology, tradition, heritage, ethnicity, and tourism. The first part of this course will examine the relation between theory and method in anthropological research on cultural globalization, especially the challenges for fieldwork in complex societies. The second part will test their applicability and validity through a close reading of ethnographic works and the screening of videos that examine various dilemmas arising from processes of cultural contact in complex societies. In addition to exploring globalization and localization issues in anthropology, this course should enable students to think through and apply different methodologies in writing their research projects for the course.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

ANTH 3328. Anthropology of the Family. 3 Credit Hours.

This course investigates the family as a key social unit across cultures. We will consider the role of kinship and reproduction through ethnographic studies of reproductive politics and policy, healthcare provision, reproductive technologies, and public health. By approaching the family through the lens of reproductive justice, we as a class will engage in sustained reflection on the place of reproduction within health, healthcare, and activism. The course situates reproduction and reproductive health within historical trajectories of health activism and governance, including but not limited to abortion, assisted reproduction, and immigration. Note: This course was previously known as "Comparative Social Organization." Students will receive credit only once for either "Anthropology of the Family" or "Comparative Social Organization."

Repeatability: This course may not be repeated for additional credits.

ANTH 3331. Anthropology and Culture Change. 3 Credit Hours.

For the last three centuries, intellectual and popular discourses have advanced conflicting ideas about culture change as either a welcome sign of progress or a detrimental process of irremediable loss. Considering this tension as constitutive of the topic at hand, the first part of the course will critically examine various theoretical explanations for culture change, its causes and results, as well as the social currency of "culture" and "change" in various social projects; for example in social, religious, and artistic movements. This examination will also include the testing the conceptual vigor of terms such as acculturation, syncretism, creolization, and transculturation, some of which have been recently revamped by some social theorists to depict the flux, indeterminacy, and heterogeneity of the world under globalization, while ignoring their past use within discriminatory social tactics. Contemporary ethnographic case studies will offer an opportunity to examine these issues, particularly the ways in which flows of, as well as restrictions upon, capital, people, commodities, media, and ideologies are affecting the lives of diverse social groups in different parts of the world, some of which eagerly embrace change while others strategically resist it.

Repeatability: This course may not be repeated for additional credits.

ANTH 3333. The Anthropology of Tourism. 3 Credit Hours.

The anthropology of Tourism is an anthropology of peoples on the move, an in encounter with the alien, the unfamiliar, the forgotten and the other. These journeys are anchored in an educational ethos and serve to make identity and opinion. Tourism today includes the pursuit of imagined and historic pasts, of transformational places of alterity, of the sensual and the experiential where knowing and part taking are constitutional and integral to learning about one's place in the world, one's community place as a unit of one among many, and where notions of a shared humanity often come face to face with an alien and sometimes forbidding other. Students will study the anthropological understanding of place, of travel, of history, of performance, of cuisine, of pilgrimage, of adventure, of ecology, of philanthropy, of alternate medicine, all expressions of the present day offerings of Tourism. They will engage with anthropological films that have examined the phenomenon of tourism in different parts of the world, in a discourse that recognizes the porosity of boundaries and the inherent hybridity of cultures.

Repeatability: This course may not be repeated for additional credits.

ANTH 3335. Anthropology and Social Policy. 3 Credit Hours.

This course explores the critical anthropology of social policy, an emerging new field. First, we will compare this kind of anthropology to closely related "applied anthropology" and "activist anthropology." The critical approach examines the disjunctures between the cultural constructions of policy targets created by experts (and the public) and the actual lived experiences of the targets themselves. Along with other critiques of the bureaucratic structures of national and international "helping" institutions and their assumptions of technocratic professionalization, we will explore the hidden aspects of power and control which lurk within the massive structures of policymaking and implementation in the past six decades.

Repeatability: This course may not be repeated for additional credits.

ANTH 3336. Sex Roles in Cross-Cultural Perspective. 3 Credit Hours.

A cross-cultural survey of the ways in which gender is used to define roles and statuses, with particular attention to the changing nature of sex roles in many contemporary cultures.

Repeatability: This course may not be repeated for additional credits.

ANTH 3337. Anthropology of War and Conflict. 3 Credit Hours.

This course examines anthropological approaches to war, conflict, and peace. After briefly unpacking media representations of tribalism, savagery, anarchy, etc. and familiarizing ourselves with anthropological responses to such representations, we then turn to ethnographic considerations of warfare and other examples of conflict in the contemporary world. Potential topics include state violence, civil war, terrorism, indigenous rights struggles, militarism, and peacemaking, both failed and successful. NOTE: This course was previously titled "Violence, War, and Revolution" and students can receive credit only once for ANTH 3337.

Repeatability: This course may not be repeated for additional credits.

ANTH 3355. Anthropology of Sexuality and Gender. 3 Credit Hours.

Formerly known as Gender Theory.

Gender is arguably universally the primary category of social difference into which we (as humans) are socialized. This course takes an historically and ethnographically situated approach to understanding how sociocultural anthropologists have theorized gender, with a particular focus on feminist anthropology approaches to culture, power, and history. Throughout the course we will additionally explore the intersection of gender with such other statuses of social difference as sexuality, class, race, ethnicity, generation, education, and rural versus urban residence in a variety of global contexts.

Repeatability: This course may not be repeated for additional credits.

ANTH 3366. Violence: An Anthropological Approach. 3 Credit Hours.

In this course, we will develop an anthropological approach to violence, querying the experience of violence and the ways in which it is generative and destructive of social structures and cultural meaning. We will consider violence's relationship to morality, politics, and inequality, as well as the ways in which violence is affirmed or denied as part of collective experience. Throughout the semester, our work will be grounded in political and anthropological theory and ethnographic material from the United States and elsewhere, as well as students' independent research and analyses.

Repeatability: This course may not be repeated for additional credits.

ANTH 3396. Fieldwork and Ethnographic Methods. 3 Credit Hours.

As a writing-intensive course focusing on fieldwork methods, this is an important course that contributes to the new theme "Mobility and Global Inequality" by promoting the six program goals. Through written assignments and readings, students learn necessary skills to develop critical analysis, disciplinary knowledge, grasp of sociocultural diversity, communication and problem-solving skills, and technological literacy. Students are assessed through workshops, evaluation of their grasp of ethnographic methods through target projects, and their written assignments.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ANTH 3433. Ethnographic Film. 3 Credit Hours.

Formerly known as Anthropological Film. Students who have completed Anthropological Film will not receive additional credit for taking Ethnographic Film.

A review of major film styles useful for anthropological film and video in conjunction with an analysis of the role of film/video in anthropology. Topics will include relationships of anthropological and ethnographic films, the significance of historical and ideological contexts, comparisons to indigenous video and feature films, and problems in the communication of anthropological theory and insight through the film/video medium. A broad range of ethnographic films will be screened to illustrate a progression of work and variety in relationships of theory, subject matter, cultural context, production techniques and style, and expected audiences.

Repeatability: This course may not be repeated for additional credits.

ANTH 3436. Anthropology of New Media. 3 Credit Hours.

This course will expose students to the anthropological theory of New Media as well as traditional and newly emerging socio-cultural methodology. Building on long-standing anthropological analyses of media as a vehicle for cultural expression and a means for articulating and defining human culture, this course will train students both to analyze and produce New Media forms. Students will be required to combine the central methodologies of socio-cultural anthropology, such as interviewing and participant observation, with New Media participatory and interactive technologies for producing and analyzing data.

Repeatability: This course may not be repeated for additional credits.

ANTH 3438. Anthropology of Mass Media. 3 Credit Hours.

Mass media is a comparatively new topic of study for anthropology, which a century ago focused on supposedly pre-literate, pre-modern, traditional societies. Now, of course, anthropologists study people in cities as well as villages, in the U.S. and Europe as well as on remote islands, and even supposedly "exotic" groups have access to media, as rainforest residents wield video cameras and Africa is the world's fastest-growing cell phone market. Today the social life of media (books, magazines, TV, films, videos, audiocassettes, radio, e-mail, the Internet, telephones, billboards, etc.) is a vibrant and growing topic of interest within anthropology. Some of the questions anthropologists ask: What roles do media play in the circulation, transmission, and contestation of culture? How do media (and new media technologies) affect people's lives, and how do people transform and adapt media to fit their needs? What is the relation of the media to economic and political systems? What can we learn by paying attention to the specific details of how media are produced, used, and talked about? This course provides an introduction to theoretical and methodological tools used by anthropologists in studying media; a forum for critical analysis of media processes in the U.S. and around the world; and opportunities to do ethnographic research of media processes.

Repeatability: This course may not be repeated for additional credits.

ANTH 3439. Anthropology of Photography. 3 Credit Hours.

A critical examination of an anthropological approach to photography. Special attention will be given to a socio-cultural history of photography in the U.S. Examples from documentary, fine art, and commercial photographic genres will be shown, discussed, and compared to ethnographic studies. Field methods, models of analysis, and ethical issues will also be included. Required readings, active class participation. No exams. Students keep a journal and write several short essays. NOTE: Knowledge of camera technology and darkroom procedures is helpful but not required.

Repeatability: This course may not be repeated for additional credits.

ANTH 3444. Advanced Production of Anthropological Media. 3 Credit Hours.

Formerly known as Anthropological Problems in Visual Production. Students who have completed Anthropological Problems in Visual Production will not receive additional credit for taking Advanced Production of Anthropological Media.

The introduction of visual recording techniques to a sample of problems in the anthropology of visual communication. Discussions will include ways anthropologists construct problems, develop observational strategies, select appropriate image-making technology, work in field conditions, among others. Strategies of representation connected to the integration of cultural and film theories will be explored in conjunction with a wide range of film examples. Students will be introduced to the department's production facilities and do short exercises in image making, viewing, and interpretation.

NOTE: A lab fee may be necessary depending on the extent of each semester's assignments.

Repeatability: This course may not be repeated for additional credits.

ANTH 3509. Language Socialization and Cultural Reproduction. 3 Credit Hours.

This course examines how children and other novices, through interaction with older or otherwise more "expert" persons, acquire the culturally specific forms of knowledge, skills, orientations, and practices that enable them to become competent members of their communities. Topics explored include cross-cultural variation in ways of teaching and learning; socialization of children and of older novices (such as adult immigrants and job trainees) into new identities, roles, and statuses; and socialization processes as sites of cultural reproduction, innovation, and change. Ethnographic case studies from around the world are discussed and compared. Throughout the semester, using the resources of the Linguistic Anthropology Teaching Laboratory, students collect and analyze ethnographic audio-video data from various local settings (schools, churches, community organizations, workplaces, etc.) in which language socialization can be observed.

Repeatability: This course may not be repeated for additional credits.

ANTH 3537. Language and the Immigrant Experience. 3 Credit Hours.

This course examines the role of language in the experiences of immigrant communities across the globe, and the ways in which language issues, broadly constructed, shape cultural politics of representation and everyday life in migration settings, including: how language is inextricably intertwined with identity formation and social belonging; how language is crucial to understanding how migrants are stratified; and how the experience of migrants in society is formed in the course of everyday interactional engagements.

Repeatability: This course may not be repeated for additional credits.

ANTH 3589. Language as Social Action. 3 Credit Hours.

A variably themed seminar dealing with collection, analysis, and presentation of ethnographic data, emphasizing observation and audio-video recording of communicative practices, both verbal and non-verbal. Each seminar participant develops an independent research project involving fieldwork in local settings.

Repeatability: This course may be repeated for additional credit.

ANTH 3596. Research Methods in Culture and Communication. 3 Credit Hours.

This course is designed to acquaint the undergraduate majors in Anthropology with the methods of linguistic anthropology. This course satisfies the Methods requirement for the major in Anthropology. This course is designed to expose you to culturally diverse perspectives on how these methodological approaches are used in the research design and development of full-fledged ethnographies. From a programmatic perspective, this is an important class that rests firmly on the line between the two themes: "Evolution and Human Environments" and "Mobility and Global Inequality."

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ANTH 3742. Human Origins and Evolution. 3 Credit Hours.

Designed to familiarize students with both theoretical and methodological frameworks for interpreting the human fossil record with a review of the synthetic theory of evolution, socio-biological concepts, and procedures in taxonomy and phylogenetic reconstruction. Attention given to the origin of the human lineage and what the fossils of that lineage tell us about the evolution of anatomical systems that are peculiar to humans. Formerly known as "Human Paleontology". Students who earned credits under the original title will not receive additional credits for this course.

Repeatability: This course may not be repeated for additional credits.

ANTH 3743. Human Biology of Modern Populations. 3 Credit Hours.

An investigation of how advances in genomics have shaped the way physical anthropologists approach the study of living human populations. Students are introduced to basic concepts in the regulation of genetic expression and developmental genetics. Concepts from these two fields are discussed within the framework of evolutionary developmental biology, and we explore the implications of this new synthesis for the evolution of modern humans and modern human variation. Variation caused by changes in developmental timing is explored in terms of genetics (using selection and life history models) and non-genetic (epigenetic, phenotypic plasticity) response pathways to environmental conditions.

Repeatability: This course may not be repeated for additional credits.

ANTH 3746. Human Reproduction: Evolutionary Perspectives. 3 Credit Hours.

This course surveys classic and contemporary literature on human life history evolution, reproductive physiology, and reproductive ecology. It begins by covering some basic information in life history theory and comparative reproductive biology. Secondly, it surveys key issues in the field organized by the stages and events of the life cycle using the following approach: what is the underlying physiology, how do humans compare to the non-human primates and what explanations have been proposed to account for our differences, what factors modulate the expression of life history characteristics among human populations? Duplicate Credit Warning: Students cannot receive credit for this course if they have successfully completed ANTH 4797.

Repeatability: This course may not be repeated for additional credits.

ANTH 3747. Human Growth and Development. 3 Credit Hours.

Understanding growth and development is essential to many aspects of the study of biological anthropology. In this course we will explore the biological processes that lead to the development of the bony skeleton, teeth, and various aspects of body composition. These measures of human growth and development are used in biological anthropology to understand human biological diversity, as well as to appreciate the influence of the genetics, the environment, and human behavior. Students will learn standard methods of assessment of growth and development used with studies of living and past human populations. After learning the basic principles of growth and development and how to measure them, we will explore specific anthropological applications.

Repeatability: This course may not be repeated for additional credits.

ANTH 3770. Methods in Physical Anthropology. 4 Credit Hours.

Advanced undergraduate students will have the opportunity to develop individual research projects in biological anthropology, utilizing materials in the department collections and from department expeditions. Students will be introduced to problems in research design, sampling theory, research paper writing, and commonly used statistical techniques in biological anthropology, and will apply them in their project analyses.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ANTH 2705.

ANTH 3771. Quantitative Analysis in Anthropology. 3 Credit Hours.

The primary goal of this course is to provide students with a solid grounding in basic statistical techniques/methods as applied to anthropological data. Such data is highly variable in form due, in part, to the diversity of research questions being asked and to the methods of collection. The ultimate goal of this course is to bring together various datasets and methods so that students might better assess the results/interpretations presented in the anthropological literature. New quantitative concepts will be presented each week along with examples/applications of the concepts and practice problems. The problems associated with the texts and other data sets will be solved using SPSS, statistical software which resides on all publically available university machines. Formerly known as "Quantitative Methods in Anthropology". Students who earned credits under the original title will not receive additional credits for this course.

Repeatability: This course may not be repeated for additional credits.

ANTH 3772. Evolutionary Medicine. 3 Credit Hours.

This course explores the new field of evolutionary medicine which seeks adaptive explanations for why humans as a species are susceptible to certain diseases that are rare among other mammals. The course also asks why certain human populations are susceptible to disease and illness whereas others are not. In contrast, when physicians and biomedical researchers ask "why" a patient is sick they usually seek an explanation in the effect of a pathogen, the role of anatomical anomaly, a genetic mutation, exposure to an environmental toxin, the cause of physiological dysregulation, or other proximate mechanisms including behavioral and cultural causes. Knowledge of how our biological adaptations and patterns of human biological variation contribute to disease susceptibility is beginning to inform therapeutic approaches in biomedicine and sometimes provokes extraordinary controversy and claims of racism or biological determinism. This course will conclude with a series of discussions and debates about the legitimacy of such critiques after students in the course have learned about evolutionary explanations for disease susceptibility.

Repeatability: This course may not be repeated for additional credits.

ANTH 3774. Environmental Physiology and Health. 3 Credit Hours.

There are two interrelated goals to this course. The first is to understand the nature of human physiological responses to environmental extremes. Here, in addition to understanding basic physiological responses to nutritional stress, climactic temperature and high altitude hypoxia, we will examine genetic and environmental causes of population differences. We also will critically evaluate adaptive hypotheses used to explain differences between human populations. The second goal is to write a scientific paper in a format acceptable for publication. To accomplish this, students will learn how to formulate and justify a hypothesis related to human physiological variation, develop an appropriate analytical strategy, test the hypothesis using a population-based data set, and interpret the results.

Course Attributes: SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ANTH 2705.

ANTH 3796. Methods in the Study of Evolution. 3 Credit Hours.

This course will critically evaluate the ways evolutionary theory has been used to explain human and primate evolution and modern human biological diversity. Included will be lectures on, and discussion of, the history of evolutionary thinking, the sources of variation in human populations, evolutionary processes, behavioral ecology, the levels of selection and problems in phylogenetic reconstruction. Anthropologically relevant models will be used throughout the course. Formerly known as "Evolutionary Biology". Students who earned credits under the original title will not receive additional credits for this course.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ANTH 2705.

ANTH 3910. Honors: Special Topics. 3 Credit Hours.

A variable topic Honors course. The topic of the course may vary by section number. Be sure to check with the instructor who is offering the given course and section to find out the specific course description in a given semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

ANTH 4082. Independent Study. 1 Credit Hour.

Directed reading and research on a specific anthropological topic. NOTE: Does not count toward major requirements in Anthropology.

Repeatability: This course may be repeated for additional credit.

ANTH 4083. Independent Study. 3 Credit Hours.

Directed reading and research on a specific anthropological topic. NOTE: Does not count toward major requirements in Anthropology.

Repeatability: This course may be repeated for additional credit.

ANTH 4096. Capstone in Evolution and Human Environments. 3 Credit Hours.

This is a writing intensive capstone course designed for senior anthropology majors or other qualified students who have taken courses (or who are interested) in the theme of "Evolution and Human Environments". With an understanding of how evolutionary and ecological processes influence past socio-cultural and biological change and how they affect modern population bio-cultural diversity, students will identify a research hypothesis and then develop a proposal that could be submitted to a private or public funding agency. This will involve the identification of articles that will be used to write a literature review related to the hypothesis, and then move through the steps of writing a research proposal: explaining the methodology that will be used to test the hypothesis, the type of results that are anticipated, the strategy that will be used to analyze the results, and the ways in which results will be disseminated to the public. The result will be a complete research proposal based on a format from a specific funding agency.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ANTH 2001 and (ANTH 3196, ANTH 3396, ANTH 3596, or ANTH 3796)

ANTH 4097. Capstone in Mobility and Global Inequality. 3 Credit Hours.

This writing-intensive course is the capstone requirement for the undergraduate major in anthropology. It is intended for advanced undergraduate anthropology students who are interested in issues of mobility and global inequality. The course will focus on the application of discipline-specific methods and modes of analysis to contemporary problems relating to movements of persons, objects, and ideas, and to inequalities of power and access to resources at multiple levels, from local to global. It is most appropriate for students who are interested in applying ethnographic methodologies to such problems, but it is open to all anthropology students who have completed a methods course in the Department of Anthropology. Advanced students in related fields may take it with the permission of the instructor.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ANTH 2002 and (ANTH 3196, ANTH 3396, ANTH 3596, or ANTH 3796)

ANTH 4185. Internship in Anthropology. 3 Credit Hours.

This course provides hands-on, professional level work experiences for Anthropology majors focusing on the study of archaeology. It is designed for students who have already completed basic course work in archaeology, including the department's field school [Anthropology 3189 (0320) & 3170 (0321)]. Students will be placed with one of a number of firms in the region involved in cultural resource management studies where they will be employed in a variety of laboratory and field activities. The intensity and focus of the experience will be tailored to the particular needs or interests of the student, but minimally will involve 8 hours of effort per week.

Repeatability: This course may be repeated for additional credit.

ANTH 4796. Biocultural Adaptations in Human Populations. 3 Credit Hours.

An evaluation of adaptation, selection, and ecological concepts as the bases for models integrating human biology and culture, and for explaining change.

Course Attributes: SI, WI

Repeatability: This course may not be repeated for additional credits.

ANTH 4798. Seminar in Human and Primate Evolution. 3 Credit Hours.

An in-depth review of the synthetic theory of evolution and special topics in evolutionary theory. Emphasis will be placed on human evolution, human bio-cultural adaptation, and evolutionary biology.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ANTH 4897. Research in Biological Anthropology. 3 Credit Hours.

This is a writing-intensive capstone course in biological anthropology. It is designed to provide students with an opportunity to formulate a data-specific and testable research hypothesis concerning the cause of variation within human populations, or across primate species. Students will have access to a large number of faculty-generated data sets; and can therefore select a research project that fits their interests. Each phase of the research project (the development of hypotheses, the strategy used to test the hypothesis on one of the data sets, the selection of statistics used to analyze data, and the interpretation of results) will coincide with the construction of a section of a scientific paper. After each phase of the paper is written, it will be evaluated, discussed in class, revised, and re-presented. The result will be a final paper based on the research project, in a format that is suitable for presentation at a scientific meeting or publication in a scientific journal.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ANTH 4982. Honors: Independent Study. 3 Credit Hours.

Directed reading and research on a specific anthropological topic.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

Applied Behavior Analysis (ABA)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ABA 2103. Concepts and Principles of Behavior Analysis. 3 Credit Hours.

This course provides the student with an introduction to the concepts and principles of Behavior Analysis. Core concepts including motivation, reinforcement, punishment, extinction, and rule-governed and verbal behavior will be covered, along with examples of behavior change techniques that employ these concepts. This course satisfies 45 hours in philosophical underpinnings (concepts and principles) required by the Behavior Analyst Certification Board (BACB) in a free-standing course.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

ABA 3301. Understanding Autism. 3 Credit Hours.

This course provides an overview of Autism Spectrum Disorders (ASD). Students will learn the cases, prevalence, diagnostic criteria, and related characteristics of the disorder, as well as behavioral manifestations. Students will also be introduced to the evidence-based practices developed to help children and adolescents with ASD to reach their full potential.

Repeatability: This course may not be repeated for additional credits.

ABA 3302. Analyzing and Changing Behavior. 3 Credit Hours.

This is an undergraduate level foundation course in using the science of Applied Behavior Analysis to change behavior for the better of society. The course will cover basic principles of Applied Behavior Analysis and methods for implementing principles to produce socially significant behavior. Some of the principles reviewed are positive and negative reinforcement, extinction, motivating operations, punishment, discrimination, and stimulus control. Additionally, this course will review procedures and techniques used to change behavior. Examples of procedures and techniques that will be covered are prompting, fading, shaping, chaining, reinforcement schedules, time out, response cost, behavioral contracts, and token economy. Following the course you will have an understanding, using the science of Applied Behavior Analysis, about how to analyze and change behavior.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

ABA 3303. Evaluating Behavior Change Intervention. 3 Credit Hours.

This course provides an overview of strategies for measuring and evaluating changes in behavior. Many fields, including applied behavior analysis, implement interventions to change a person's behavior and then seek to determine if those interventions are effective. The purpose of the course is to teach the skills involved in measuring a behavior that has been targeted for an intervention and utilizing specific analytic skills to evaluate whether that intervention was effective. Competencies include selection of dependent variables for measurement, measurement tactics, single case research design, etc. In addition to learning how to collect and analyze data, students will learn to analyze the validity of existing data and research already conducted. The methods discussed are not specific to any handicapping condition or age level; rather, they are a general set of methods for conducting and interpreting single-subject data analysis.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

ABA 3304. Ethics and Applied Behavior Analysis. 3 Credit Hours.

During this course, we will explore the issue of ethics in Applied Behavior Analysis by engaging in various activities including: case study discussions, role plays, functional analyses of unethical behavior, and article presentations. Some in-class activities will require preparation prior to arriving to class. This course satisfies 45 hours of the content in BACB Compliance Code and Disciplinary Standards in a freestanding course required by the Behavior Analyst Certification Board (BACB). This course addresses specific guidelines for responsible conduct according to the Behavior Analyst Certification Board: <http://bacb.com/ethics-code/>.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

Arabic (ARBC)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ARBC 0868. World Society in Literature & Film. 3 Credit Hours.

Learn about a particular national culture by taking a guided tour of its literature and film. You don't need to speak a language other than English to take this exciting course, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film include family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

ARBC 0968. Honors World Society in Literature & Film. 3 Credit Hours.

Learn about a particular national culture by taking a guided tour of its literature and film. You don't need to speak a language other than English to take this exciting course, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film include family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. (This is an Honors course.) NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GG, HO

Repeatability: This course may not be repeated for additional credits.

ARBC 1001. Arabic Elements I. 4 Credit Hours.

First semester level of Arabic.

Course Attributes: LC

Repeatability: This course may not be repeated for additional credits.

ARBC 1002. Arabic Elements II. 4 Credit Hours.

Second semester level of Arabic.

Course Attributes: LC

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARBC 1001.

ARBC 1401. Spoken Syrian Colloquial I. 1 Credit Hour.

This is an elementary course in spoken Syrian colloquial, which is closely related to other Arabic colloquials spoken in the Levant region. The goal is to become aware of and acquire skills in the basic linguistic shifts from modern standard Arabic (MSA) to the regional colloquial. Arabic is characterized as diglossic, meaning that most speakers of the language utilize two registers, the spoken and the formal written. There is a considerable gap between the two on a number of levels: pronunciation, word choice, grammar and syntax.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARBC 1002.

ARBC 2000. Special Topics I. 3 Credit Hours.

Arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic.

Repeatability: This course may be repeated for additional credit.

ARBC 2001. Arabic Intermediate I. 3 Credit Hours.

Third semester of Arabic.

Course Attributes: LC

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARBC 1002.

ARBC 2002. Arabic Intermediate II. 3 Credit Hours.

Fourth semester of Arabic.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARBC 2001.

ARBC 2012. Modern Arabic Literature in Translation. 3 Credit Hours.

Formerly known as Contemporary Arabic Literature (in Translation)

This course will survey some of the most important contemporary narratives of Arabic literature, with emphasis on their socio-political context. The timeline of the course runs from the end of World War II, the creation of Israel in 1948, and the 1952 Free Officers Revolution in Egypt up to the present. Historic events give us a framework for referencing the literary works. At the same time, we will consider novels, short stories, and poems as works of art on their own, inquiring into their narrative framework, aesthetic strategies, and position within the Arabic literary heritage. Critical and background readings will supplement literary texts. Occasionally we will have the opportunity to watch films that supplement the literature. All works will be in English and all films will be subtitled.

Repeatability: This course may not be repeated for additional credits.

ARBC 2021. Contemporary Arab Society in Film (in Translation). 3 Credit Hours.

This course uses film as a medium to explore contemporary social and political issues in the Arab Middle East. It investigates how filmmakers from the region narrate, represent and navigate particular historical events and conditions of the region. The films are coupled with readings that provide background and help to facilitate historical, cultural and, at times, aesthetic understandings of the narratives. The narratives begin roughly in the middle of the 20th century, and are arranged thematically - though a sense of historic consequence is evident. The films cover issues such as: feudalism and "socialist" revolution; Palestine after 1948 and the consequences in the Arab world; pan-Arabism; women, modernity, and the city; authoritarian states; religious extremism; war; immigration; and identity.

Repeatability: This course may not be repeated for additional credits.

ARBC 2900. Honors Special Topics I. 3 Credit Hours.

This is an Honors course. It is arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

ARBC 3001. Arabic Advanced I. 3 Credit Hours.

Fifth semester of Arabic.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARBC 2002.

ARBC 3002. Arabic Advanced II. 3 Credit Hours.

Sixth semester of Arabic.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARBC 3001.

ARBC 3010. Special Topics IV. 3 Credit Hours.

Arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic.

Repeatability: This course may be repeated for additional credit.

ARBC 4183. Arabic Directed Readings I. 3 Credit Hours.

Arranged each semester. Please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ARBC 3002.

ARBC 4283. Arabic Directed Readings II. 3 Credit Hours.

Arranged each semester. Please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ARBC 3002.

Architecture (ARCH)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ARCH 0835. Guerrilla Altruism: A Mini-Manual of Subversive Activism. 3 Credit Hours.

A multi-disciplinary investigation into the unorthodox strategies deployed by contemporary guerrilla artists and activists, reformers and humanitarians, eventually culminating in the design and realization of one or more small-scale humanitarian interventions within Temple's surrounding communities.

NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core.

Course Attributes: GB, SI

Repeatability: This course may not be repeated for additional credits.

ARCH 0875. Architecture and the American Cultural Landscape. 3 Credit Hours.

This course explores the relation of the physical environment, understood as both given and constructed, to the larger and more ephemeral cultural context which it at once delimits and enables. The resultant scene-like spatial situations have been described within some academic disciplines as "cultural landscapes," a term meant to describe distinct geographical areas or properties uniquely representing the combined work of nature and humans. Deploying this concept of cultural landscapes as a framework, the course will plumb American culture with an emphasis on its physical dimension, exploring the ways that culture is engaged, reflected, and modified in the substance and configuration of those places wherein and through which we live our individual and collective lives. The course will ask students to explore how geography, topography, ecology, landscape, economics, and politics have influenced the reading and making of the American cultural landscape, and, perhaps more importantly, how the corporeal characteristics of constructed places have in turn shaped cultural developments and impacted, by extension, our world. At base, then, the course facilitates consideration of the fundamental interdependencies of nature, human nature, and the constructed environment in the context of U.S. culture. The politics of place are central to these explorations, but do not encompass them, since place intersects U.S. culture and society on many extra-political levels. The course will be founded on historical precedent and case studies, considered in light of key texts from various disciplines including urbanism, architecture, geography, film, philosophy, fiction, anthropology, and sociology, topical discussion, site visits, and the students' own analyses. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd. Students cannot receive credit for this course if they have successfully completed ARCH 0975.

Course Attributes: GU, SI

Repeatability: This course may not be repeated for additional credits.

ARCH 0935. Honors Guerrilla Altruism: A Mini-Manual of Subversive Activism. 3 Credit Hours.

A multi-disciplinary investigation into strategies deployed by contemporary community based architects, artists and activists. The course engages community groups and results in collaborative planning and design strategies, proposals, and projects in Philadelphia and surrounding communities. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GB, HO, SI

Repeatability: This course may not be repeated for additional credits.

ARCH 0975. Honors Architecture & the American Cultural Landscape: Physical Dimensions of Cultural Settings. 3 Credit Hours.

This course explores the relation of the physical environment, understood as both given and constructed, to the larger and more ephemeral cultural context which it at once delimits and enables. The resultant scene-like spatial situations have been described within some academic disciplines as "cultural landscapes," a term meant to describe distinct geographical areas or properties that represent the combined work of nature and humans. Deploying this concept of cultural landscapes as a framework, the course will plumb American culture with an emphasis on its physical dimension, exploring the ways that culture is engaged, reflected, and modified in the substance and configuration of those places wherein and through which we live our individual and collective lives. The course will ask students to explore how geography, topography, ecology, landscape, economics, and politics have influenced the reading and making of the American cultural landscape, and, perhaps more importantly, how the corporeal characteristics of constructed places have in turn shaped cultural developments and impacted, by extension, our world. At base, then, the course facilitates consideration of the fundamental interdependencies of nature, human nature, and the constructed environment in the context of U.S. culture. The politics of place are central to these explorations, but do not encompass them, since place intersects U.S. culture and society on many extra-political levels. The course will be founded on historical precedent and case studies, considered in light of key texts (from various disciplines including urbanism, architecture, geography, film, philosophy, fiction, anthropology, and sociology), topical discussion, site visits, and the students' own analyses. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd. Students cannot receive credit for this course if they have successfully completed ARCH 0875.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GU, HO, SI

Repeatability: This course may not be repeated for additional credits.

ARCH 1001. Introduction to Design and the Environment. 3 Credit Hours.

An introduction to the complex and contingent relationship between architects and the environments in which they intervene. Using contemporary and historical materials, students will begin to understand how architects establish and position design processes in response to their social, technological, and material situations. Coursework includes both position papers in response to particular reading topics as well as diagrammatic interrogations of the city around us. NOTE: (1) Open to non-majors. (2) A required course for all students interested in majoring in architecture and an elective university Core course in the Arts category. (3) This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university Gen Ed requirements. See your advisor for further information.

Course Attributes: AR, SE, SI, SS

Repeatability: This course may not be repeated for additional credits.

ARCH 1011. Visual Literacy for Architects 1. 3 Credit Hours.

This course focuses on the development of visual literacy, graphic techniques, and 3D formal exploration. Through projects supported by research, graphically-based exercises, and formal investigations, students will be exposed to the process of representation in architecture. Units dealing with line, patterning, surface articulation, form, and assembly will be explored through 2D and 3D analog constructions. Thematic concepts linked to each unit will be presented through the work and representation of architects and artists.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation, Historic Preservation.

Repeatability: This course may not be repeated for additional credits.

ARCH 1012. Visual Literacy for Architects 2. 3 Credit Hours.

This course continues to focus on the development of visual literacy, graphical techniques, and 3D formal exploration. Through projects supported by research, graphically-based exercises, and formal investigations, students will be exposed to the process of representation in architecture. Methods of deconstruction and filtering, narrative assemblies, motion systems, propositional imagery, and visual assembly will be explored through 2D and 3D analog and digital constructions. Thematic concepts linked to each unit will be presented through the work and representation of architects and artists.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation, Historic Preservation.

Repeatability: This course may not be repeated for additional credits.

ARCH 1013. Architectural Representation for Non-Majors. 3 Credit Hours.

Introduction to architectural representation and design. This is a studio based course for non-majors. Students are introduced to 2D and 3D architectural design graphic techniques, and engage in drawing and model making in a studio setting. Note: This course may not count as an Architecture elective course for the BS in Architecture, BS in Facilities Management, BS in Architectural Preservation, BS in Historic Preservation or Certificate in Historic Preservation.

Repeatability: This course may not be repeated for additional credits.

ARCH 1017. Photography and Visual Literacy. 3 Credit Hours.

Photography is explored as a visual language, complete with vocabulary, syntax, and modes of expression. This course introduces the principles of visual design that are particularly important for creating articulate and aesthetically engaging photographs. Using their own digital cameras, students develop sufficient technical competence to be able to make photographs that investigate the fundamental issues of visual design, in the context of environmental studies. NOTE: This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AR

Repeatability: This course may not be repeated for additional credits.

ARCH 1196. History of Form of Cities. 3 Credit Hours.

Study of the physical design of cities with particular emphasis on the emergence of settlement patterns and their relationship to landforms and social intentions. NOTE: This course can be used to satisfy a university Core Arts (AR) and Writing Intensive (WI) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AR

Repeatability: This course may not be repeated for additional credits.

ARCH 1502. Investigations into Built Environment Professions. 1 Credit Hour.

This course for entry level students in Architecture and Environmental Design introduces students to educational and career paths in the built environment professions (architecture, architectural preservation, community development, facilities management, horticulture, landscape architecture, and city planning). Note: Prior to fall 2017, the course title was "Investigations in Architecture."

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

ARCH 1996. Honors History of Form of Cities. 3 Credit Hours.

Study of the physical design of cities with particular emphasis on the emergence of settlement patterns and their relationship to landforms and social intentions. NOTE: This course can be used to satisfy a university Core Arts (AR) and Writing Intensive (WI) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: AR, HO

Repeatability: This course may not be repeated for additional credits.

ARCH 2121. Foundation Architectural Design 1. 4 Credit Hours.

The development of design logics drawn from natural systems, processes and measurement; introduction to landscape research and site analysis; development of the desk crit as a teaching method; craft based modes of drawing, model making, and visualization; emphasis on graphic and spatial relationships, active plotting and site analysis. Scale: the body in the natural landscape.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation, Historic Preservation.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ARCH 1011 or 'Y' in AR11) and (ARCH 1012 or 'Y' in AR12)

ARCH 2122. Foundation Architectural Design 2. 4 Credit Hours.

Developing rigorous design thinking through making and the integration of material, craft, tectonic and visual practice. Further development of the design crit plus methods of communicating design objectives. Scale: artifact, body and spatial envelope.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation, Historic Preservation.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ARCH 1011 or 'Y' in AR11), (ARCH 1012 or 'Y' in AR12), and (ARCH 2121 or 'Y' in AR21)

ARCH 2123. Facility Management Foundation I. 3 Credit Hours.

Studio with a focus on interior architecture, space occupation, and qualities of space. Analysis and practical application of use of space, adjacencies, to provide a general understanding of place making, methods of construction, tectonics and detailing as design concerns; introduction to precedent study as research technique.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation, Historic Preservation.

Co-requisites: ARCH 2153.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ARCH 1011 or 'Y' in AR11) and (ARCH 1012 or 'Y' in AR12)

ARCH 2124. Facility Management Foundation II. 3 Credit Hours.

Studio with environmental sustainability focus for facility management - energy and resource use, hydrology, sustainable materials, infrastructure and building methods, recycling, environmental performance and quality; emphasis on systems and details (very large and very small); development of techniques for environmental analysis (observation, data analysis, etc.); development of ecological and environmentally responsive design proposals; program development; introduction to design collaboration.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation, Historic Preservation.

Co-requisites: ARCH 2154.

Course Attributes: SE, SF, SP

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ARCH 2121, 'Y' in AR21, ARCH 2123, or 'Y' in AR23)

ARCH 2141. Architectural History: Ancient through Renaissance. 3 Credit Hours.

Traces the history of Western architecture from the ancient world to the high renaissance and mannerism of the late 16th century. The evolution of architectural thought, various formal languages (styles) and theoretical concepts are studied through the examination of selected buildings within their specific political, social, economic, and cultural milieu. Emphasis on the analysis of the ancient temple and the Christian church. NOTE: This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AR

Repeatability: This course may not be repeated for additional credits.

ARCH 2142. Architectural History: 17th Century through 20th Century. 3 Credit Hours.

Traces the history of architecture from the 17th century through the present time. The evolution of architectural thought, various languages (styles) and theoretical concepts from cultures around the world are studied through the examination of selected buildings within their specific political, social, economic, and cultural milieu. The course introduces analytical methods for the study of significant buildings across a range of architectural styles and significant periods of development. Note: Prior to Fall 2023 this course was titled "Architectural History: Renaissance through 20th Century."

Course Attributes: AR

Repeatability: This course may not be repeated for additional credits.

ARCH 2151. Architecture, Technology, and the Environment. 3 Credit Hours.

Introduction to behavioral, environmental and technological factors in relation to the building design process. Basic exploration of functional, sustainable and material aspects of architecture.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation, Historic Preservation.

Course Attributes: SE, SF, SS

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ARCH 1001 or 'Y' in AR01) and (ARCH 1011 or 'Y' in AR11)

ARCH 2153. Facility Management Case Study Research I. 1 Credit Hour.

Case study research course focused on available products and applications of architectural interiors. This is a one-credit lab component for ARCH 2123: Facility Management Foundation I.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation, Historic Preservation.

Co-requisites: ARCH 2123.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ARCH 1011 or 'Y' in AR11) and (ARCH 1012 or 'Y' in AR12)

ARCH 2154. Facility Management Case Study Research II. 1 Credit Hour.

Case study research course focused on available products, applications, and issues pertaining to sustainable architecture. This is a one-credit lab component for ARCH 2124: Facility Management Foundation II.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation, Historic Preservation.

Co-requisites: ARCH 2124.

Course Attributes: SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ARCH 2121, 'Y' in AR21, ARCH 2123, or 'Y' in AR23)

ARCH 2941. Honors Architectural History: Ancient through Renaissance. 3 Credit Hours.

Traces the history of Western architecture from the ancient world to the high renaissance and mannerism of the late 16th century. The evolution of architectural thought, various formal languages (styles) and theoretical concepts are studied through the examination of selected buildings within their specific political, social, economic, and cultural milieu. Emphasis on the analysis of the ancient temple and the Christian church. NOTE: This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: AR, HO

Repeatability: This course may not be repeated for additional credits.

ARCH 2942. Honors Architectural History: Renaissance through the 20th Century. 3 Credit Hours.

Traces the history of Western architecture from the 17th century through the 20th century. The evolution of architectural thought, various languages (styles) and theoretical concepts studied through the examination of selected buildings within their specific political, social, economic, and cultural milieu. Analysis of the significant buildings of the baroque and rococo, the neo-classic and the romantic, modernist, and post-modernism periods. NOTE: This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: AR, HO

Repeatability: This course may not be repeated for additional credits.

ARCH 3010. Seminar: Special Topics in Communications. 1 to 3 Credit Hour.

Special seminar dealing with current topics in communications in the field of architecture. NOTE: Course may be taken more than once for credit when each topic is unique.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may be repeated for additional credit.

ARCH 3012. Computer Aided Facility Management. 3 Credit Hours.

Consideration of current trends and practices in computer aided facility management (CAFM), computerized maintenance management systems (CMMS) and integrated computer-aided design (CAD) applications and databases.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Facilities Management.

Repeatability: This course may not be repeated for additional credits.

ARCH 3013. Project Planning & Programming. 3 Credit Hours.

A course covering the general processes related to the planning, programming, design, construction and occupancy of facilities, including long range, strategic and tactical planning, the relationship between facility planning and business planning, organization of sites, buildings and interiors. Also covered are specific tools and techniques for these functions, including design and construction documentation and contracts, facility inventories, space planning and relocation management, construction and installation specifications, value engineering, post-occupancy evaluation, contract management and cost estimating techniques.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation, Historic Preservation.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ARCH 1011 or 'Y' in AR11), (ARCH 1012 or 'Y' in AR12), and (ARCH 2121, 'Y' in AR21, or (ARCH 2123 and ARCH 2153))

ARCH 3020. Special Topics Studio. 6 Credit Hours.

Special design studio. Topics vary with year and instructor. Consult Architecture office for more information.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may be repeated for additional credit.

ARCH 3030. Special Topics in Design. 3 to 6 Credit Hours.

Special studio dealing with issues of architectural design. Topics vary with year and instructor. Consult Architecture office for more information. May be taken more than once for credit when each topic is unique. NOTE: Architecture majors only.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may be repeated for additional credit.

ARCH 3040. Seminar: Special Topics in History and Theory. 1 to 3 Credit Hour.

Special seminar dealing with history and theory of architecture. Topics vary with year and instructor. Consult Architecture Program office for more information. NOTE: Course may be taken more than once when each topic is unique.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may be repeated for additional credit.

ARCH 3050. Seminar: Special Topics in Building Technology. 1 to 3 Credit Hour.

Special seminar dealing with building technology in architecture. Topics vary with year and instructor. Consult Architecture Program office for more information. NOTE: Course may be taken more than once when each topic is unique.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may be repeated for additional credit.

ARCH 3060. Special Topics in Digital Technology. 1 to 3 Credit Hour.

Special seminar dealing with digital technology in architecture. Topics vary with year and instructor. Consult Architecture Program office for more information. NOTE: Course may be taken more than once when each topic is unique.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may be repeated for additional credit.

ARCH 3070. Seminar: Special Topics in Site and Context. 1 to 3 Credit Hour.

Special seminar dealing with current topics in site and context in the field of Architecture. NOTE: Course may be taken more than once for credit when each topic is unique.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may be repeated for additional credit.

ARCH 3080. Seminar: Special Topics in Human Factors and Environment. 1 to 3 Credit Hour.

Special topics seminar dealing with current topics in environment and human factors in the field of architecture.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may be repeated for additional credit.

ARCH 3090. Special Topics in Professional Practice. 1 to 3 Credit Hour.

Special seminar dealing with professional practice in architecture. Topics vary with year and instructor. Consult Architecture Program office for more information. NOTE: Course may be taken more than once when each topic is unique.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may be repeated for additional credit.

ARCH 3096. Vernacular Architecture. 3 Credit Hours.

Study of vernacular architecture as an embodiment of site, culture, indigenous materials and craft.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Facilities Management, Architectural Preservation, Historic Preservation.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ARCH 3097. Introduction to Facility Management. 3 Credit Hours.

Overview of the profession of facility management, including the organizational, managerial, ethical and legal principles behind facility management services. The course includes the history of facility management and related professions, concepts, roles and responsibilities of the profession, basic facility management functions and techniques, organizational issues (including corporate culture, relationships between facility units and other organizational divisions, facility management and industry structure, etc.) and codes and other regulatory issues. The course is writing intensive.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Facilities Management.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Science.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ARCH 3111. Introduction to Historic Preservation. 3 Credit Hours.

This course introduces students to the scope of architectural conservation, preservation and adaptive reuse, their histories, philosophies and theoretical bases. It introduces techniques for the preservation of buildings, including those for observation, recording and intervention.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Architectural Preservation, Historic Preservation.

Course Attributes: SF, SP, SS

Repeatability: This course may not be repeated for additional credits.

ARCH 3146. Engaging Places: Observations. 2 Credit Hours.

This course introduces students to the study of buildings and public places in Philadelphia using a set series of investigative and observation methods.

Repeatability: This course may not be repeated for additional credits.

ARCH 3152. Materials and Methods. 4 Credit Hours.

Introduction to construction materials, fundamentals of building construction, methods of assembling building systems in an integrated manner, and costing. Introduces specific regulatory issues dealing with zoning regulations, building codes, and barrier-free access requirements within the context of contemporary building techniques. Methods of construction in wood, masonry, concrete, and steel are described in detail and issues of enclosure, roofing, insulation, and finishes are presented. The course carries technical drawing requirements.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation, Historic Preservation.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ARCH 2151 or 'Y' in AR51), MATH 1031, and (PHYS 1021 or ECE 2142)

ARCH 3174. Site Investigations. 3 Credit Hours.

The course focuses on the discourse on urban form, the environment and design process that has emerged since the middle of the 20th century. It will examine theories and projects that address the integration of architecture, landscape and urbanism, so that students will be better prepared to address complex issues surrounding building sustainable environments. The subject is explored through readings, lectures, and case studies.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ARCH 2121 or 'Y' in AR21) and (ARCH 2122 or 'Y' in AR22)

ARCH 3212. Introduction to Architectural Documentation. 3 Credit Hours.

This lecture and hands-on lab course will introduce students to techniques of architectural documentation through the use of computer-aided drafting, building information modeling, and other software within the field of Architecture.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ARCH 3231. Architectural Design III. 6 Credit Hours.

House and Community Studio. This studio will introduce students to the design of domestic space, including the relationships between program, culture, society, and form making.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bach of Sci in Architecture.

Course Attributes: SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ARCH 2121 or 'Y' in AR21) and (ARCH 2122 or 'Y' in AR22)

ARCH 3232. Architectural Design IV. 6 Credit Hours.

Introduction to Integrated Design Studio. This studio will focus on integrated and sustainable building design with particular attention given to the design of the building envelope system, considering building energy transactions, site issues and user experience. Secondary issues will include rain/storm water management, sustainable material evaluation, and coordination with structural and (primarily passive) environmental systems.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bach of Sci in Architecture.

Course Attributes: SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARCH 3231.

ARCH 3233. Architecture Design Studio in Tokyo (Undergraduate). 6 Credit Hours.

Complex design investigation incorporating analysis of urban systems, observational research, data collection and analysis and the study of architectural precedent. This course aims to develop understandings of a foreign architectural and urban culture and how to engage it and promotes cosmopolitan values. Scale: variable.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ARCH 3234. Architectural Design Studio in Rome. 6 Credit Hours.

Architectural design studio at the Rome Campus with noted architectural faculty from Italy. Special application required. Consult Architecture Department office for more information. Course may be used to satisfy one of the upper level studios [Architecture 3231 (0231), 3232 (0232), or 4332 (0332)] but may only be taken once.

Repeatability: This course may not be repeated for additional credits.

ARCH 3241. Seminar Analysis of Urban Structure in Rome. 3 Credit Hours.

Research on urban systems and forms that have marked the development of Italian and Roman architecture from the 15th to the 18th century and that are now a reference point in every Western city: the piazza, the Roman palazzo, the theater, the garden. The course is intended to be a theoretical and analytical complement to the Rome Campus design course.

Repeatability: This course may not be repeated for additional credits.

ARCH 3242. Urban Seminar in Tokyo (Undergraduate). 3 Credit Hours.

This course provides students an overview of architecture and urbanization in historic and contemporary Japan. Economic, socio-political and technological forces that have shaped the built environment and architecture are discussed and the work of contemporary Japanese architects are studied and analyzed. The course is a theoretical and analytical complement to the Architecture Design Studio.

Repeatability: This course may not be repeated for additional credits.

ARCH 3251. Structural Analysis for Architects. 3 Credit Hours.

This course covers loadings determination and evaluation, resolution and equilibrium of force systems, truss analysis, centroids, moments of inertia, shear and bending moment diagrams, basic beam, column, and system design.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation, Historic Preservation.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MATH 1031 and (PHYS 1021 or ECE 2142)

ARCH 3255. The Art of Detailing. 3 Credit Hours.

Exploration of architectural details and their application and evolution in architectural works through a historical perspective. Students research, analyze, describe, and document their findings into a bound volume.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ARCH 2122 or 'Y' in AR22) and (ARCH 2151 or 'Y' in AR51)

ARCH 3273. Housing and Community Design. 3 Credit Hours.

This course explores the context of housing and the design of communities in the Modern era and uses examples both local and world-wide as case studies.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ARCH 3296. Movements in Modern Architecture. 3 Credit Hours.

History and theories of the architecture and urbanism of the modern period, from the beginning of the 19th century until the 1960's. Key ideas, texts and iconic buildings from the USA, Europe and other sites of the modernist diaspora are discussed. NOTE: This is a writing-intensive course.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ARCH 2141 or 'Y' in AR41) and (ARCH 2142 or 'Y' in AR42)

ARCH 3354. Sustainability and Architecture. 3 Credit Hours.

The study of the ecological, environmental, socio-cultural, and behavioral principles of sustainable architecture, including climatic considerations, total energy systems, resource management, energy-efficient technologies, ecological design strategies, as well as issues of social equity and environmental justice.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation, Historic Preservation.

Course Attributes: SE, SF, SP

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ARCH 2151 or 'Y' in AR51), MATH 1031, and (PHYS 1021 or ECE 2142)

ARCH 3362. Architecture Workshop. 3 Credit Hours.

Support for K-12 classroom teaching experience that is carried out through the Architecture and Design Education (ADE) initiative administered by the Center for Architecture and Design (CFAD). Students work with an interdisciplinary team that introduces an awareness of the principles of architecture and the built environment to students in city schools. Teams are composed of architecture students, a practicing architect and a school teacher who are designated and guided by CFAD staff. Students develop and administer lesson plans and work with the team and students for 4-6 weeks in a classroom setting. Students enrolled in the course work on independent projects and meet during agreed upon weeks with the course instructor to reflect on their work.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ARCH 3391. Independent Research. 1 to 7 Credit Hour.

A project assigned with the approval of the Program Director and conducted under the supervision of a faculty sponsor.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Facilities Management, Architectural Preservation, Historic Preservation.

Repeatability: This course may be repeated for additional credit.

ARCH 3411. Career Preparation. 1 Credit Hour.

In this course, students will learn essential strategies for career entry including strong communication, presentation, and networking skills. This will enable students to increase their marketability as prospective employees.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ARCH 3412. Portfolio Design and Career Preparation. 3 Credit Hours.

This seminar will assist students in the creation of a unique and successful portfolio for use in job placement or graduate program admissions. The course will provide an overview of design presentation tools necessary for effective communication.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ARCH 3970. Honors Special Topics in Architecture, Site and Context. 1 to 3 Credit Hour.

Special topics seminar dealing with issues of site and context in the field of Architecture. Topics vary with year and instructor. Consult Architecture program office and honors course catalog for more information. NOTE: May be taken more than once for credit when each topic is unique.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

ARCH 4011. Research Methods for Facility Management. 3 Credit Hours.

Research and analytical methods for facility management, including literature searches, data collection, analysis and application, basic descriptive and inferential statistics, benchmarking, audits, post-occupancy evaluation and diagnostic, performance and needs assessment. The course is project based and will engage in working relationships with companies in the Philadelphia region.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Facilities Management.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARCH 3013 and ARCH 3097.

ARCH 4096. Professional Practice. 3 Credit Hours.

Administrative and business aspects of the architectural profession, professional relations between architect, engineer, owner, and contractor. Legal aspects of modern practice. Marketing architectural services, project organization, and production.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Facilities Management, Architectural Preservation, Historic Preservation.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ARCH 4099. Capstone Research Seminar for Facility Management. 4 Credit Hours.

The capstone course for all B.S. Facility Management majors that focuses on a self defined individual research topic within the field of facility management based on case study analysis requiring investigative research, problem definition, alternative considerations and solution building. It has a seminar format with discussion and commentary expected from all participants. The course results in the development and presentation of a senior level thesis.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Facilities Management.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ACCT 2101 or ACCT 2901), ARCH 3012, ARCH 3013, ARCH 3097, (ARCH 3152 or 'Y' in AR31), ARCH 4011, and RE 3501.

ARCH 4141. Global Preservation Practice. 3 Credit Hours.

This course introduces the agencies, global, national and regional, operating in the fields of architectural conservation, preservation and adaptive reuse. Through global, national and regional case studies, it develops a knowledge base of contemporary practice.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARCH 3111.

ARCH 4145. Research Methods for Historic Preservation. 3 Credit Hours.

The first half of this course introduces students to sources and methods of investigation particular to historic preservation and develops techniques employed in the physical, verbal, and quantitative documentation of structures, buildings, and sites. Students become acquainted with archival resources, methods of graphical recording and annotation, and preparation of narrative and quantitative records. The second half of this course provides an overview of the physical processes that affect the stability of buildings, structures, and sites and the range of available remedial actions.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Architectural Preservation, Historic Preservation.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARCH 3111.

ARCH 4182. Independent Study in History and Theory. 1 to 7 Credit Hour.

Individual study of advanced nature exploring aspects of architectural history and theory, under the guidance of a faculty advisor.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation, Historic Preservation.

Repeatability: This course may be repeated for additional credit.

ARCH 4199. Capstone Research Seminar for Historic Preservation. 4 Credit Hours.

The is the capstone course for all B.S. Architectural Preservation majors that focuses on a self defined individual research topic within the field of architectural preservation or adaptive re-use. Students are required to demonstrate competence through a reality-based case study. The course has a seminar format with discussion and commentary expected from all participants. It results in the development and presentation of a senior level thesis.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architectural Preservation, Historic Preservation.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ARCH 3111, ARCH 4141, ARCH 4145, and CHEM 1011)

ARCH 4211. Advanced Architectural Representation. 3 Credit Hours.

This course involves lectures and hands-on lab experience in advanced use and applications of computers. The course focuses on graphic programs that allow animation, mapping, visualization, and special rendering techniques. NOTE: Special authorization required for non-majors.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ARCH 4282. Independent Study in Technology. 1 to 7 Credit Hour.

Individual study of advanced nature exploring aspects of architectural history and theory, under the guidance of a faculty advisor.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation, Historic Preservation.

Repeatability: This course may be repeated for additional credit.

ARCH 4285. Professional Internship. 1 to 3 Credit Hour.

This course expands students' knowledge and professional experience through internships in architectural and other built environment firms. Students will be exposed to methods of professional practice to help them advance their careers.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may be repeated for additional credit.

ARCH 4296. Design, Behavior and Culture. 3 Credit Hours.

This course aims to develop students' understanding of how users perceive environments and adapt to them, to investigate the potential role of environmental psychology factors in architectural design; and to develop a working methodology for thinking about the environment based on behavioral and social science principles. The course is writing intensive.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ARCH 2141 or 'Y' in AR41)

ARCH 4331. Architectural Design V. 6 Credit Hours.

Urban Design Studio. This studio will focus on the scale of the neighborhood, developing a variety of techniques to analyze, map, represent and generate urban environments considering geographical, economic, social, cultural, and formal factors. Students will develop urban design proposals and urban architecture through collaborative group work, engaging aligned fields such as landscape architecture, planning, or real estate and stakeholders, such as civic groups, neighborhood associations, etc. as appropriate.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bach of Sci in Architecture.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARCH 3231.

ARCH 4332. Architectural Design VI. 6 Credit Hours.

Architecture Capstone Studio. Students will select from a range of the studio topics, with offerings depending on faculty expertise. Topics will be drawn from the following: Innovation, Materials and fabrication studio; Interdisciplinary studio; Big and complex building studio; Community design studio; Global urban systems studio. Not all topics will be offered every year.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bach of Sci in Architecture.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARCH 3231, ARCH 3232, and (ARCH 4331, ARCH 3233, or ARCH 3234)

ARCH 4351. Environmental Control Systems for Buildings. 3 Credit Hours.

Heating, ventilating, air conditioning, electric power, lighting, acoustics, vertical transportation, plumbing, and fire protection for buildings.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PHYS 1021 and ARCH 3152)

ARCH 4382. Independent Study: Site and Context. 1 to 7 Credit Hour.

Individual study of advanced nature exploring aspects of site, context, or urbanism in architecture, under the guidance of a faculty advisor.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation, Historic Preservation.

Repeatability: This course may be repeated for additional credit.

ARCH 4482. Independent Study in Human Factors and Environment. 1 to 7 Credit Hour.

Individual study of advanced nature exploring aspects of environment and human factors in architecture, under the guidance of a faculty advisor.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation, Historic Preservation.

Repeatability: This course may be repeated for additional credit.

ARCH 4596. Seminar in Architectural Theory. 3 Credit Hours.

Theories of architecture and urbanism during the modern and contemporary periods; participation in critical theoretical discussions and the development of a research paper in response to critical feedback. The course serves to lay the ground for the theoretical development of thesis ideas.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation, Historic Preservation.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ARCH 3243 or ARCH 3296)

Art (ART)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ART 0822. Human Behavior and the Photographic Image. 3 Credit Hours.

How do photographs become more than just a pile of disparate images? Is there more to photography than that single "decisive moment" in the hunt and capture of an image? How do photographers comment on issues that are important to them? How can photographs tell a story? Is there a way one can use the art of photography to elicit change? In this class, students will use their digital cameras to investigate individual photographs, as well as series of photographs. We will look at photography in its historical context -- at the advent of documentary photography and photojournalism, and at narrative photography in its more contemporary form, as photographers use it to chronicle their own lives and to tell a story. Through the exercises of looking at and making photographic images, several core concepts of social work, along with theories of human behavior in the social environment, will be introduced. Students will learn not only about the place photography holds in our culture, but our culture itself, and the students' place in that culture. Students will critically analyze published photographs, as well as photographs made during the class. The semester will culminate in a class exhibition where students will be given the opportunity to present their photographs to the public, demonstrating their understanding of human behavior in the social environment. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed SSWU 0822, GAD 0822 or PHOT 0822.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

ART 1010. Special Topics. 1 to 3 Credit Hour.

In this studio art course, approaches to making and understanding images in various media will be addressed.

Repeatability: This course may be repeated for additional credit.

ART 1011. Introduction to Visual Language, 3-D Design. 3 Credit Hours.

A foundation course in 3-D design focusing on the principles, elements, and technical processes for visual understanding and creative expression.

Department Restrictions: May not be enrolled in one of the following Departments: Tyler:Art, Tyler:Graphic Interactv Design.

Course Attributes: AR

Repeatability: This course may not be repeated for additional credits.

ART 1012. Introduction to Visual Language, Design. 3 Credit Hours.

A foundation course in design focusing on the principles, elements, and technical processes for visual understanding and creative expression.

Department Restrictions: May not be enrolled in one of the following Departments: Tyler:Art, Tyler:Graphic Interactv Design.

Course Attributes: AR

Repeatability: This course may not be repeated for additional credits.

ART 1101. Introduction to Beginning Ceramics for Non-Tyler BFA Majors. 3 Credit Hours.

This course introduces the aesthetic, concept and design of functional objects. Investigates tactility and the process of realizing form, and the effective use of the wheel as a creative tool. Introduces historic and contemporary approaches, firing techniques, and glaze application. NOTE: This course does not fulfill Tyler BFA requirements.

Department Restrictions: May not be enrolled in one of the following Departments: Tyler:Art, Tyler:Graphic Interactv Design.

Repeatability: This course may not be repeated for additional credits.

ART 1201. Introduction to Fibers for Non-Tyler BFA Majors. 3 Credit Hours.

This course focuses on the fundamental structural and surface techniques of fibers. Techniques including weaving, surface dyeing, felt making, embroidery, basketry, and basic hand and machine sewing will be introduced. Students will be encouraged to explore their own unique interpretations using alternative and traditional fiber materials to create contemporary works of art. NOTE: This course does not fulfill Tyler BFA requirements.

Department Restrictions: May not be enrolled in one of the following Departments: Tyler:Art, Tyler:Graphic Interactv Design.

Repeatability: This course may not be repeated for additional credits.

ART 1301. Introduction to Glass for Non-Tyler BFA Majors. 3 Credit Hours.

This is a studio course that will introduce the student to a variety of glass studio methods and processes. It will include glassblowing, glass casting, and glass fabrication. NOTE: This course does not fulfill Tyler BFA requirements.

Department Restrictions: May not be enrolled in one of the following Departments: Tyler:Art, Tyler:Graphic Interactv Design.

Repeatability: This course may not be repeated for additional credits.

ART 1401. Introduction to Jewelry for Non-Tyler BFA Students. 3 Credit Hours.

This course teaches the student to design and create objects in metal, and combine metal with other materials. The course focuses upon both design and technique. The student learns the fundamentals of design, current styles and formal characteristics of jewelry and metal objects through a series of design problems. Basic techniques of metal manipulation are covered from working with pre-existing metal forms as well as transforming objects into metal from non-metal models. The student learns to understand the field of metal as it relates to contemporary society, and the potentials of a career as an artist, working in metal and plastics. Students will be encouraged to design jewelry and/or objects that have personal meaning. Students will be asked to conceptualize each assignment, research historical precedents, and develop their ideas through a series of drawings and/or models. NOTE: This course does not fulfill Tyler BFA requirements.

Department Restrictions: May not be enrolled in one of the following Departments: Tyler:Art, Tyler:Graphic Interactv Design.

Repeatability: This course may not be repeated for additional credits.

ART 1402. Introduction to CAD for Non-Tyler BFA Students. 3 Credit Hours.

Using Rhinoceros 3D CAD modeling software and Flamingo photorealistic rendering software the student will learn to customize the modeling environment and create basic graphic objects: lines, circles, arcs, curves, solids, and surfaces. Students will proceed to draw with precision using coordinate input and object snaps and modify objects with edit commands. This course will show students how to display any portion of the model, import and merge models and output models to different file formats. Creating, testing and verifying solid models in STL file format for production of rapid prototypes will be a focus of this course. Finally, photorealistic rendering of CAD models will be practiced. NOTE: This course does not fulfill Tyler BFA requirements.

Department Restrictions: May not be enrolled in one of the following Departments: Tyler:Art, Tyler:Graphic Interactv Design.

Repeatability: This course may not be repeated for additional credits.

ART 1501. Painting on Paper for Non-Tyler BFA Students. 3 Credit Hours.

This introduction to watercolor and other water-based media course meets in the studio as well as on-site throughout the city. Subjects range from landscape to the model and still life with an emphasis on art historical and current references to subject matter. Painting from observation provides the structure for almost all the assignments but individual interpretation and fluency with color are the ultimate goals of the class. NOTE: This course will not fulfill Tyler BFA requirements.

Department Restrictions: May not be enrolled in one of the following Departments: Tyler:Art, Tyler:Graphic Interactv Design.

Repeatability: This course may not be repeated for additional credits.

ART 1502. Introduction to Visual Language, Painting. 3 Credit Hours.

A foundation course in painting focusing on painting techniques, conceptual development, and the use of elements of design for creative expression.

Department Restrictions: May not be enrolled in one of the following Departments: Tyler:Art, Tyler:Graphic Interactv Design.

Course Attributes: AR

Repeatability: This course may not be repeated for additional credits.

ART 1503. Introduction to Visual Language, Drawing. 3 Credit Hours.

A foundation course in drawing focusing on drawing techniques, conceptual development, and the use of elements of design for creative expression.

Department Restrictions: May not be enrolled in one of the following Departments: Tyler:Art, Tyler:Graphic Interactv Design.

Course Attributes: AR

Repeatability: This course may not be repeated for additional credits.

ART 1504. Philadelphia Sketchbook. 3 Credit Hours.

This non-majors drawing course combines studio instruction in basic drawing skills as well as on-site drawing in Philadelphia's many historical sites and museums. Emphasis will be on improving observational skills and drawing techniques. Students will be encouraged to develop their own unique vision. This course has no prerequisites. Daily outings will be required to various significant Philadelphia sites.

Department Restrictions: May not be enrolled in one of the following Departments: Tyler:Art, Tyler:Graphic Interactv Design.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

ART 1505. Intermediate Painting. 3 Credit Hours.

A second semester level course in oil painting that builds on the ideas introduced in ART 1502 (formerly ARTU 1101 (C079)) with emphasis on conceptual and technical growth. NOTE: This course is required for Art and Art Education majors.

Department Restrictions: May not be enrolled in one of the following Departments: Tyler:Art, Tyler:Graphic Interactv Design.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 1502 or ARTU 1101)

ART 1506. Intermediate Drawing. 3 Credit Hours.

Figurative painting in pastel coupled with basic drawing approaches and techniques. A second level drawing course emphasizing more advanced drawing strategies and the use of chalk pastels. The model is used, although not exclusively.

Department Restrictions: May not be enrolled in one of the following Departments: Tyler:Art, Tyler:Graphic Interactv Design.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 1503 or ARTU 1401)

ART 1601. Art Photography: Darkroom. 3 Credit Hours.

The student is expected to master the basic photographic skills quickly through the use of lecture/demonstration, critiques and independent lab and field work. The course then concentrates on the use of photography as a fine art medium.

Department Restrictions: May not be enrolled in one of the following Departments: Tyler:Art, Tyler:Graphic Interactv Design.

Repeatability: This course may not be repeated for additional credits.

ART 1602. Art Photography: Digital. 3 Credit Hours.

The basic principles of digital photography, including shooting with a digital camera, manipulating images within the computer, and printing to inkjet printers are taught. The course focuses on black & white photo, including duotones. Emphasis is placed on technical expertise, creative development, and an understanding of the potential of imaging software.

Department Restrictions: May not be enrolled in one of the following Departments: Tyler:Art, Tyler:Graphic Interactv Design.

Repeatability: This course may not be repeated for additional credits.

ART 1603. Art Photography / Digital On-Line. 3 Credit Hours.

This course teaches students the use of low-tech devices such as cell phones and point-and-shoot cameras for photography, video and sound recording. The results are posted to art-specific online visual communities similar to Facebook and YouTube. Responses from fellow students are evaluated in class critiques. This course raises the aesthetic bar above what is usually seen online. It teaches students how to see the world through a camera, organize the visual spaces found in their local community, and fill these photographs with meaningful content that can communicate the personal vision they develop during the semester to a broader audience.

Department Restrictions: May not be enrolled in one of the following Departments: Tyler:Art, Tyler:Graphic Interactv Design.

Repeatability: This course may not be repeated for additional credits.

ART 1604. The Shared Image: Photography and Social Media. 3 Credit Hours.

This course will use smartphone photography to explore the relationship between conceptual aspects of photographic imagery and our use of social media. Students will be asked to consider their role as a cultural producer and contemporary uses of imagery in relation to Photography as an artistic medium. The use of social media platforms will provide students with real-world outlets to share ideas and interact with others, and encourage them to take account of the personal responsibility associated with how we use imagery to create meaning and represent ourselves in a virtual community.

Department Restrictions: May not be enrolled in one of the following Departments: Tyler:Art, Tyler:Graphic Interactv Design.

Repeatability: This course may not be repeated for additional credits.

ART 1701. Screenprinting. 3 Credit Hours.

This course engages students in historic and contemporary approaches to water-based screenprinting concepts and technologies, while encouraging a multi-disciplinary approach to fine art print production. Students will begin with direct cut-paper and hand-painted stencils and move into more complex hand-drawn and digitally manipulated photographic techniques. There will be an emphasis on multi-colored, multi-layered prints as well as the print as image, book, poster, installation, and sculpture. Community and group-based activities will be an integral part of the course.

Department Restrictions: May not be enrolled in one of the following Departments: Tyler:Art, Tyler:Graphic Interactv Design.

Repeatability: This course may not be repeated for additional credits.

ART 1702. Artist Books, Zines and Independent Publishing. 3 Credit Hours.

Throughout the semester, you will learn the basics of bookbinding, DIY independent publishing, and limited printmaking processes. This will include, but is not limited to: basic book binding terminology, tools, and structures; basic printmaking techniques, covering hand printing techniques and alternative printmaking processes; development and dissemination of work completed in class; and working knowledge of contemporary practices and working artists in the Book Arts and Zine fields.

Department Restrictions: May not be enrolled in one of the following Departments: Tyler:Art, Tyler:Graphic Interactv Design.

Repeatability: This course may not be repeated for additional credits.

ART 1801. Non-Tyler BFA Woodworking. 3 Credit Hours.

Have you ever wanted to make furniture that doesn't come from Ikea? Have you ever looked at a beautifully crafted chair and asked, "How does that get made?" Have you ever tried to build a bookcase from scrap material only to have it fall apart a week later? Do you know the difference between a "hard" and a "soft" wood? (Hint, it has nothing to do with how easy it is to scratch.) This course is designed to familiarize students with the language and skills necessary to create both functional and aesthetic works out of wood. Through practical demonstrations, readings, project based assignments and group/individual critiques, students will advance their studio practice to utilize wood as a structural material and will have a deeper understanding of craft theory as it applies to wood. Each student will have the opportunity to construct several sculptural and functional furniture pieces over the course of the semester.

Repeatability: This course may not be repeated for additional credits.

ART 1802. Introduction to Welding. 3 Credit Hours.

This course introduces the basics of metal fabrication with an emphasis on sculptural design. Skills covered include cutting, bending, cold assembly methods, welding, and finishing. Students will become familiar with a range of metal shop tools - including hand tools, power and pneumatic tools, stationary equipment, and welders - and will demonstrate competency in these tools and related processes through individual skill assessments and project assignments. This course is designed to cultivate the enjoyment of hands-on practice and will provide a safe environment in which to build skills, experiment with materials and processes, and take creative risks. However, developing technical proficiency requires hard work and practice, and students will be held to a high standard. Students' work will culminate in a final project incorporating multiple fabrication processes learned over the course of the semester, developed in consultation with the instructor based on each student's goals and/or interests.

Department Restrictions: May not be enrolled in one of the following Departments: Tyler:Painting and Sculpture, Tyler:Art, Tyler:Crafts, Tyler:Graphic Interactv Design.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

ART 2001. The Art of Infographics. 3 Credit Hours.

This course is an introduction to data visualization and infographic design. It explores the history of data visualization and infographic design, from cave paintings to contemporary design, covering static, animated and interactive solutions. Lectures on visual literacy and graphic design foundations will help the students develop the vocabulary necessary to critically analyze contemporary infographics. Students receive basic instruction in the creation of infographics and develop their own infographic utilizing supplied data. This course will include readings from Edward Tufte's *The Visual Display of Quantitative Information*. Tutorials may also be used for outside software instruction.

Repeatability: This course may not be repeated for additional credits.

ART 2002. Introduction to Illustration. 3 Credit Hours.

This course introduces students to concepts and techniques in illustration. Basic drawing skills will be needed for this course.

Repeatability: This course may not be repeated for additional credits.

ART 2003. Introduction to Web Design. 3 Credit Hours.

This course instructs students in the fundamentals of interactive design with a focus on the use of interactive software, layout, typography, hierarchy and organization. Basic working knowledge of Adobe Photoshop and Illustrator required.

Repeatability: This course may not be repeated for additional credits.

ART 2004. Mobile Apps: Design/Prototype. 3 Credit Hours.

This course will walk students through the creative process of concept development, design and prototyping a mobile application. The audience for this class includes, but is not limited to: entrepreneurs, business students, computer science/programming majors, advertising students, and anyone interested in design thinking and creative problem solving. Students do not need any prior design knowledge, though some basic Adobe Photoshop skills would be helpful. The course will work through the creative process of identifying a problem, conducting research, brainstorming a solution, studying the user experience, creating a wireframe and executing many iterations to design a working prototype. This course will not involve the actual development of the app. After engaging in group brainstorming and concept development sessions students will understand how group work can help them arrive at the best possible solution for a problem. User experience exercises investigate how a user interacts with a product to create a positive experience. Wireframe exploration and design iterations will establish an overall plan for the mobile app. A study of color, composition and typography will also enhance the visual execution of the app. The final apps will be created as working prototypes.

Repeatability: This course may not be repeated for additional credits.

ART 2010. Special Topics in Art. 3 Credit Hours.

In this studio art course, approaches to making and understanding images, objects and experiences in various media will be addressed. Each topic will be addressed through contextual, procedural, material and critical lenses.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

ART 2011. Socially Engaged Arts Practices in Communities. 3 Credit Hours.

Community Arts brings artists together with people of a community of location, spirit, or tradition, to create art that is based in the life of that community. This course introduces students to the history and theory of Community Arts and current projects in Philadelphia and nationally, through field trips, guest speakers, readings and research. Students will engage in arts projects to orient to and re-discover their own communities of origin in relation to Community Arts and examine issues of race, class, and aesthetics. The course prepares students to become involved in the field internships that are being offered through Tyler/Temple's Arts in Community Program and is a prerequisite for other Arts in Community courses.

Repeatability: This course may not be repeated for additional credits.

ART 2061. Moving Image and Sound. 3 Credit Hours.

This foundational course introduces students to the possibilities of moving image and sound practice. Through screenings and readings by a diverse range of artists, filmmakers, and theorists, students will be introduced to critical concepts in contemporary time-based art practice. Assignments will explore the relationship between still and moving image, sound and deep listening, performance, film/video production, and post-production. Students will acquire a strong understanding of digital video and audio capture and contemporary digital editing practices.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

ART 2101. Beginning Ceramics. 3 Credit Hours.

Wheel thrown and hand formed pottery and sculpture, glazing, and firing, with an emphasis on design as an organic outgrowth of the ceramic process. NOTE: This course is a prerequisite for all other ceramic courses.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Science Educ.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (FDPR 1531, FDPR 1532, or VS 1351)

ART 2102. Intermediate Ceramics. 3 Credit Hours.

Creative problems in pottery for the student who has mastered use of the wheel and basic ceramic processes. Kiln firing techniques and simple glaze formulation will also be covered.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Science Educ.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 2101 or CRFT 2151)

ART 2201. Introduction to Fibers and Material Studies. 3 Credit Hours.

Students are introduced to a wide range of fiber processes, tools, materials, equipment, and ideas in relation to the contemporary discourse surrounding Fibers and Material Studies. Students will learn about contemporary artists working within the field as well as gain an understanding of its histories. This course includes an intro to dye and print on cloth, weaving, tapestry, sewing and various construction techniques. Emphasis is placed on material exploration as well as developing an awareness of the conceptual framework within which one can explore. Visits to local galleries, museums and artist studios will augment the class. Prior to fall 2016, the course title was "Off Loom Structure I".

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (FDPR 1531, FDPR 1532, or VS 1351)

ART 2202. Dyeing for Color I. 3 Credit Hours.

This class is an investigation into the unique properties of dye and color. Over-dyeing and discharge processes are introduced as methods of adding layers of color. Applications will range from controlled immersion dyeing to expressive direct application and resist processes. The historical use of color, contemporary readings, philosophy of color, its political implications and critiques augment this class. Prior to fall 2016, the course title was "Fabric Pattern and Image I".

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (FDPR 1521 or VS 1151)

ART 2203. Alternative Materials. 3 Credit Hours.

This course involves the exploration of alternative materials. Products such as Tyvek, rubber, adhesives, found and recycled materials will be combined with processes such as collage, layering, stitching, and heating. These materials and processes will be used in conjunction with other media and uncommon methods of joining to create a sculptural surface. Students are encouraged to develop a personal vocabulary by combining these techniques with images and found, purchased and recycled materials as well as media from other disciplines. Emphasis on the process of collecting will be used as a basis for the creation of work which involves a contemporary, mixed-media approach to surface treatment and its relationship to structure, form and content. Historical and contemporary issues and practices involving alternative media are explored through readings, field trips, lectures and class discussions.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (VS 1351, ARCH 1011, FDPR 1531, FDPR 1521, or 'Y' in AR11)

ART 2204. Woven Structure I. 3 Credit Hours.

An introduction to weaving using the floor loom. Tapestry and other structural techniques will be taught. Both an historical and a contemporary approach will be encouraged.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

ART 2205. Book Structures. 3 Credit Hours.

This course is an introduction to Book Arts. It includes both traditional and contemporary approaches as well as working with the book as a sculptural medium. Students will be encouraged to experiment with a wide variety of materials and processes and will learn to make several book structures to use as a means of expressing narrative and sequential concepts through which they will develop conceptual abilities and technical proficiencies. NOTE: Formerly titled "Fiber Structures I: Dimensional Form."

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (FDPR 1531 or VS 1351)

ART 2301. Introduction to Glass. 3 Credit Hours.

An introductory studio class for students who are interested in learning the basic processes of off-hand glass working techniques. A brief history of glass, studio operations and studio safety will be covered in slide lectures and studio demonstrations. Glassblowing, mold blowing, glass finishing and team work will be emphasized through demonstrations. NOTE: This course is a prerequisite for all glass courses. Studio work outside of class time is required.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (FDPR 1531, FDPR 1532, or VS 1351)

ART 2302. Intermediate Glass. 3 Credit Hours.

An advanced introductory studio course for learning off-hand blowing techniques. Advanced team work, finishing glass objects, and studio operations will be demonstrated the use of color and its application to hot glass will be introduced.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2301.

ART 2303. Glass Construction, Topic: Cold Glass. 3 Credit Hours.

This studio course provides comprehensive instruction with regard to "cold" glass-working techniques. 2-D and 3-D glass objects will be constructed with the employment of a variety of procedures without the introduction of heat. The classes will encourage the areas of student expertise. Thus, information on surface treatment (glass texturing), joining (glass to glass, to other materials), and finishing processes will be covered. Proficiency in the creation of structurally and conceptually cohesive objects is stressed.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (FDPR 1531, FDPR 1532, or VS 1351)

ART 2401. Jewelry. 3 Credit Hours.

An introduction to the design and fabrication of small scale functional objects and jewelry, exploring metalsmithing, casting, mold making, machine use, anodizing, linkages, plastics and finishing. The course focuses upon both design and technique. The student learns the fundamentals of design, current styles and formal characteristics of jewelry and metal objects through a series of design problems. Basic techniques of metal manipulation are covered from working with pre-existing metal forms as well as transforming objects into metal from non-metal models. The student learns to understand the field of metal as it relates to contemporary society, and the potentials of a career as an artist, working in metal and plastics. Students will be encouraged to design jewelry and/or objects that have personal meaning. Students will be asked to conceptualize each assignment, research historical precedents, and develop their ideas through a series of drawings and/or models.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (FDPR 1531, FDPR 1532, or VS 1351)

ART 2402. CAD-CAM I: Introduction to 3D Modeling. 3 Credit Hours.

In this introduction to CAD-CAM, the students learn to: customize the modeling environment; create basic graphic objects-lines, circles, arcs, curves, solids and surfaces; draw with precision; create, test and verify solid models in STL file format for production of rapid prototypes and render models. Students will learn to use professional-level software used for 3D modeling across many industries worldwide, including product design, architecture and jewelry. Students follow self-guided lessons/assignments to learn the basics of computer aided design (CAD), then use the digital tools learned in creating original projects. Generally, one session per week will be devoted to demonstrating the lessons and related CAD functionality, and the second session will be devoted to independent projects and scheduled one-on-one time with the instructor. NOTE: This course is sometimes offered as an online course under Section Number 701. Prior to Fall 2023, the course was titled "Introduction to 3D Modeling."

Repeatability: This course may not be repeated for additional credits.

ART 2403. Jewelry II. 3 Credit Hours.

This is a continuation of ART 2401 Jewelry.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ART 2401.

ART 2404. Intermediate 3D Modeling. 3 Credit Hours.

This course is a continuation of CAD/CAM I. The primary objective of this course is to create a solids model in Rhino. The model is then verified for accuracy using Magics RP and prepared for rapid prototyping (RP). Students create a ring model to be produced via the Sanders Model Maker wax rapid prototyping system. These models are verified using Sanders Model/Works and Bview software. The student is assisted in having the model produced and cast. The concepts and principles of computer rendering the 3-D models is a major component of this course. Photorealistic renderings of the student's Rhino models are produced using the NuGraf rendering system. Course Software: Rhinoceros, Magics RP, ModelWorks, Bview and NuGraf.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 2402 or CRFT 2433)

ART 2405. Machine Tool Processes. 3 Credit Hours.

The lathe, milling machine, drill press, and other machines are examined for their creative potential.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2401.

ART 2406. Metalsmithing. 3 Credit Hours.

Advanced metal forming techniques are explored. Students are encouraged to produce functional hollowware and objects of a non-traditional source.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2401.

ART 2407. Casting. 3 Credit Hours.

Controlled inertial (centrifugal) casting, rubber moldmaking, wax injection, vacuum assisted casting, high frequency melting, sand casting, and other specialized casting processes are used to produce jewelry and other objects in precious and non-precious metal.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2401.

ART 2408. Electroforming Workshop. 3 Credit Hours.

Students with prior metalworking experience have the opportunity to explore nontraditional electrochemical processes for the creation of unique forms in metal.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2401.

ART 2409. Plastics for Jewelry and Objects. 3 Credit Hours.

An introduction to forming, fabricating, joining, and casting a variety of plastic materials. This 20th and 21st century material is studied for its visual and artistic potential, as well as its applications in product design. Students learn to combine these materials with metals and other media.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2401.

ART 2411. Production Processes. 3 Credit Hours.

Introduction to production processes and marketing. Students will design and produce an object in quantity and be assisted in the marketing of that object.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2401.

ART 2412. Color in Metals. 3 Credit Hours.

Aspects of applying color to metals or changing the existing color of metallic surfaces are explored. Students are introduced to the new techniques, color anodizing aluminum, and the space-age metals titanium and niobium. Application of color resin and vitreous enamels are also examined.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2401.

ART 2413. Enameling. 3 Credit Hours.

All basic enameling techniques, which include Plique A Jour, Limoges, Champeleve, Bustail, etc. The course explores the use of synthetic resins as an addition to the enamelist's repertoire.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2401.

ART 2414. Casting. 3 Credit Hours.

Controlled inertial (centrifugal) casting, rubber moldmaking, wax injection, vacuum assisted casting, high frequency melting, sand casting, and other specialized casting processes are used to produce jewelry and other objects in precious and non-precious metal.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2401.

ART 2415. Lapidary and Stone Setting. 3 Credit Hours.

Advanced lapidary processes are demonstrated which include the cutting and polishing of faceted stones designed by the student. Traditional and innovative stone setting methods are also explored.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2401.

ART 2416. Photo Processes and Etching Jewelry. 3 Credit Hours.

All aspects of the photographic processes that can be used with metals and plastics are introduced. This includes photo-resist techniques for metal etching, plating, and anodizing, along with photo embedments in plastics. NOTE: This course is for majors only.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2401.

ART 2501. Painting. 3 Credit Hours.

This studio-intensive course is designed to give the student a thorough grounding in the art and craft of oil painting. Lectures, group critiques and field trips are planned in order to establish a wide reference base and an historical and contemporary context.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Science Educ.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((FDPR 1511 and FDPR 1512) or VS 1151)

ART 2502. Intermediate Drawing. 3 Credit Hours.

Traditional and non-traditional approaches to drawing will be explored in this studio-intensive course. In addition to observational drawing, sources such as film, photography, and digital media will be investigated.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((FDPR 1511 and FDPR 1512) or VS 1151)

ART 2503. Painting. 3 Credit Hours.

This studio-intensive course is designed to give the student a thorough grounding in the art and craft of oil painting. Lectures, group critiques and field trips are planned in order to establish a wide reference base and an historical and contemporary context.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Science Educ.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((FDPR 1511 and FDPR 1512) or VS 1151)

ART 2504. Intermediate Drawing. 3 Credit Hours.

Traditional and non-traditional approaches to drawing will be explored in this studio-intensive course. In addition to observational drawing, sources such as film, photography, and digital media will be investigated.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((FDPR 1511 and FDPR 1512) or VS 1151)

ART 2505. Painting Materials and Techniques. 3 Credit Hours.

The course will address both traditional and contemporary topics in the materials and techniques of drawing and painting.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ((FDPR 1511 and FDPR 1512) or VS 1151)

ART 2506. Painting Workshop. 3 Credit Hours.

A studio painting course with emphasis on the development of a student's individual point of view. Class work will focus on the development of the student's ability to work at a conceptually advanced level. Experimentation is encouraged.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ((FDPR 1511 and FDPR 1512) or VS 1151)

ART 2507. Intermediate Figure Drawing. 3 Credit Hours.

An intermediate course focused entirely on the human figure as subject. There is emphasis on a variety of approaches to drawing the figure. Dynamics, proportion, anatomy, volume, and structure will be investigated through various drawing methods and selected materials. Frequent historical references will be made through reproductions and slides, and 20th century figure drawing will be thoroughly discussed.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((FDPR 1511 and FDPR 1512) or VS 1151)

ART 2508. Digital Drawing. 3 Credit Hours.

This course engages students with the possibilities of the computer as a drawing tool. Digital Drawing expands the conceptual and pictorial fundamentals of drawing and painting.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Science Educ.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ((FDPR 1511 and FDPR 1512) or VS 1151)

ART 2509. Drawing Workshop. 3 Credit Hours.

Studies in drawing emphasizing individual instruction for students of varied backgrounds.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ((FDPR 1511 and FDPR 1512) or VS 1151)

ART 2601. Photo I: Digital. 3 Credit Hours.

An introduction to the fundamental vocabulary and techniques of digital photography with an emphasis on developing skills of perception and visual competence in both the creation and consumption of lens-based imagery. Students will explore the complex relationship between content, composition, technical execution, and visual ideas that communicate with intent. Course topics include digital workflow methods for exhibition quality output using digital cameras, scanners, contemporary imaging software, and printers. Projects will include both color and black and white imagery. Prior to fall 2016, the course title was "Photography I."

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

ART 2602. Digital Imaging. 3 Credit Hours.

This course deals with photographic images and how ideas can be expressed through the manipulation of these images using the computer as a tool for creative expression. Excellent basic course in image software use and introduction to the use of the computer.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

ART 2603. Photo I: Digital. 3 Credit Hours.

In this class, students will explore the visual language of digital photography using Rome as their studio. Rome's many layered history juxtaposed with its current global urban landscape offers a unique opportunity to photograph an important European city. The technical component of the class consists of mastering manual digital camera operation and exposure. Students also learn to use contemporary imaging software and to produce digitally-generated output. Students will gain an understanding of the aesthetic possibilities of photography through assignments, lectures on both historic and contemporary photographers, photo field trips in Rome, and visits to photo galleries and museums. Critiques are conducted through a shared website. Students will be expected to complete a final project in which they choose one aspect of Rome's multi-layered landscape to visually explore in depth. Prior to fall 2016, the course title was "Photography I".

Repeatability: This course may be repeated for additional credit.

ART 2604. Introduction to Photography (Online Digital Course). 3 Credit Hours.

This is an introductory course in photography. We will concentrate on learning the basic camera functions, proper exposure of an image, and the formal and conceptual considerations in composition. Although there will be an emphasis on the technical aspects of photography, this course will also introduce students to many contemporary artists working in photography, as well as the history of the photographic medium and how to appropriately approach the critique setting.

Repeatability: This course may not be repeated for additional credits.

ART 2611. Eco-Friendly Plant Based Photo Printing. 3 Credit Hours.

This eco-friendly plant-based photo printing course focuses on sustainability using sunlight and common plant materials from your yard or the grocery store. Photographic processes covered are anotypes, chlorophyll printing, eco printing, phytograms and other plant-based printing methods. Students will print with and on plant materials, learn to make developers from plants rich in phenols and make prints using expired papers and film. Demonstrations and critiques will be synchronous and work will be completed outside of class. Troubleshooting and discussions will take place through Canvas between class sessions.

Course Attributes: SF

Repeatability: This course may not be repeated for additional credits.

ART 2701. Survey of Lithography and Serigraphy. 3 Credit Hours.

A beginning survey of basic techniques of lithography and screenprinting. The course introduces a number of short projects designed to give a broad experience with the media. Additional topics include print presentation, care of tools and materials, and a historical survey in slides and actual examples.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

ART 2702. Survey of Etching and Relief. 3 Credit Hours.

A beginning survey of the basic techniques of etching and relief printing. The course introduces a number of short projects designed to give a broad experience with the media. Additional topics include print presentation, care of tools and materials, and a historical survey in slides and actual examples.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

ART 2703. Book Structures. 3 Credit Hours.

This course is an introduction to the art of the book: a significant format for the expression of information and creativity. Bookbinding has a long history in Europe and a particularly rich history in Rome. Students will engage first hand with the historical tradition and contemporary possibilities of this craft. The course will cover traditional binding techniques including folded, sewn, and adhesive structures, as well as custom portfolio design. Emphasis will be placed on utilizing the unique format of the hand-bound book to engage with students' visual and psychological experience of Rome. Course projects will incorporate a range of media including drawing, photography, collage, graphic design and printmaking in the execution of both traditional and modern book structures. Each project will provide an opportunity for students to plan and execute unique book designs reflecting their personal Roman experience.

Repeatability: This course may be repeated for additional credit.

ART 2704. Serigraphy. 3 Credit Hours.

The fundamentals of screenprinting as a fine art print medium. This course introduces various handmade stencil methods as well as the photo processes. Students use non-toxic acrylic inks with projects that emphasize color organization and conceptual challenge.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

ART 2705. Etching. 3 Credit Hours.

The beginning level course in intaglio and relief printing processes. This course covers traditional methods of platemaking, such as etching, drypoint, and aquatint, as well as explorations into photo transfer and color viscosity printing.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

ART 2706. Intaglio Printmaking. 3 Credit Hours.

This introductory studio course engages students in historic and contemporary printmaking concepts and technologies, while encouraging a multi-disciplinary approach to fine art print production. Students are introduced to a broad range of ideas, methods and materials that focus upon the intaglio printmaking processes, but also include monoprints and monotypes. Initial projects are structured around the more traditional drawing, plate making and printing processes. As students become more comfortable with the fundamentals of the medium, they are encouraged to develop a more personal approach to concept, subject, scale, material and process. Studio projects will be supplemented by field trips to museums, galleries and artist studios to give students first hand experience of the historic and contemporary context of printmaking in Italy. Field trips may include the National Print Cabinet, where students may closely examine original prints by Italian masters, which may include Da Carpi, Canaletto, Tiepolo, Piranesi and others.

Repeatability: This course may not be repeated for additional credits.

ART 2707. Lithography. 3 Credit Hours.

A basic course in metal plate lithography. Preparation, processing, and printing are studied with the intention of giving the beginning student control over a medium that is often thought to be complicated. Students work with traditional hand-drawn imagery as well as transfer and photo-litho, in black and white and color.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

ART 2745. Contemporary Papermaking in Rome. 3 Credit Hours.

Papermaking in Rome introduces the cycle of the paper making process, including various aspects of processing and contemporary innovations in Papermaking. There is a strong focus on the interaction between papermaking and printmaking and methods for the successful integration of both practices. This is a wet lab course which requires hands-on experimentation to observe the nuances and subtleties that occur between the hand-formed sheet and the subsequent printed matrix. Learners acquire the capacity to produce high quality papers and understand the potential for those papers to be applied meaningfully with monotype, relief, and collagraph print projects.

Repeatability: This course may not be repeated for additional credits.

ART 2801. Sculpture. 3 Credit Hours.

Develops the integration of sculptural concept and practice, and the critical analysis of completed sculpture through a series of projects that investigate basic sculptural processes and issues. Lectures on directions in sculpture, technical demonstrations, and group critiques are scheduled.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ((FDPR 1511 and FDPR 1512) or VS 1351)

ART 2802. Video Workshop. 3 Credit Hours.

This course is an introduction to basic digital video editing.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((FDPR 1511 and FDPR 1512) or VS 1151)

ART 2803. Installation. 3 Credit Hours.

Investigations into the intrinsic meaning of the site will be coupled with the effective channeling of those issues into the work of art. Ideas, material, and placement will be analyzed so as to achieve cogent integration into the site. Introduction to use of scale models and various types of models to analyze a site and plan work for a site is part of this course. Lectures, individual discussions, and group critiques are scheduled.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((FDPR 1531 and FDPR 1532) or VS 1351) and (ART 2801 or ART 2807)

ART 2804. Mold Making Technology. 3 Credit Hours.

Flexible moldmaking techniques are explored using foam, latex, RTV and silicone rubber, as well as alginate compounds for direct body casts. Non-flexible techniques include wood forms for cement castings. Positives are cast in cement, plaster, rubber and polyurethane using both solid and hollow casting methods. Students incorporate these techniques in directed projects, or for completing self-directed work.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ((FDPR 1531 and FDPR 1532) or VS 1351) and (ART 2801 or ART 2807)

ART 2805. Figure Modeling. 3 Credit Hours.

This course stresses clinical observation as well as analytical response to issues pertaining to the body. The nature and aspects of representation in the sculptural tradition are considered. Work from the model in class.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Science Educ.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ((FDPR 1511 and FDPR 1512) or VS 1351)

ART 2806. Art Matters. 3 Credit Hours.

Art Matters is designed for the sophomore student intending to major in painting. The course objective is to incorporate a working understanding of art-historical precedents and their relationships to cultural, political, historical, and critical discourses as a complex and vital component of the development of a contemporary painting practice. This course combines a seminar approach of study using readings, film, field trips, and discussions in relation to studio practice.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ((FDPR 1511 and FDPR 1512) or VS 1151)

ART 2807. Sculpture: Rome. 3 Credit Hours.

This is an introductory course on the basic principles of object making. Demos on specific material use and procedures will alternate with lectures and site visits that will link the course with the student's experience of Italian art and architecture. Working with a variety of methods and materials including plaster casting, clay and wax modeling and concrete fabricating process, students will learn to communicate technically as well as conceptually through three-dimensional form.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Science Educ.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ((FDPR 1511 and FDPR 1512) or VS 1351)

ART 2808. Figure Modeling: Rome. 3 Credit Hours.

This course focuses entirely on the human figure as subject. Along with working from the model in class there will be visits to museums and sculptural sites introducing students to the figurative tradition in Rome: artwork ranging from ancient Greek and Roman carvings to Baroque figures in movement that characterize the cityscape. While the course is designed to help the student develop an understanding of the artistic representation of the human figure in historic and aesthetic terms, its ultimate goal is to have each student develop a personal interpretation of figuration as it relates to contemporary culture.

Repeatability: This course may be repeated for additional credit.

ART 2815. Social Practice and Socially Engaged Art. 3 Credit Hours.

This course introduces students to the many issues and ideas in Social Practice and Socially Engaged Art practices. These disciplines build on a lineage of contemporary art movements including public art, institutional critique, performance art, relational aesthetics, guerilla art and environmental art. We will investigate the role of accessibility, audience, participation, permanence, community, ownership, interactivity and politics in public works. The focus will be to create socially motivated and participatory art that engages non-art audiences and that exists outside of traditional art venues. This engagement with varying audiences, from passersby to targeted participants will take different forms, including collaborations, the creation of new experiences in familiar and known sites (i.e. Temple campus), the provision "services" in unexpected locations, the activation of historical sites and monuments, and the repurposing of unused and under-used locations around North Philadelphia and the city.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Science Educ.

Course Attributes: SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (FDPR 1511 (may be taken concurrently) or FDPR 1512 (may be taken concurrently)) and FDPR 1531.

ART 2900. Honors Special Topics. 3 Credit Hours.

In this studio art course, approaches to making and understanding images in various media will be addressed.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

ART 2901. Honors Digital Imaging: Seeing Photographically. 3 Credit Hours.

Life is full of wonder when you simply open your eyes to it. All it takes is an open mind and a shift in your way of seeing. The primary objective of this course is to introduce students to the act of seeing photographically, creative problem solving, and thinking visually while learning contemporary digital technology and practices. Students will be instructed on the use of a variety of input and output devices (cameras, scanners, printers) and software applications. Lecture and research on historical and contemporary artwork inform creative approaches to visual thinking and assignments build on creative problem-solving skill sets. Emphasis is placed on image making, proper workflow, interpretation, and output. Students produce a portfolio that demonstrates critical visual thinking and effective skill development.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

ART 3010. Special Topics in Art. 3 Credit Hours.

In this studio art course, approaches to making and understanding images, objects and experiences in various media will be addressed. Each topic will be addressed through contextual, procedural, material and critical lenses. This course assumes a strong level of basic studio knowledge in one or more art disciplines.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

ART 3011. Interactive Projects. 3 Credit Hours.

The intent of this course is to broaden the studio practice through the use of interactive technologies. Students will create a portfolio web site and an animated, interactive Flash project to be shown on the web or CD-ROM. Software explored in this course includes DreamWeaver, Flash and SoundEdit 16. Basic HTML and Action Scripting is also included in the curriculum. The finished work will be burned onto a CD-ROM and posted on the web. NOTE: Special Authorization for Non-Majors.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

ART 3012. Optics and Light. 3 Credit Hours.

In this course, students will explore phenomena of optics and light through the use of glass. They will learn how to create optical objects such as water lenses and prisms, investigating how they transform and extend vision. Students will also learn how to create their own glass lenses and manipulate existing lenses. Use of glass optics in distortion, reflection, image making, and installation will be explored, and we will employ various light sources in combination with glass to make immersive environments. No glass experience is required for this course.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

ART 3085. Field Internship. 3 Credit Hours.

A field internship must provide practical experience in a setting which is relevant to the student's course of study, such as in a gallery, museum or community art center, etc. A comprehensive paper must be written.

Repeatability: This course may be repeated for additional credit.

ART 3101. Advanced Ceramics. 3 Credit Hours.

Problems in ceramics for the advanced student with emphasis on individual research projects and upon portfolio development.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ART 2102 (may be taken concurrently)

ART 3103. Two-Dimensional Ceramics. 3 Credit Hours.

The making and production of tiles and other essentially two-dimensional ceramic items for application to interior and exterior architecture. Several processes, techniques and firing methods are explored. These include both high and low temperature firing, mold, and hand pressing techniques. The history of tiles and ceramic wall reliefs are surveyed with concentration on relevant periods and countries.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ART 2102 (may be taken concurrently)

ART 3104. Ceramic Materials. 3 Credit Hours.

An advanced level examination of ceramic processes, the formulation of clay bodies and glazes, common firing practices, and the construction of kilns.
NOTE: The course required and intended for ceramic majors.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2102 (may be taken concurrently)

ART 3105. Porcelain. 3 Credit Hours.

A ceramic course that covers the special properties of porcelain clay. Various hand building, throwing and casting techniques are explored as well as experiments in glazing and the preparation of clay bodies. Historical importance of porcelain is reviewed along with many contemporary uses of this material in vessel and sculptural forms.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ART 2102 (may be taken concurrently)

ART 3106. Advanced Throwing and Wheel Work. 3 Credit Hours.

A course concentrating on the use of the potter's wheel, using a problem-solving approach. Structured to develop the necessary skills to enable the student in making personal aesthetic choices with regard to three-dimensional ceramic forms created on the wheel.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2102 (may be taken concurrently)

ART 3107. Ceramic Mold Making. 3 Credit Hours.

Students produce both two and three-piece plaster molds to be used in the slip casting process for the production of multiple ceramic items. The course examines both the historical and contemporary use of molds and slip casting. During the semester the students are encouraged to incorporate the use of slip casting into their current style of work.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ART 2102.

ART 3108. Ceramic Structures. 3 Credit Hours.

The approach to this course is to utilize ceramic materials for the creation of sculpture. The history of ceramic sculpture as well as contemporary movements is stressed. Various techniques used in ceramic sculpture, techniques and materials used in conjunction with ceramics are explored.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2102 (may be taken concurrently)

ART 3110. Ceramic Workshop. 3 Credit Hours.

Ceramic Workshop is a course where a variety of skill levels and aesthetic points of view can interact. The course itself rotates through several specialty topics corresponding to current themes in Ceramics.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ART 2102 (may be taken concurrently)

ART 3201. Threading the Needle: Drawing with Stitch I. 3 Credit Hours.

This course focuses on stitch as a form of mark making, exploring surface applications such as embroidery, beading, collage, transfers and forms of layering through additive and subtractive processes. Using conventional and unconventional substrates students will explore the power of mark making as a form of disruption. Readings, lectures and critiques contribute to the development of conceptual concerns and provide knowledge of historical work and contemporary artistic practices. Prior to fall 2021, the course title was "Stitching I".

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2201 and ART 2202.

ART 3202. Soft Sculpture. 3 Credit Hours.

This course examines the transformation of traditional and nontraditional materials to three-dimensional forms, surfaces, and spaces. The exploration of pliable materials will be realized through hand and machine stitching, mark making, embellishment, felting, stuffing, and manipulation of armature. Students are encouraged to develop a personal direction in soft sculptural practice, with emphasis on material investigation and research. Individual and group critiques and discussion of both historic and contemporary artists and concepts augment the course.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

ART 3203. Alternative Materials II. 3 Credit Hours.

This class allows students to further develop their work and research in this area and introduce intermediate and more advanced techniques; working more independently students are able to pursue specific areas projects, developing their skills learned in Alternative Materials I.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2203.

ART 3204. Woven Structure II. 3 Credit Hours.

Exploration of dyeing and printing including space dyed ikat and printing on the woven surface.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2204.

ART 3205. Figurative Futures - Technology and the Body. 3 Credit Hours.

This course is the exploration of the histories and techniques involved in the construction of clothing, costume, fashion, and haute couture. The term clothing implies protection against the elements and to preserve modesty. Costume functions beyond simple utility, becoming a means of seduction by enhancing nature, or adding artificial attraction. Fashion and haute couture indulge the fantasy of the creator. Students will be encouraged to explore their own interpretations of these terms through construction: machine knitting, crochet, hand and machine sewing, and embroidery. Students may also experiment with documentation methods, including performance, fashion shows, photography, and video as media to exhibit cumulated work. Note: Prior to Fall 2023 this course was titled "Body Art and Adornment."

Repeatability: This course may be repeated for additional credit.

ART 3206. Sewn. 3 Credit Hours.

Sewn construction will be the focus of this class. Students will work with a myriad of sewing technologies including but not limited to the long arm sewing machine, industrial sergers and domestic machines and hand sewing. The focus is on manipulating pliable elements to create structure and form. This class will be augmented with readings, field trips, lectures and visiting artists.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (FDPR 1531, FDPR 1532, or VS 1351)

ART 3207. Intermediate Fibers and Material Studies. 3 Credit Hours.

Intermediate Fibers and Material Studies allows students an opportunity to further develop their work and research through introducing intermediate and more advanced techniques; working independently students are able to pursue specific areas and projects.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 2201 or ART 2202)

ART 3208. Jacquard I. 3 Credit Hours.

The Jacquard loom interfaces with a computer allowing for control of each thread. This allows for a multitude of possibilities. Students explore the Jacquard while also learning about its history and relationship to punched card systems and early computers. Working with digital sources and alternative materials students will create woven works. The class will include weaving, working on a computer, readings, lectures, writing and field trips.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2204 (may be taken concurrently)

ART 3209. Screen Print on Fabric I. 3 Credit Hours.

Screen-printing is a versatile printmaking technique that allows reproduction of an image and/or a repetition of an image. Students will be introduced to a vast array of processes including but not limited to silkscreen, digital printing, heat transfer, mono printing, stencil, stamp printing and block printing. The emphasis will be placed on conceptual development of language and using print in a contemporary art context. Final projects may take the form of installation, soft sculptures, yardage or site specific work. Prior to fall 2016, the course title was "Silkscreen on Fabric I".

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (FDPR 1521, FDPR 1522, or VS 1151)

ART 3210. Special Topics in Fibers and Material Studies. 3 Credit Hours.

This course varies from semester to semester; the class content responds to current themes in Fibers and Material Studies and the varying discourses associated. Special topics classes typically include studio work, readings, lectures, writing and field trips.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (FDPR 1521, FDPR 1522, FDPR 1531, or FDPR 1532)

ART 3211. Cultivating a Collection. 3 Credit Hours.

Through in-depth textile research and learned construction techniques, students will create a collection to be exhibited in the annual show. Visiting artists, independent studio time and critique will support the cumulative collection. At the end of the semester, students will debut their collection in the annual Wearable Art Show.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2201.

ART 3212. Digital Drawing and Pattern Making. 3 Credit Hours.

Using the digital hand, students will design one-of-a-kind garments to be printed and constructed to make unique wearables. Students will have first-hand experience and participate in the industry standard in pattern drafting and construction. Students will utilize Adobe Suite and a large format fabric printer.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2201.

ART 3213. Experimental Costume and Performance. 3 Credit Hours.

This class will explore garment construction through a performance lens, looking at artists who create silhouette extension or body distortion through both movement and pattern making. Students will learn necessary sewing skills and garment manipulation to facilitate performative workshops throughout the class.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2201.

ART 3214. History of Wearable Art and Costume. 3 Credit Hours.

Through independent research, readings, and discussion, students will examine the extensive history of wearable art and garment. Introductions to the cultural, political, historical, and aesthetic dimensions of experimental costume will focus on examination in relation to contemporary art.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2201.

ART 3301. Hot Glass, Topic: Blowing. 3 Credit Hours.

A glass course primarily for the glass major who wants to learn advanced skills in off-hand techniques for blowing traditional and non-traditional glass forms. Advanced color work, team work and advanced methods for combining complicated glass forms will be a major component of this studio class. NOTE: Six hours of studio work outside of class time is required.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ART 2301 and ART 2302.

ART 3303. Glass Construction, Topic: Kiln Working. 3 Credit Hours.

Predominantly a course in glass object-making. This class will provide beginning instruction through advanced tutelage in kiln forming techniques. Traditional and contemporary processes covered include frit casting from both clay and wax positives, fusing, and slumping. Moldmaking is emphasized and a variety of refractory mold materials will be introduced. A repertoire of finishing processes will be offered to aid in taking the kiln worked object to its completed state.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (FDPR 1531, FDPR 1532, or VS 1351)

ART 3304. Glass Construction, Topic: Cold Glass. 3 Credit Hours.

This studio course provides comprehensive instruction with regard to "cold" glass-working techniques. 2-D and 3-D glass objects will be constructed with the employment of a variety of procedures without the introduction of heat. The classes will encourage the areas of student expertise. Thus, information on surface treatment (glass texturing), joining (glass to glass, to other materials), and finishing processes will be covered. Proficiency in the creation of structurally and conceptually cohesive objects is stressed.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ART 2301 and ART 2302.

ART 3305. Glass Workshop. 3 Credit Hours.

An intensive daily studio course designed for beginning students through advanced glass majors. This studio course meets each day. Studio demonstrations in all hot glass applications are the focus. Individual problem solving through guided team work will be emphasized. NOTE: Three hours of studio work outside of class each day is required.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2301.

ART 3306. Hot Glass Casting. 3 Credit Hours.

A glass class that will provide beginning advanced instruction on using molten glass as a material for casting into a wide variety of mold materials. Methods of mold setup, methods for pouring hot glass and finishing glass will be provided and demonstrated. A survey of contemporary craft-artists using these materials and methods will be shown. Presentation and evaluation of finished work will be an important aspect of this studio course.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (FDPR 1531, FDPR 1532, or VS 1351)

ART 3307. Advanced Glass Seminar. 3 Credit Hours.

This studio course is for the junior glass major. The emphasis is on historical glass research topics. A survey of glass making from ancient cultures to early American glass will be covered by slide lectures, museum visits, and research projects.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2301 and ART 2302.

ART 3308. Advanced Glass, Topic: Visiting Artist Series. 3 Credit Hours.

This course is for the junior glass major.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ART 2301 and ART 2302.

ART 3401. Metals Workshop. 1 to 3 Credit Hour.

Summer classes for variable credit in specialized subjects: advanced fabrication, mechanisms, machine tool processes, advanced lapidary and stone setting, linkages and advanced casting. Students have the opportunity to learn and utilize specialized technologies. It is also an opportunity to complete projects or participate in a class designed for students who studied abroad. This class requires special permission from the instructor.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ART 2401.

ART 3402. CAD-CAM I: Introduction to 3D Modeling. 3 Credit Hours.

In this introduction to CAD-CAM, the students learn to: customize the modeling environment; create basic graphic objects-lines, circles, arcs, curves, solids and surfaces; draw with precision; create, test and verify solid models in STL file format for production of rapid prototypes and render models. Students will learn to use professional-level software used for 3D modeling across many industries worldwide, including product design, architecture and jewelry. Students follow self-guided lessons/assignments to learn the basics of computer aided design (CAD), then use the digital tools learned in creating original projects. Generally, one session per week will be devoted to demonstrating the lessons and related CAD functionality, and the second session will be devoted to independent projects and scheduled one-on-one time with the instructor. This 3000-level course is offered for graduate and upper-level undergraduate students. NOTE: This course is sometimes offered as an online course under Section Number 701. Prior to Fall 2023 this course was titled "CAD/CAM I Computer-Aided-Design/Computer-Aided-Manufacture."

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

ART 3404. CAD-CAM II: Intermediate 3D Modeling. 3 Credit Hours.

In this continuation from CAD-CAM I (ART 2402), students will continue learning computer aided design (CAD) software to create basic objects and 3D models for the production of rapid prototypes (3D printing); and rendering. CAD will supplement bench-based making techniques, such as casting and cold connections. Upon completion of the course, students will be able to use software to create three-dimensional models for virtual reality, rapid prototyping via 3D printing, patterns for use in bench work, and photorealistic rendering. The course will discuss and experiment with a multitude of materials, from wax to porcelain. This 3000-level course is offered for graduate and upper-level undergraduate students. Prior to Fall 2023 this course was titled "CAD/CAM II Computer-Aided-Design/Computer-Aided-Manufacture."

Field of Study Restrictions: Must be enrolled in one of the following Majors: Metals, Jewelry, CAD-CAM.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 2402 or ART 3402)

ART 3405. Advanced 3D Modeling. 3 Credit Hours.

This course is a continuation of Intermediate 3D Modeling. Students will be encouraged to produce Three-D CAD models for rapid prototyping and photo-realistic rendering.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Metals, Jewelry, CAD-CAM.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 2404 or ART 3404)

ART 3406. Junior Metalsmithing. 3 Credit Hours.

Advanced problems exploring the design and fabrication of functional objects and jewelry. Three-dimensional sheet metal development, fabrication of hollow structures, mechanisms, linkage systems and mold making will be introduced. NOTE: This course is for majors only.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2401.

ART 3407. Junior Metalsmithing. 3 Credit Hours.

Advanced problems exploring the design and fabrication of functional objects and jewelry. Three-dimensional sheet metal development, fabrication of hollow structures, mechanisms, linkage systems and mold making will be introduced. NOTE: This course is for majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Metals, Jewelry, CAD-CAM.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 3406.

ART 3408. Electroforming Workshop. 3 Credit Hours.

Students with prior metalworking experience have the opportunity to explore nontraditional electrochemical processes for the creation of unique forms in metal.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ART 2401.

ART 3409. Plastics for Jewelry and Objects. 3 Credit Hours.

An introduction to forming, fabricating, joining, and casting a variety of plastic materials. This 20th and 21st century material is studied for its visual and artistic potential, as well as its applications in product design. Students learn to combine these materials with metals and other media.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 2401 or CRFT 2453)

ART 3411. Production Processes. 3 Credit Hours.

Introduction to production processes and marketing. Students will design and produce an object in quantity and be assisted in the marketing of that object.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Metals, Jewelry, CAD-CAM.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 2401 or CRFT 2453)

ART 3412. Color in Metals. 3 Credit Hours.

Aspects of applying color to metals or changing the existing color of metallic surfaces are explored. Students are introduced to the new techniques, color anodizing aluminum, and the space-age metals titanium and niobium. Application of color resin and vitreous enamels are also examined.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Metals, Jewelry, CAD-CAM.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 2401 or CRFT 2453)

ART 3413. Enameling. 3 Credit Hours.

All basic enameling techniques, which include Plique A Jour, Limoges, Champleve, Bustail, etc. The course explores the use of synthetic resins as an addition to the enamelist's repertoire.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 2401 or CRFT 2453)

ART 3414. Plastics for Jewelry. 3 Credit Hours.

Introduction to the forming, fabricating, and casting of plastic materials. The student works with acrylics, polyesters, urethanes, epoxies, and silicones, and learns to combine these materials with metal. NOTE: This course is for majors only. Metals/Jewelry/CAD-CAM Major.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2401.

ART 3415. Lapidary and Stone Setting. 3 Credit Hours.

Advanced lapidary processes are demonstrated which include the cutting and polishing of faceted stones designed by the student. Traditional and innovative stone setting methods are also explored.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2401.

ART 3416. Photo Processes and Etching Jewelry. 3 Credit Hours.

All aspects of the photographic processes that can be used with metals and plastics are introduced. This includes photo-resist techniques for metal etching, plating, and anodizing, along with photo embeddings in plastics. NOTE: This course is for majors only.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2401.

ART 3417. Metalsmithing. 3 Credit Hours.

Advanced metal forming techniques are explored. Students are encouraged to produce functional hollowware and objects of a non-traditional source.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Metals, Jewelry, CAD-CAM.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 2401 or CRFT 2453)

ART 3501. Advanced Painting. 3 Credit Hours.

A studio painting course with emphasis on the development of a student's individual point of view. Class work focuses on the development of the student's ability to work at a conceptually advanced level. Experimentation is encouraged and there are frequent class critiques.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 2501 or ART 2503) and (ART 2502, ART 2504, ART 2507, or ART 2508)

ART 3502. Advanced Painting. 3 Credit Hours.

A studio painting course with emphasis on the development of a student's individual point of view. Class work focuses on the development of the student's ability to work at a conceptually advanced level. Experimentation is encouraged and there are frequent class critiques.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 2501 or ART 2503) and (ART 2502, ART 2504, ART 2507, or ART 2508)

ART 3503. Landscape. 3 Credit Hours.

An examination of painting problems involved in the variable light, space, and form of cityscape and landscape. Work from various sites and sources. NOTE: This course may fulfill an advanced Painting/Drawing Studio Major or Studio Elective.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 2501 or ART 2503) and (ART 2502, ART 2504, ART 2507, or ART 2508)

ART 3504. Figure Painting. 3 Credit Hours.

A painting course based on direct observation. Fundamentals of oil painting as well as an understanding of anatomy, composition, and the relationship of the figure to its environment are stressed. The development of an individualized approach and the use of content are explored through group discussion and assigned work.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 2501 or ART 2503) and (ART 2502, ART 2504, ART 2507, or ART 2508)

ART 3505. Color. 3 Credit Hours.

The study of color, its characteristics, and interaction, explored through studio painting experiences. NOTE: This course may fulfill an advanced Painting/Drawing Studio Major or Studio Elective.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (PDS 2011, PDS 2111, ART 2501, or ART 2503) and (PDS 2311, PDS 2321, PDS 2331, ART 2502, ART 2504, ART 2507, ART 2508, or PDS 2341)

ART 3506. Color. 3 Credit Hours.

The study of color, its characteristics, and interaction, explored through studio painting experiences. NOTE: This course may fulfill an advanced Painting/Drawing Studio Major or Studio Elective.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (PDS 2011, PDS 2111, ART 2501, or ART 2503) and (PDS 2311, PDS 2321, PDS 2331, ART 2502, ART 2504, ART 2507, ART 2508, or PDS 2341)

ART 3507. Painting on Paper. 3 Credit Hours.

A study of the uses of aqueous media beyond transparent watercolor. Opaque watercolor, collage, and transfer techniques, and oil and acrylic on paper are explored.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (PDS 2011, PDS 2111, ART 2501, or ART 2503) and (PDS 2311, PDS 2321, PDS 2331, ART 2502, ART 2504, ART 2507, ART 2508, or PDS 2341)

ART 3508. Painting on Paper. 3 Credit Hours.

A study of the uses of aqueous media beyond transparent watercolor. Opaque watercolor, collage, and transfer techniques, and oil and acrylic on paper are explored.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (PDS 2011, PDS 2111, ART 2501, or ART 2503) and (PDS 2311, PDS 2321, PDS 2331, ART 2502, ART 2504, ART 2507, ART 2508, or PDS 2341)

ART 3509. Painting Workshop. 3 Credit Hours.

A studio painting course with emphasis on the development of a student's individual point of view. Class work will focus on the development of the student's ability to work at a conceptually advanced level. Experimentation is encouraged.

Repeatability: This course may be repeated for additional credit.

ART 3511. Digital Drawing. 3 Credit Hours.

This course engages students with the possibilities of the computer as a drawing tool. Digital Drawing expands the conceptual and pictorial fundamentals of drawing and painting.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ((FDPR 1511 and FDPR 1512) or VS 1151)

ART 3512. Rome Sketchbook. 3 Credit Hours.

Participants record their observations in sketchbook form on daily outings to significant sites. Rome - incomparably rich historically and visually - provides a host of subjects ideal for improving drawing technique. The concentration required in drawing directly from observation leads to a deeper understanding of the city's forms.

Repeatability: This course may not be repeated for additional credits.

ART 3513. Drawing Workshop. 3 Credit Hours.

Studies in drawing emphasizing individual instruction for students of varied backgrounds.

Repeatability: This course may be repeated for additional credit.

ART 3514. Advanced Drawing. 3 Credit Hours.

In this studio-intensive course students engage in an investigation of subject matter, sources, and strategies for generating work. Experimentation is encouraged and there are frequent class critiques.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 2501 or ART 2503) and (ART 2502, ART 2504, ART 2507, or ART 2508)

ART 3515. Advanced Drawing: Rome. 3 Credit Hours.

This course combines studio work with the Rome experience as a way to explore ideas and materials as well as the development of an individualized approach to drawing. The goal of this studio course is not only to improve one's technical ability but to probe the limits of what can be done in drawing; defining the boundaries of what a drawing is, and how it relates to contemporary art and other studio practices.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (PDS 2311, ART 2502, ART 2504, ART 2507, PDS 2321, or PDS 2331)

ART 3516. Advanced Drawing. 3 Credit Hours.

In this studio-intensive course students engage in an investigation of subject matter, sources, and strategies for generating work. Experimentation is encouraged and there are frequent class critiques.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 2501 or ART 2503) and (ART 2502, ART 2504, ART 2507, or ART 2508)

ART 3517. Figure Drawing. 3 Credit Hours.

An advanced course focused entirely on the human figure as subject. There is emphasis on a variety of approaches to drawing the figure. Dynamics, proportion, anatomy, volume, and structure will be investigated through various drawing methods and selected materials. Frequent historical references will be made through reproductions and slides, and 20th century figure drawing will be thoroughly discussed.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 2501 or ART 2503) and (ART 2502, ART 2504, ART 2507, or ART 2508)

ART 3518. Figure Drawing. 3 Credit Hours.

An advanced course focused entirely on the human figure as subject. There is emphasis on a variety of approaches to drawing the figure. Dynamics, proportion, anatomy, volume, and structure will be investigated through various drawing methods and selected materials. Frequent historical references will be made through reproductions and slides, and 20th century figure drawing will be thoroughly discussed.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 2501 or ART 2503) and (ART 2502, ART 2504, ART 2507, or ART 2508)

ART 3519. Advanced Painting: Rome. 3 Credit Hours.

This course emphasizes the development of an active and reflective studio practice combined with the Rome experience. As the semester progresses, students identify and pursue their own projects, working independently with a collective critical structure with an emphasis on the development of a student's individual point of view. Experimentation is encouraged and there are frequent class critiques. Individual studios are provided.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 2501 or ART 2503)

ART 3521. Fresco Painting. 3 Credit Hours.

This studio art course is designed to give students an overview of fresco painting techniques as practiced in Italy from the Roman through the Renaissance periods. While this is a studio art course, we will use the resources of Rome's churches and museums to understand the physical and symbolic structure of fresco painting throughout history from domestic to sacred spaces. Stylistic influences will be examined to create a coherent and correct wall painting using the same materials and techniques used by craftspeople of antiquity. As part of this course students will take a weekend excursion outside of Rome to participate in completing a permanent fresco. This course is open to beginning and advanced students.

Repeatability: This course may be repeated for additional credit.

ART 3601. Color Photography I. 3 Credit Hours.

An introduction to basic skills in color photography. This course includes camera work and understanding of light, processing and printing with an emphasis on color theory, the development of personal imagery and the history of color photography.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 2601, PHOT 2441, or GAD 2441)

ART 3602. View Camera. 3 Credit Hours.

This course provides an introduction to large format photography using a 4x5 view camera. Basic camera operation, various functions, specific uses, and potential as a creative tool are studied. A variety of specific exercises lead the student to proficient use of the view camera. Emphasis is on creative use as well as technical development. NOTE: Open to Photo majors only - special authorization required for non-majors.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 3603, PHOT 3412, or GAD 3412)

ART 3603. Darkroom Photography. 3 Credit Hours.

An introduction to the fundamental vocabulary and techniques of darkroom photography. Skills of perception, visual competence, and black and white film-based photographic practice will be emphasized with an introduction to digital and darkroom hybrid techniques. Projects will address technical development as well as the development of personal vision through the photographic medium. Prior to fall 2016, the course title was "Photography II."

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

ART 3604. Photographic Lighting. 3 Credit Hours.

At the core of any commercial or fine art photographer's practice is an in-depth understanding of lighting. This course is a thorough investigation of artificial lighting techniques (strobe and continuous) both in the studio and on location. Additional topics include advanced methods of exposure and the different approaches required in lighting for digital and film based images. A final portfolio is required. This course is repeatable for credit.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 2601, ART 2603, PHOT 2441, PHOT 2451, GAD 2441, or GAD 2451)

ART 3605. Darkroom Photography. 3 Credit Hours.

This course will introduce students to the historic methods and materials of pre-digital black and white darkroom photography on location in Rome. Students will become familiar with Italian culture and with the techniques they are using to capture it deepening their understanding of the city and the creative process. Along with photo field trips the class will consist of lectures, demonstrations and group discussions. Weekly assignments will be given and a final portfolio of silver gelatin prints will be completed by the end of the semester. Images will be printed from negatives produced during the course. NOTE: Students are strongly encouraged to bring their own 35mm camera. A small number of basic film cameras will be available for limited student use.

Repeatability: This course may not be repeated for additional credits.

ART 3606. Digital Projects. 3 Credit Hours.

The emphasis of this course will be on creating a professional digital portfolio. Throughout the semester, students will learn a series of multimedia software applications and develop interactive presentations that will promote themselves as artists with contemporary and professional portfolios. NOTE: The course is limited to seniors and graduate students.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 2602, PHOT 2461, or GAD 2461)

ART 3607. Contemporary Photography. 3 Credit Hours.

We live in an extraordinary moment in the history of photography, a moment much hoped for and anticipated by many champions of the medium. Finally one can say without qualification that photography is a medium fully embraced by the contemporary art world. While there has always been a movement to look at and discuss photography as art, photography has never played a more central, critical and vital role in contemporary art than it does now. This course will look at both the role that photography plays in contemporary art and the role that contemporary art plays in photography. By surveying contemporary trends in photography, students in this class will develop an understanding of what exactly photography is now. At the same time the class will attempt to answer questions about what it means to be contemporary, about what the relationship between the contemporary and the historical is, and why this might be important. Through these problems students will be encouraged to develop personal work that addresses themes and ideas discussed in the class. NOTE: Open to Junior/Seniors. Special authorization required for non-majors.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 2601, ART 2603, PHOT 2441, PHOT 2451, GAD 2441, or GAD 2451)

ART 3608. Color Photography I. 3 Credit Hours.

An introduction to basic skills in color processing and printing with an emphasis on development of personal imagery and the history of color picture making.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 2601, PHOT 2441, or GAD 2441)

ART 3609. Color Photography II. 3 Credit Hours.

Advanced projects in color photography to include either chemical processes or digital technology. Research will focus on contemporary trends in color photography with an emphasis on the development of a personal portfolio.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 3608, PHOT 3431, or GAD 3431)

ART 3610. Special Topics in Photography. 3 Credit Hours.

This course explores special topics in photographic and imaging practices including new and emerging methods of research and production. Special topics courses can include lectures, demonstrations, readings, and student presentations in support of field and studio research. Both individual and collaborative practices may be addressed.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 2601, ART 2602, ART 2901, ART 2604, ART 1602, PHOT 2441, PHOT 2461, PHOT 2961, PHOT 2401, GAD 2441, GAD 2461, GAD 2961, GAD 2401, ARTU 2811, PHOT 2811, ARCH 1011, or ARCH 1017)

ART 3611. Advanced Photo Workshop. 3 Credit Hours.

A continuation of advanced black and white photography with an introduction to the zone system and a variety of professional techniques. Emphasis will be on the development of a professional portfolio, classical black and white photographic history, and focused development of personal vision. Digital photographic techniques may also be included.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (PHOT 2441, PHOT 2451, ART 2601, ART 2603, GAD 2441, or GAD 2451) and (ART 3603, PHOT 3412, or GAD 3412)

ART 3612. Photo Process Workshop. 3 Credit Hours.

This course is a survey covering a wide range of experimental and historical photographic processes that extend beyond traditional silver printing. Workshop orientation emphasizes a diverse exposure to many creative possibilities from hand applied photographic emulsions to artists' book production, culminating in a professional final project.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (PHOT 2441, PHOT 2451, ART 2601, ART 2603, GAD 2441, or GAD 2451) and (PHOT 3412, ART 3603, or GAD 3412)

ART 3613. Digital Photography. 3 Credit Hours.

Digital photography explores advanced applications in digital imaging with an emphasis on photographic output. Emphasis will be placed on more sophisticated methods of capture and production including large format printing, advanced color management, cataloging, and archival storage practices. The development of a personal vision and lines of inquiry will be central. A professional portfolio will be required.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 2601, ART 2603, PHOT 2441, PHOT 2451, GAD 2441, or GAD 2451)

ART 3614. The Photo Book: Making and Understanding. 3 Credit Hours.

Throughout photography's history artists have used the photo book to share their personal lives, create enduring documents of time and place, and shine a light on social injustices. In this course students will craft their own photo books while learning about the history and contemporary issues surrounding this particular form of expression. Students will learn how to edit, sequence, title, and bind their own photography books. Podcast assignments, photo book reviews, lectures, video demonstrations, and workshops, will round out the course.

Repeatability: This course may be repeated for a total of 6 credit.

Pre-requisites: Minimum grade of C- in (ART 2601, ART 2602, ART 2901, ART 2604, ART 1603, ART 1604, or ART 1602)

ART 3701. Printmaking Workshop. 3 Credit Hours.

Studies in all printmaking media, emphasizing individual instruction for students of varied backgrounds.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 2701, ART 2702, PRNT 2701, PRNT 2702, GAD 2701, or GAD 2702) and (ART 3704, ART 3705, ART 3706, PRNT 3711, PRNT 3731, PRNT 3751, GAD 3711, GAD 3731, or GAD 3751)

ART 3702. Relief and Monoprint Workshop. 3 Credit Hours.

The directness of both relief printing and monotype give the artist a unique opportunity to concentrate on the image possibilities. Students will work with non-traditional and traditional cutting methods, materials, and printing methods.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

ART 3703. Color Print Workshop. 3 Credit Hours.

A methodical study of color printing problems as they are presented by the intaglio, relief, lithographic and screen printing media. Color theory and practical techniques are combined, giving experience in all phases of multicolor and intermedia graphic production.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 2701, ART 2702, PRNT 2701, PRNT 2702, GAD 2701, or GAD 2702), (ART 3704, ART 3705, ART 3706, PRNT 3711, PRNT 3731, PRNT 3751, GAD 3711, GAD 3731, or GAD 3751), and Two Introductory Printmaking: (ART 2704, PRNT 2761, GAD 2731, GAD 2741, GAD 2751, GAD 2761, ART 2705, ART 2706, ART 2707, GAD 2711, PRNT 2711, PRNT 2731, PRNT 2741, or PRNT 2751)

ART 3704. Advanced Serigraphy. 3 Credit Hours.

Advanced screen printing with emphasis on expanding the students' stencil making and printing skills as well as personal artistic growth. Students work with non-toxic acrylic inks in projects that emphasize scale, color, and use of material.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 2704, GAD 2711, or PRNT 2711)

ART 3705. Advanced Etching. 3 Credit Hours.

Advanced problems in intaglio and relief processes. While the emphasis is on personal artistic development, the students are also encouraged to work toward professional standards in platemaking and printing skills. Projects often include, multi-plate color printing, copper engraving, mezzotint, various relief methods, and embossing.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 2705, ART 2706, PRNT 2731, PRNT 2741, GAD 2731, or GAD 2741)

ART 3706. Advanced Lithography. 3 Credit Hours.

This course is designed to improve the students' technical skills toward professional standards and to develop the students' personal vision through the use of lithography. Study will include stone and plate lithography, color theory and practice, photo processes and editing.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 2707, PRNT 2751, PRNT 2761, GAD 2751, or GAD 2761)

ART 3796. Art Career Workshop. 3 Credit Hours.

Creative and practical solutions to career problems of the artist; preparation of the art student for postgraduate challenges.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Course Attributes: WI

Repeatability: This course may be repeated for additional credit.

ART 3802. Advanced Video. 3 Credit Hours.

This course is geared towards students who are working with concepts best expressed through the various forms of video art. Projects will develop and challenge the students' ability to address technical, formal, and conceptual elements in their work. NOTE: Students are expected to have some prior knowledge of video production and/or postproduction.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

ART 3803. Installation. 3 Credit Hours.

Investigations into the intrinsic meaning of the site will be coupled with the effective channeling of those issues into the work of art. Ideas, material, and placement will be analyzed so as to achieve cogent integration into the site. Introduction to use of scale models and various types of models to analyze a site and plan work for a site is part of this course. Lectures, individual discussions, and group critiques are scheduled.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 2801 or ART 2807)

ART 3804. Mold Making Technology. 3 Credit Hours.

Flexible moldmaking techniques are explored using foam, latex, RTV and silicone rubber, as well as alginate compounds for direct body casts. Non-flexible techniques include wood forms for cement castings. Positives are cast in cement, plaster, rubber and polyurethane using both solid and hollow casting methods. Students incorporate these techniques in directed projects, or for completing self-directed work.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 2801 or ART 2807)

ART 3805. Advanced Sculpture. 3 Credit Hours.

Emphasis on development of an individual direction in sculpture through studio work, drawing, writing, and some research. Progress is reviewed through individual critiques. The development of critical analysis of completed work is emphasized in group critiques.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 2801, ART 2807, PDS 2611, PDS 2621, SCLP 2611, or SCLP 2621)

ART 3806. Advanced Sculpture. 3 Credit Hours.

Emphasis on development of an individual direction in sculpture through studio work, drawing, writing, and some research. Progress is reviewed through individual critiques. The development of critical analysis of completed work is emphasized in group critiques.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 2801 or ART 2807)

ART 3807. Advanced Sculpture. 3 Credit Hours.

Emphasis on development of an individual direction in sculpture through studio work and special research on topics relative to contemporary practice. Progress is reviewed through individual critiques. The development of critical analysis of completed work is emphasized in group critiques.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 2801, ART 2807, SCLP 2611, SCLP 2621, PDS 2611, or PDS 2621)

ART 3808. Advanced Sculpture. 3 Credit Hours.

Emphasis on development of an individual direction in sculpture through studio work, drawing, writing, and some research. Progress is reviewed through individual critiques. The development of critical analysis of completed work is emphasized in group critiques.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 2801 or ART 2807)

ART 3809. Public Art Projects. 3 Credit Hours.

The class will introduce the processes involved in designing actual site-specific public art projects. These will include site research, design development, architectural drawings and model building, and presentation techniques. Studio visits with architects, model-makers, sculptors, and project coordinators are an integral part of the course. Students work on an actual project that is juried by area arts professionals at the end of the semester. NOTE: Special authorization is required from the instructor in order to register for this class.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 2801 or ART 2807)

ART 3811. Sculpture Techniques and Materials. 3 Credit Hours.

This course is meant to give students the tools they need to acquire and produce and exhibit. Students will examine displays in multiple contexts, and will be introduced to presentation concepts in art, retail, and the home. They will gain skills in exhibit design, model-making, proper art handling, crate design, fabrication, and shipping. The course will culminate with an off-campus exhibit that is themed, designed, installed and publicized by the class. NOTE: Special authorization for all.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 2801 or ART 2807)

ART 3812. Foundry. 3 Credit Hours.

Ceramic shell bronze and aluminum casting techniques are emphasized, as well as a variety of hot and cold casting materials and processes. The course focuses on the way these techniques serve sculptural thinking. NOTE: Special authorization for all.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

ART 3813. Junior Sculpture Seminar. 3 Credit Hours.

This studio class is a bridge from lower level introductory courses to advanced studio work. Aspirations of the profession, studio principles, and critical thinking are stressed, along with readings and discussions in contemporary art theory.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 2801, ART 2807, SCLP 2611, SCLP 2621, PDS 2611, or PDS 2621)

ART 3814. Sculpture Workshop. 3 Credit Hours.

The main focus of the course will be to help each student develop a well-considered and professional show of their own work.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

ART 3815. Public of One, Public of Many. 3 Credit Hours.

What do we mean by the word public? General public? A public? The public? Or its plural, publics? In this course students create a range of works - objects, installations, actions, interventions, participatory events, and situations for varying publics. These will include works for an intimate audience of one (which is a public), our class (another public), our Tyler colleagues, the Temple community, and the City of Philadelphia. What questions should we ask to create works for these varying publics? Through an exploratory curriculum, students construct these questions and instigate inventive and meaningful responses.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (FDPR 1511 (may be taken concurrently) or FDPR 1512 (may be taken concurrently)) and FDPR 1531.

ART 3896. PDS Seminar. 3 Credit Hours.

Group discussion and individual presentation concerning formal, conceptual, historical, and personal creative issues in contemporary painting, drawing and sculpture. NOTE: Special Authorization for Non-Majors.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Painting, Sculpture.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Course Attributes: WI

Repeatability: This course may be repeated for additional credit.

ART 4082. Independent Study. 1 to 3 Credit Hour.

Self-directed study and research for upper-level BFA students developed in conjunction with, and supervised by, a full-time faculty member in the major area of the student.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

ART 4096. Professional Practices in Art. 3 Credit Hours.

Covers many aspects of career, business and professional practices as they relate to a range of contemporary modes of artistic production. The course includes information and resources relating to artist residencies, grants, internships, and jobs. Business-oriented topics include the pricing of work, taxes, contracts, bookkeeping for small businesses, marketing, legal problems, insurance, advertising, and publicity, artist-gallery relations, and studio operations. NOTE: This is a writing intensive course. Prior to fall 2023, the course title was "Professional Practices in Crafts."

Department Restrictions: Must be enrolled in one of the following Departments: Tyler:Art.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ART 4101. Advanced Ceramics. 3 Credit Hours.

Problems in ceramics for the advanced student with emphasis on individual research projects with emphasis upon portfolio development.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (6 credits in ART 3101, 6 credits in CRFT 3162, or (3 credits in ART 3101 and 3 credits in CRFT 3162))

ART 4102. Senior Ceramics. 3 Credit Hours.

Fourth-year concentration in ceramics and thesis work.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in 6 credits in ART 3101.

ART 4201. Threading the Needle: Drawing with Stitch II. 3 Credit Hours.

This class builds on techniques learned in Stitching I and includes a research component alongside the development of a studio practice. Students will create a proposal for their research and studio projects that will focus on involved projects that incorporate intermediate and more advanced techniques in the area. Faculty will work individually with students to develop their work, teaching them specific techniques relevant to their stated projects. Students will be expected to present their work to the department and be able to talk about their work and research.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 3201.

ART 4202. Dyeing for Color II. 3 Credit Hours.

This class allows students to further develop their work and research in dyeing and related processes through introducing intermediate and more advanced techniques; working independently students are able to pursue specific areas and projects.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2201 and ART 2202.

ART 4203. Jacquard II. 3 Credit Hours.

This class allows students to further develop their work and research with the Jacquard Loom through introducing intermediate and more advanced techniques; working independently students are able to pursue specific areas and projects.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 3208.

ART 4204. Woven Structure III. 3 Credit Hours.

An exploration of advanced weaving techniques: computer loom drafting and weaving, three-dimensional investigations and structural manipulations.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2204 and ART 3204.

ART 4205. Senior Seminar in Fibers and Material Studies. 3 Credit Hours.

Seniors work independently on research and making work that addresses their individual interests within a contemporary art context. Through in-depth group discussions and critiques students sharpen their perceptions, research skills, conceptual concerns, and refine the content of their work. Students develop strategies for pursuing a professional career in the arts that goes beyond the standard resume writing and website development but rather into the muddy waters of the challenging ethics of being an artist in today's society. Group discussions, readings, field trips and visiting artists augment this class. Group critiques and individual critiques are an integral part of this course.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2201 and ART 2202.

ART 4209. Screen Print on Fabric II. 3 Credit Hours.

This class allows students to further develop their work and research in printing methods, including screen print, through introducing intermediate and more advanced techniques; working independently students are able to pursue specific areas and projects.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2202 and ART 3209.

ART 4210. Special Topics in Fibers and Material Studies. 3 Credit Hours.

This course varies from semester to semester; the class content responds to current themes in Fibers and Material Studies and the varying discourses associated. Special topics classes typically include studio work, readings, lectures, writing and field trips.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (FDPR 1521, FDPR 1522, FDPR 1531, or FDPR 1532)

ART 4301. Hot Glass Blowing. 3 Credit Hours.

A glass course primarily for the glass major who wants to learn advanced skills in off-hand techniques for blowing traditional and non-traditional glass forms. Advanced color work, team work and advanced methods for combining complicated glass forms will be a major component of this studio class. NOTE: Six hours of studio work outside of class time is required.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 2301 or CRFT 2258) and (ART 2302 or CRFT 2261)

ART 4303. Glass Construction, Topic: Kiln Working. 3 Credit Hours.

Predominantly a course in glass object-making. This class will provide beginning instruction through advanced tutelage in kiln forming techniques. Traditional and contemporary processes covered include frit casting from both clay and wax positives, fusing, and slumping. Moldmaking is emphasized and a variety of refractory mold materials will be introduced. A repertoire of finishing processes will be offered to aid in taking the kiln worked object to its completed state.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (FDPR 1531, FDPR 1532, or VS 1351)

ART 4304. Glass Construction, Topic: Cold Glass. 3 Credit Hours.

This studio course provides comprehensive instruction with regard to "cold" glass-working techniques. 2-D and 3-D glass objects will be constructed with the employment of a variety of procedures without the introduction of heat. The classes will encourage the areas of student expertise. Thus, information on surface treatment (glass texturing), joining (glass to glass, to other materials), and finishing processes will be covered. Proficiency in the creation of structurally and conceptually cohesive objects is stressed.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 2301 or CRFT 2258) and (ART 2302 or CRFT 2261)

ART 4306. Hot Glass Casting. 3 Credit Hours.

A glass class that will provide beginning advanced instruction on using molten glass as a material for casting into a wide variety of mold materials. Methods of mold setup, methods for pouring hot glass and finishing glass will be provided and demonstrated. A survey of contemporary craft-artists using these materials and methods will be shown. Presentation and evaluation of finished work will be an important aspect of this studio course.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (FDPR 1531, FDPR 1532, or VS 1351)

ART 4307. Advanced Glass Seminar: Visiting Artist Series. 3 Credit Hours.

This course is for the senior glass major.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 2301 or CRFT 2258), (ART 2302 or CRFT 2261), (ART 3307 or CRFT 3243), and (ART 3308 or CRFT 3244)

ART 4308. Advanced Glass Seminar. 3 Credit Hours.

This studio course is for the senior glass major. The emphasis is on historical glass research topics. A survey of glass making from ancient cultures to early American glass will be covered by slide lectures, museum visits, and research projects.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 2301, ART 2302, ART 3307, and ART 3308.

ART 4401. Senior Metals and Plastics. 3 Credit Hours.

The course introduces the student to portfolio preparation. An independent senior project is also encouraged.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 3407 or CRFT 3466)

ART 4402. Senior Metals and Plastics. 3 Credit Hours.

The course introduces the student to portfolio preparation. An independent senior project is also encouraged.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Metals, Jewelry, CAD-CAM.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ART 4401.

ART 4403. Senior Seminar in Metals. 3 Credit Hours.

This course provides seniors who are interested in going on to graduate school with an opportunity to experience the responsibilities and rewards of graduate education by participation in the graduate metals seminar. These students, selected by the faculty, are also provided with a workspace in the graduate metals studio.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Metals, Jewelry, CAD-CAM.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 3407 or CRFT 3466)

ART 4404. Rapid Prototyping: 3D Sculpting. 3 Credit Hours.

The advanced CAD/CAM student will learn to use the ZCorp, Z406 3D color printer to test computer-aided-design solid models. Students will also be encouraged to find innovative methods for using the Z406 in the creation of finished tangible objects.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 3405 or CRFT 3435)

ART 4501. Advanced Painting. 3 Credit Hours.

A studio painting course with emphasis on the development of a student's individual point of view. Class work focuses on the development of the student's ability to work at a conceptually advanced level. Experimentation is encouraged and there are frequent class critiques.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 2501 or ART 2503) and (ART 2502, ART 2504, ART 2507, or ART 2508)

ART 4502. Advanced Painting. 3 Credit Hours.

A studio painting course with emphasis on the development of a student's individual point of view. Class work focuses on the development of the student's ability to work at a conceptually advanced level. Experimentation is encouraged and there are frequent class critiques.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 2501 or ART 2503)

ART 4503. Landscape. 3 Credit Hours.

An examination of painting problems involved in the variable light, space, and form of cityscape and landscape. Work from various sites and sources.

NOTE: This course may fulfill an advanced Painting/Drawing Studio Major or Studio Elective.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 2501 or ART 2503) and (ART 2502, ART 2504, ART 2507, or ART 2508)

ART 4504. Figure Painting. 3 Credit Hours.

A painting course based on direct observation. Fundamentals of oil painting as well as an understanding of anatomy, composition, and the relationship of the figure to its environment are stressed. The development of an individualized approach and the use of content are explored through group discussion and assigned work.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 2501 or ART 2503) and (ART 2502, ART 2504, ART 2507, or ART 2508)

ART 4505. Color. 3 Credit Hours.

The study of color, its characteristics, and interaction, explored through studio painting experiences. NOTE: This course may fulfill an advanced Painting/Drawing Studio Major or Studio Elective.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 2501 or ART 2503) and (ART 2502, ART 2504, ART 2507, or ART 2508)

ART 4506. Senior Painting Studio. 3 Credit Hours.

The senior painting studio program is designed to emphasize the development of an active and reflective studio practice. Students identify and pursue their own projects, working independently within a collective critical structure. Entry into this course is by faculty jury selection only.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 2501 or ART 2503)

ART 4507. Senior Painting Studio. 3 Credit Hours.

The senior painting studio program is designed to provide an intensive studio experience while working in individual studio space. The group works with two faculty members in individual and group critiques.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

ART 4511. Critical Dialogues. 3 Credit Hours.

Each week a different visiting speaker delivers a public lecture about the history of their work. The speakers are culled primarily from artists, but also from curators and critics. Class members meet after the public lecture for a seminar on the work and ideas presented. Each class member has a private studio critique with a few of the visiting speakers.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

ART 4514. Advanced Drawing. 3 Credit Hours.

In this studio-intensive course students engage in an investigation of subject matter, sources, and strategies for generating work. Experimentation is encouraged and there are frequent class critiques.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 2502, ART 2504, or ART 2507)

ART 4517. Figure Drawing. 3 Credit Hours.

An advanced course focused entirely on the human figure as subject. There is emphasis on a variety of approaches to drawing the figure. Dynamics, proportion, anatomy, volume, and structure will be investigated through various drawing methods and selected materials. Frequent historical references will be made through reproductions and slides, and 20th century figure drawing will be thoroughly discussed.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 2502, ART 2504, or ART 2507)

ART 4518. Figure Drawing. 3 Credit Hours.

An advanced course focused entirely on the human figure as subject. There is emphasis on a variety of approaches to drawing the figure. Dynamics, proportion, anatomy, volume, and structure will be investigated through various drawing methods and selected materials. Frequent historical references will be made through reproductions and slides, and 20th century figure drawing will be thoroughly discussed.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ART 2502, ART 2504, or ART 2507)

ART 4601. Senior Photography. 3 Credit Hours.

Development of a contemporary theoretical and conceptual foundation for long-range involvement with professional photographic image-making and processes. The course includes research, field trips, critical theory and the organization of a final portfolio of work using various photographic materials. Career options within the field are emphasized.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Photography.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (9 credits in 3600-level ART courses, 9 credits in 3400-level GAD courses, or 9 credits in 3400-level PHOT courses)

ART 4602. Senior Projects Workshop/Seminar. 3 Credit Hours.

A combination workshop/seminar course in which the senior printmaker, through classroom and individual discussion with the instructor, develops and produces a major print project. The course includes a formal presentation of all the projects.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

ART 4696. Senior Seminar in Photography. 3 Credit Hours.

The primary objective of this advanced writing intensive/studio course is to investigate the concept of photography both technically and conceptually. Students will research, revise, and present an extended, articulate, and professionally accomplished body of writings and artwork. Students will learn the professional standards of writing that are expected in the different avenues of photography. Writing and vocabulary skills appropriate to fine arts venues are different than those needed in a commercial endeavor. Students will learn how to identify and use the appropriate language, references, and resources in the photography world. This course is required for all photography majors.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Course Attributes: WI

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (9 credits in 3400-level GAD courses, 9 credits in 3400-level PHOT courses, or 9 credits in 3600-level ART courses)

ART 4801. Senior Sculpture. 3 Credit Hours.

A combined studio and seminar course for senior majors in sculpture. Research of graduate schools and studio practice and career after the BFA is part of this course. Students will work on the preparation of a portfolio and statement of individual working philosophy for either graduate school or gallery/grant applications. The course emphasizes knowledge of contemporary issues in sculpture, and critical and analytical skills through research projects and group discussions and development of the focus of each participants' studio practice through individual and group critiques. The mounting of a group show and design of a catalog for the show are part of this class.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ART 2801 or ART 2807)

ART 4812. Foundry. 3 Credit Hours.

Ceramic shell bronze and aluminum casting techniques are emphasized, as well as a variety of hot and cold casting materials and processes. The course focuses on the way these techniques serve sculptural thinking. NOTE: Special authorization for all.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Art - Japan Campus (ARTU)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ARTU 1101. Painting for Non-Majors. 3 Credit Hours.

This Non-Major course in painting focuses on oil painting techniques, conceptual development, and the use of elements of design for creative expression. Note: See your advisor for information on the GenEd Arts waiver.

Course Attributes: AR

Repeatability: This course may not be repeated for additional credits.

ARTU 1201. 3-D Design. 3 Credit Hours.

A foundation course in 3-D design focusing on the principles, elements, and technical processes for visual understanding and creative expression. Note: See your advisor for information on the GenEd Arts waiver.

Course Attributes: AR

Repeatability: This course may not be repeated for additional credits.

ARTU 1401. Drawing I. 3 Credit Hours.

A foundation course in drawing focusing on drawing techniques, conceptual development, and the use of elements of design for creative expression. Note: See your advisor for information on the GenEd Arts waiver.

Course Attributes: AR

Repeatability: This course may not be repeated for additional credits.

ARTU 1402. Drawing II. 3 Credit Hours.

A foundation course in drawing focusing on drawing techniques, conceptual development, and the use of elements of design for creative expression.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 1401.

ARTU 1501. 2D Design. 3 Credit Hours.

A foundation course in design focusing on the principles, elements, and technical processes for visual understanding and creative expression. Note: See your advisor for information on the GenEd Arts waiver.

Course Attributes: AR

Repeatability: This course may not be repeated for additional credits.

ARTU 2001. Philadelphia Sketchbook. 3 Credit Hours.

This non-majors drawing course combines studio instruction in basic drawing skills as well as on-site drawing in Philadelphia's many historical sites and museums. Emphasis will be on improving observational skills and drawing techniques. Students will be encouraged to develop their own unique vision. This course has no prerequisites. Daily outings will be required to various significant Philadelphia sites.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

ARTU 2102. Painting. 3 Credit Hours.

Introduces second-year students to painting techniques and conceptual framework while developing the procedural logic necessary to articulate the figure and still life in oil and acrylic media. The student is encouraged to explore invented as well as analytical form.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 1401 and ARTU 1402.

ARTU 2111. Aqueous Media. 3 Credit Hours.

An introduction to color design theory and practice.

Repeatability: This course may not be repeated for additional credits.

ARTU 2121. Introduction to Landscape Painting. 3 Credit Hours.

This course introduces students to the rich traditions of painting outdoors. Focus will be on water-based medium. NOTE: Summer only. Ambler Campus only.

Repeatability: This course may not be repeated for additional credits.

ARTU 2122. Advanced Landscape Painting. 3 Credit Hours.

For students with some painting and drawing background, the course emphasizes painting outdoors on the Ambler Campus. NOTE: Summer only. Ambler campus only.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 2121.

ARTU 2202. Intermediate 3-D. 3 Credit Hours.

Three-dimensional design theory and practice through construction techniques in wood and other materials. Emphasis on conceptual growth. NOTE: Main Campus only. Prior to Fall 2008, this course was titled "3-D Structures."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 1201.

ARTU 2301. Relief Printmaking. 3 Credit Hours.

An introduction to basic relief printmaking, black/white and color, in wood, linoleum, metal, and various other materials. NOTE: Main Campus only.

Repeatability: This course may not be repeated for additional credits.

ARTU 2302. Intermediate Printmaking: Relief. 3 Credit Hours.

Intermediate level studies in relief processes including photographic and digital printmaking, with emphasis on conceptual growth and individual instruction. NOTE: Main Campus only. Prior to Fall 2008, this course was titled "Relief Printmaking II."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 2301.

ARTU 2311. Lithography. 3 Credit Hours.

An introduction to drawing, painting, photographic, and digital printmaking techniques, processes, and image development, black/white and color on limestone. NOTE: Main Campus only.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ARTU 1401, ARTU 1496, or ARTU 1996)

ARTU 2312. Intermediate Printmaking: Lithography. 3 Credit Hours.

Intermediate level studies in lithographic, photographic, and digital printmaking techniques. Reversals, transfers, master image plans, registration procedures and color printing will be demonstrated. Emphasis is on conceptual growth and individual instruction. NOTE: Main Campus only. Prior to Fall 2008, this course was titled "Lithography II."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 2311.

ARTU 2331. Intaglio Printmaking. 3 Credit Hours.

This course introduces a broad range of intaglio plate making and printing processes including etching, drypoint, collagraphs, and photogravure. Additional topics include the care and use of tools and materials, print portfolio presentation, and a historical survey of printmaking.

Repeatability: This course may not be repeated for additional credits.

ARTU 2341. Screenprinting. 3 Credit Hours.

This course engages students in historic and contemporary approaches to water-based screenprinting concepts and technologies, while encouraging a multi-disciplinary approach to fine art print production. Students will begin with direct cut-paper and hand-painted stencils and move into more complex hand-drawn and digitally manipulated photographic techniques. There will be an emphasis on multi-colored, multi-layered prints as well as the print as image, book, poster, installation, and sculpture. Community and group-based activities will be an integral part of the course.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 2301.

ARTU 2351. Artist Books, Zines and Independent Publishing. 3 Credit Hours.

Throughout the semester, you will learn the basics of bookbinding, DIY independent publishing, and limited printmaking processes. This will include, but is not limited to: basic book binding terminology, tools, and structures; basic printmaking techniques, covering hand printing techniques and alternative printmaking processes; development and dissemination of work completed in class; and working knowledge of contemporary practices and working artists in the Book Arts and Zine fields.

Repeatability: This course may not be repeated for additional credits.

ARTU 2400. Special Topics. 3 Credit Hours.

In this studio art course, approaches to making and understanding images in various media will be addressed.

Repeatability: This course may be repeated for additional credit.

ARTU 2402. Intermediate Drawing. 3 Credit Hours.

Figurative painting in pastel coupled with basic drawing approaches and techniques. A second level drawing course emphasizing more advanced drawing strategies and the use of chalk pastels. The model is used, although not exclusively. NOTE: Prior to Fall 2008, this course was titled "Drawing II."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 1402.

ARTU 2601. Computer Imaging. 3 Credit Hours.

This course introduces students to the computer as an artist's tool. Emphasis is on developing personal imagery and exploring the ways that the computer can serve as a vehicle for artistic expression. Students should have some previous studio art experience before taking this class. NOTE: Prior to Fall 2008, this course was titled "Introduction to Computer Imaging."

Repeatability: This course may not be repeated for additional credits.

ARTU 2602. Intermediate Computer Imaging. 3 Credit Hours.

This course serves to deepen students' engagement with the computer as a tool for fine arts. Students explore image making in relation to contemporary practices and work with alternative methods of using the computer as a medium.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 2601.

ARTU 2605. Internet Imaging. 3 Credit Hours.

This class explores the web as a tool for artistic expression. Students learn web design within the context of an exploration of the uses of the internet as an art medium. NOTE: Prior to Fall 2008, this course was titled "Introduction to Internet Imaging."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ARTU 2601 or ARTU 2811)

ARTU 2801. Art Photography: Darkroom. 3 Credit Hours.

The student is expected to master the basic photographic skills quickly through the use of lecture/demonstration, critiques and independent lab and field work. The course then concentrates on the use of photography as a fine art medium. NOTE: Prior to Fall 2008, this course was titled "Basic Darkroom Photography B/W I."

Repeatability: This course may not be repeated for additional credits.

ARTU 2802. Intermediate Art Photography: Darkroom. 3 Credit Hours.

An intermediate level class on the use of photography as a fine art medium with emphasis on archival printing on fiber-based paper, sepia and selenium toning, and the development of a personal aesthetic supported by the use of sophisticated shooting and printing techniques. NOTE: Prior to Fall 2008, this course was titled "Basic Darkroom Photography B/W II."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 2801.

ARTU 2811. Art Photography: Digital. 3 Credit Hours.

The basic principles of digital photography, including shooting with a digital camera, manipulating images within the computer, and printing to inkjet printers are taught. The course focuses on black & white photo, including duotones. Emphasis is placed on technical expertise, creative development, and an understanding of the potential of imaging software. NOTE: Prior to Fall 2008, this course was titled "Introduction to Digital Photography."

Repeatability: This course may not be repeated for additional credits.

ARTU 2812. Intermediate Art Photography: Digital. 3 Credit Hours.

An intermediate level class in digital photography including the introduction of color photography and its relevant aesthetics, and the use of the web as a presentation medium. Emphasis is on conceptual growth and personal vision. NOTE: Prior to Fall 2008, this course was titled "Intermediate Digital Photography."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 2811.

ARTU 2831. Art Photography / Digital On-Line. 3 Credit Hours.

This course teaches students the use of low-tech devices such as cell phones and point-and-shoot cameras for photography, video and sound recording. The results are posted to art-specific online visual communities similar to Facebook and YouTube. Responses from fellow students are evaluated in class critiques. This course raises the aesthetic bar above what is usually seen online. It teaches students how to see the world through a camera, organize the visual spaces found in their local community, and fill these photographs with meaningful content that can communicate the personal vision they develop during the semester to a broader audience.

Repeatability: This course may not be repeated for additional credits.

ARTU 2835. Art Photo / Moving Image. 3 Credit Hours.

This course allows artists to use the medium of video to investigate their world. The technical end involves shooting digital video, transferring to computer, computer editing, post processing, sound editing and processing, and burning finished pieces to DVD. Students are also introduced to alternative ways of creating moving images using digital based animation software to investigate art of motion graphics. The aesthetics are from the art world rather than the commercial, documentary, or Hollywood styles. Knowledge of computers for visual application is expected. NOTE: This course is offered in Tokyo only.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ARTU 2601 or ARTU 2811)

ARTU 2900. Honors Special Topics. 3 Credit Hours.

In this studio art course, approaches to making and understanding images in various media will be addressed.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

ARTU 3000. Special Topics. 3 Credit Hours.

This studio art course addresses approaches to making and understanding images, objects, and experiences, in various media. Each topic will be addressed through contextual, procedural, material, and critical lenses. A specific theme will be selected each time the course is offered. This course assumes a strong level of basic studio knowledge in one or more art disciplines.

Repeatability: This course may be repeated for additional credit.

ARTU 3103. Advanced Painting. 3 Credit Hours.

Painting as an art form with emphasis upon disciplined draftsmanship and imaginative composition. NOTE: Prior to Fall 2008, this course was titled "Painting Workshop."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 2102.

ARTU 3203. Advanced 3-D. 3 Credit Hours.

Workshop course for students wishing to focus on advanced 3-D with emphasis on individual instruction. NOTE: Prior to Fall 2008, this course was titled "Advanced 3-D I."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 2202.

ARTU 3303. Advanced Printmaking. 3 Credit Hours.

Exploration of advanced printmaking problems. NOTE: Prior to Fall 2008, this course was titled "Advanced Printmaking I."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ARTU 2302 or ARTU 2341)

ARTU 3321. Intermediate Printmaking: Digital. 3 Credit Hours.

This course integrates a variety of digital applications and the traditional printmaking processes of relief, intaglio and lithography. Emphasis is on creative growth and individual instruction. Printmaking experience is required and computer imaging experience is recommended. NOTE: Prior to Fall 2008, this course was titled "Digital Printmaking."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 2601 and (ARTU 2301 or ARTU 2311)

ARTU 3403. Advanced Drawing. 3 Credit Hours.

Drawing as an art form with emphasis upon disciplined draftsmanship and imaginative composition. NOTE: Prior to Fall 2008, this course was titled "Intermediate Drawing I."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 2402.

ARTU 3601. Multimedia Studio. 3 Credit Hours.

An advanced course in which students explore the computer as a tool for artists. Students will be expected to explore their personal imagery and artistic goals through using the computer to make several long-term ambitious projects using computer screen as their primary medium.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 1101, ARTU 1201, ARTU 1401, ARTU 1501, and 4 ARTU courses numbered 2000 to 4999.

ARTU 3602. Digital Mixed Media Studio. 3 Credit Hours.

An advanced course in which students explore the computer as an artistic tool in combination with other materials. Students will be expected to explore their personal imagery and artistic goals through using the computer to make several long-term ambitious projects that exist primarily outside the computer screen.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 1101, ARTU 1201, ARTU 1401, ARTU 1501, and 4 ARTU courses numbered 2000 to 4999.

ARTU 3603. Advanced Computer Imaging. 3 Credit Hours.

An advanced course in which students explore the computer as a tool for artists. Students will be expected to explore their personal imagery and artistic goals through using the computer to make several long-term ambitious projects.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 2602.

ARTU 3803. Advanced Art Photography: Darkroom. 3 Credit Hours.

This upper-level class involves the collection of aesthetic and technical tools, organized into a photographic vocabulary and the subsequent generation of a body of work that communicates a personal vision that ultimately evokes a meaningful response from an audience. Fiber-based papers, toners, and some unique aesthetic approach are required. NOTE: Prior to Fall 2008, this course was titled "Intermediate Darkroom Photography."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 2802.

ARTU 3813. Advanced Art Photography: Digital. 3 Credit Hours.

An upper-level course in digital photography. Emphasis is on conceptual growth through individual instruction. Advanced forms of presentation, including multiple prints, interactive images, and dynamic photographs are considered. NOTE: Prior to Fall 2008, this course was titled "Advanced Digital Photography."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 2812.

ARTU 3825. Intermediate Art Photography: Hybrid. 3 Credit Hours.

This upper-level course introduces a wide range of processes that integrate digital and darkroom techniques and aesthetics to produce work in this new genre of photography. The students must have experience with both darkroom and digital photography. Aesthetic problems are posed that use the formal characteristics of these special media to support image content to best advantage. NOTE: Prior to Fall 2008, this course was titled "Introduction to Hybrid Photography."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 2811 and ARTU 2812.

ARTU 3826. Advanced Art Photography: Hybrid. 3 Credit Hours.

This advanced level class extends the opportunity to study and develop the use of photographic media that integrate digital and darkroom processes and aesthetics to produce a meaningful body of work in this new genre of photography. The students must have experience with both darkroom and digital photography. NOTE: Prior to Fall 2008, this course was titled "Intermediate Hybrid Photography."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 3825.

ARTU 4148. Painting Workshop. 3 Credit Hours.

An advanced level drawing course focusing on the refinement of skills and personal expression. Individual instruction and self motivation are emphasized. NOTE: Prior to Fall 2008, this course was 3104 "Painting Workshop II."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 3103.

ARTU 4149. Painting Portfolio. 3 Credit Hours.

An advanced level painting course focusing on making finished quality work to build a portfolio. Individual instruction and motivation are emphasized.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ARTU 3103 or ARTU 4148)

ARTU 4182. Independent Study: Painting. 3 Credit Hours.

This course allows the student to explore an area of study that lies outside regular course offering, working independently although under the supervision of a faculty member. All proposals must be approved by the department chair.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ARTU 4148 or ARTU 4149)

ARTU 4248. 3-D Workshop. 3 Credit Hours.

An advanced level 3D course focusing on the refinement of skills and personal expression. Individual instruction and motivation are emphasized. NOTE: Prior to Fall 2008, this course was 3204 "Advanced 3-D II."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 3203.

ARTU 4249. 3-D Portfolio. 3 Credit Hours.

An advanced level 3D course focusing on making finished quality work to build a portfolio. Individual instruction and motivation are emphasized.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ARTU 3203 or ARTU 4448)

ARTU 4282. Independent Study: 3-D. 3 Credit Hours.

This course allows the student to explore an area of study that lies outside regular course offering, working independently although under the supervision of a faculty member. All proposals must be approved by the department chair.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ARTU 4448 or ARTU 4249)

ARTU 4348. Printmaking Workshop. 3 Credit Hours.

Advanced study of aesthetics and techniques of contemporary printmaking provide an in-depth appreciation of etching, lithography, relief printing and intaglio type processes. Students may concentrate in one print medium. Individual and group work is required. NOTE: Prior to Fall 2008, this course was titled "Printmaking Portfolio I."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 3303.

ARTU 4349. Printmaking Portfolio. 3 Credit Hours.

Advanced study in advanced printmaking with emphasis on individual instruction. The preparation of a professional portfolio of editions and/or series is required. Various aspects of a studio career will be covered including: resumes, artists' statements, photographing work, and presentations. NOTE: Prior to Fall 2008, this course was titled "Printmaking Portfolio II."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ARTU 3303 or ARTU 4348)

ARTU 4382. Independent Study: Printmaking. 3 Credit Hours.

This course allows the student to explore an area of printmaking outside regular course offering, working independently although under the supervision of a faculty member. The department chair must approve a written proposal. NOTE: Prior to Fall 2008, this course was 3304 "Advanced Printmaking II."

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ARTU 4348 or ARTU 4349)

ARTU 4448. Drawing Workshop. 3 Credit Hours.

An advanced level drawing course focusing on the refinement of skills and personal expression. Individual instruction and motivation are emphasized. NOTE: Prior to Fall 2008, this course was 4405 "Drawing Workshop I."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 3403.

ARTU 4449. Drawing Portfolio. 3 Credit Hours.

An advanced level drawing course focusing on making finished quality work to build a portfolio. Individual instruction and motivation are emphasized. NOTE: Prior to Fall 2008, this course was 4406 "Drawing Workshop II."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ARTU 3403 or ARTU 4448)

ARTU 4482. Independent Study: Drawing. 3 Credit Hours.

This course allows the student to explore an area of drawing that lies outside regular course offering, working independently although under the supervision of a faculty member. A written proposal must be approved by the department chair.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ARTU 4448 or ARTU 4449)

ARTU 4648. Computer Imaging Workshop. 3 Credit Hours.

Advanced study of aesthetics and techniques of computer imaging with emphasis on individual instruction.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 3603.

ARTU 4649. Computer Imaging Portfolio. 3 Credit Hours.

Advanced study of aesthetics and techniques of computer imaging with emphasis on individual instruction. The preparation of a professional portfolio is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ARTU 3603 or ARTU 4648)

ARTU 4682. Independent Study: Computer Imaging. 3 Credit Hours.

This course allows the student to explore an area of study in computer imaging outside the regular course offering, working independently although under the supervision of a faculty member. A written proposal must be approved by the department chair.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ARTU 4648 or ARTU 4649)

ARTU 4785. Field Internship. 3 Credit Hours.

This course offers experiential learning and hands-on training in student's field of choice. NOTE: For Art and Art Education Majors only with Special Authorization.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ARTU 1101, ARTU 1201, ARTU 1401, ARTU 1501, and 4 ARTU courses numbered 2000 to 4999.

ARTU 4796. Art Seminar. 3 Credit Hours.

The goal of this writing intensive upper-level studio course is to help the advanced student find his/her own voice through independent studio projects and writing assignments. The class will meet as a group and the instructor will also meet individually with students. NOTE: Additional prerequisites for studio concentration: Art 2101 (0118), 2402 (0140), 2111 (0159) and two printmaking courses. For digital concentration: one printmaking or photo, three digital electives, and two studio electives or two non-digital electives. For visual studies concentration: one printmaking, photo, or computer imaging course plus four classes from the concentration group.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 1201, ARTU 1401, ARTU 1402, ARTU 1501, 6 ARTU courses numbered 2000 to 4999, ARTH 1103, (ARTH 1155, ARTH 1156, or ARTH 1801), and any ARTH course numbered 2000 to 4999.

ARTU 4848. Art Photography Workshop. 3 Credit Hours.

A top-level course for the study of advanced photographic techniques and aesthetics. The student is expected to design a course of study (proposal required) that is particular to his or her own interests and that involves aspects of photography not available in the other course offerings. Work can be realized in either the darkroom or digital studio and must include unique techniques, aesthetics, and presentation. NOTE: Prior to Fall 2008, this course was titled "Advanced Photo Study I."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTU 3813.

ARTU 4849. Art Photography Portfolio. 3 Credit Hours.

A top-level course for the study of advanced photographic techniques and aesthetics with an emphasis on the creation of all artwork and documentation needed to build a portfolio. The student is expected to define an aesthetic philosophy that is particular to his or her own interests (proposal required). Work can be realized in either the darkroom or digital studio and must include unique techniques, aesthetics, and presentation. NOTE: Prior to Fall 2008, this course was titled "Advanced Photo Study II."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ARTU 3813 or ARTU 4848)

ARTU 4882. Independent Study: Art Photography. 3 Credit Hours.

This course allows the student to explore an area of photographic study outside our regular course offerings, working independently although under the supervision of a faculty member. A written proposal must be approved by the department chair. NOTE: Prior to Fall 2008, this course was 3804 "Advanced Darkroom Photography."

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ARTU 4848 or ARTU 4849)

Art Education (ARTE)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ARTE 1001. Professional Practices in Art Education and Art Therapy. 1 Credit Hour.

This course covers topics and issues related to professional practices for the BS in Art Education and the BA in Art Therapy. Some of the topics/ issues include clearances and background checks, observational practicums, and volunteer hours, applications for internship, student teaching and fieldwork courses; professionalism, digital literacy, teaching/therapeutic art philosophy, identity, self-care, information literacy, writing skills, and wellness practices.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Science Educ.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

ARTE 2001. Science and Art of Teaching. 4 Credit Hours.

Various theories as a framework for considering the science and art of teaching with emphasis on classroom-based research. Accompanied by a practicum in which students observe teacher behavior in a visual arts-based learning environment. NOTE: Students must obtain a B- or better for admission into the certification program. 20 hours field observation required. Child Abuse, Criminal History Clearances, FBI fingerprints and TB test must be obtained prior to the first day of class. Meeting with the Art Education advisor is mandatory.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ARTH 1155, ARTH 1955, or 'Y' in CRAH01) and (ARTH 1156, ARTH 1956, or 'Y' in CRAH02)

ARTE 2011. Creative Process in Art Therapy. 3 Credit Hours.

This course explores creativity theory and applies concepts from art therapy and related fields and presents a blend of approaches including Eastern traditions, Jungian psychology, and other sources. Studio work and writing are used as tools to understand the creative process in art therapy and cultivate the discipline of self-awareness. Readings, group discussions, and processing of the art-making experiences will be utilized.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((ARTU 1401, ARTU 1201, and ARTU 1501), (FDPR 1511 and FDPR 1521), or Select 2 from the following: VS 1151, VS 1351, and VS 1451)

ARTE 3003. Arts & Learning in the Elementary School. 3 Credit Hours.

This course forms a foundation for using the arts as active processes for learning, for those who will be teaching at the K-8 level, through a series of hands-on workshops in media including theater, dance, music and visual arts. The course offers experiential and theoretical tools for understanding processes of creativity in the arts and education. Parallel with the in-class arts workshops, students will gain skills in designing curricula which integrate arts and academic content areas.

Repeatability: This course may not be repeated for additional credits.

ARTE 3004. Introduction to Art Therapy. 3 Credit Hours.

This course is designed to offer students a didactic and experiential overview of the field of art therapy. Material covered will include history, theory, and practice of art therapy processes and approaches as well as a survey of populations, settings, and applications. Lectures, readings, discussion, audiovisual presentations, experiential exercises, and guest presentations comprise the structure of this course.

Repeatability: This course may not be repeated for additional credits.

ARTE 3010. Special Topics. 3 Credit Hours.

Special Topics in Art Education addresses and explores pertinent contemporary issues and artmaking practices. Art students and art teachers in the schools and communities will create work as artists and translate their practices into relevant curriculum for their classrooms.

Repeatability: This course may be repeated for additional credit.

ARTE 3011. Introductory Seminar in Community Arts. 3 Credit Hours.

Community Arts brings artists together with people of a community of location, spirit, or tradition, to create art that is based in the life of that community. This course introduces students to the history and theory of Community Arts and current projects in Philadelphia and nationally, through field trips, guest speakers, readings and research. Students will engage in arts projects to orient to an re-discover their own communities of origin in relation to Community Arts and examine issues of race, class, and aesthetics. The course prepares students to become involved in the field internships that are being offered through Tyler/Temple's Arts in Community Program and is a prerequisite for other Arts in Community courses. NOTE: Course previously called "Interdisciplinary Seminar in Community Arts."

Repeatability: This course may not be repeated for additional credits.

ARTE 3089. Research and Project Planning Seminar in Community Arts. 3 Credit Hours.

In this course, students will apply methods of community data collection to research on a specific community, including personal and oral history interviews, background cultural research, detailed observation of community visual environments and performative conventions, and relationship building. Site visits to community sites and meetings with community leaders provide context for this research. These processes are then directed toward sequential project planning, including a research paper and individual and group creative responses in various media. Utilizing a collective research methodology, students then collaborate to identify emerging themes and key issues toward the conceptual design of a community arts project.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ARTE 3011, ARTE 3911, or VS 1058)

ARTE 3096. Art in Elementary and Secondary School. 4 Credit Hours.

Course focuses on an examination of methods, materials, and current research as it relates to teaching art at elementary and secondary levels. NOTE: One day per week internship in a school art classroom is required of each student. Students must obtain B- or better. Application materials must be submitted during pre-registration the semester prior to taking the course. Child Abuse, Criminal History, FBI fingerprints and TB test must be up-to-date. Meeting with the Art Education advisor is recommended.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ARTE 2001 or 'Y' in CRAR01) and minimum GPA of 3 in: courses numbered 0700 to 4999.

ARTE 3202. Teaching Artists. 3 Credit Hours.

This course presents students from all arts fields with career options as teaching artists. Teaching artists are professional, practicing artists who collaborate with community and school leaders to create arts-based experiences in a variety of settings including: arts organizations, social service programs, health facilities, public libraries, senior centers, prisons, museums, and schools. Students will research existing resources for teaching artists, learn advocacy strategies, grant writing skills, and participate in direct field experience. Guest teaching artists and community arts administrators will provide presentations and workshops.

Repeatability: This course may not be repeated for additional credits.

ARTE 3911. Honors Introductory Seminar in Community Arts. 3 Credit Hours.

Community Arts brings artists together with people of a community of location, spirit, or tradition, to create art that is based in the life of that community. The goals of this course are for students to learn about the history and theory of Community Arts, to gain skills in Community Arts studio and research processes, to learn to think critically about the issues of race, class, and aesthetics inherent in Community Arts practice, to gain exposure to established Community Arts projects in Philadelphia through field trips and guest speakers, and to orient to and re-discover one's own community of origin in relation to Community Arts. NOTE: This is an honors course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

ARTE 3989. Honors Research and Project Planning in Community Arts. 3 Credit Hours.

In this course, students will apply methods of community data collection to research on a specific community, including personal and oral history interviews, background cultural research, detailed observation of community visual environments and performative conventions, and relationship building. Site visits to community sites and meetings with community leaders provide context for this research. These processes are then directed toward sequential project planning, including a research paper and individual and group creative responses in various media. Utilizing a collective research methodology, students then collaborate to identify emerging themes and key issues toward the conceptual design of a community arts project. NOTE: This is an honors course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in ARTE 3911.

ARTE 4003. Inclusive Art Education K-12 Students in the Art Room. 3 Credit Hours.

Learn about the scope of different disabilities that may present themselves in the art room including intellectual, learning, and physical disabilities; and visual, hearing, emotional, and behavior disorders. Effective instructional strategies for inclusive practices to meet the unique, diverse learning and special educational needs of K-12 students in the art room, including methods of assessment and accommodations are explored.

Co-requisites: ARTE 4088.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in ARTE 3096 and minimum GPA of 3 in: courses numbered 0700 to 4999.

ARTE 4012. Community Arts. 3 Credit Hours.

In this course students will create, develop and implement a community-based arts project in media including visual arts and performance within a particular Philadelphia community. Students will gain skills in community arts processes including project design, local research, teaching, and design/performance/installation of arts projects. The course is grounded in community arts theory, growing out of the fields of public art and performance studies.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ARTE 3089 or ARTE 3989) and (ARTE 3011, ARTE 3911, or VS 1058)

ARTE 4082. Independent Study. 1 to 3 Credit Hour.

Self-directed study and research initiated by a student with an independent study contract developed in conjunction with, and supervised by, a faculty member in the art education and community art department.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may be repeated for additional credit.

ARTE 4088. Student Teaching. 9 Credit Hours.

Students assume responsibility for direction of classes and lesson planning in both elementary and secondary schools. The practical experience is enriched through seminar discussions focusing on the enterprise of teaching. NOTE: Application Materials must be submitted during pre-registration the semester prior to taking the course. Meeting with the Art Education advisor is recommended.

Co-requisites: ARTE 4003.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in ARTE 3096 and minimum GPA of 3 in: courses numbered 0700 to 4999.

ARTE 4089. Evaluation and Documentation in Community Arts. 3 Credit Hours.

In this course students will learn and apply methods for evaluation and ongoing work in the aftermath phase of Community Arts projects, including assessment of artistic process and product and community impact, approaches to continuing community involvement, and transitioning of project ownership to the community. The course offers students a variety of media for documenting and assisting community members to document Community Arts projects in the form of scholarly articles, video and audio documentary, community feedback and personal essays/journals that contribute knowledge to the field of Community Arts.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ARTE 4012.

ARTE 4289. Field Work in Art Therapy. 4 Credit Hours.

The course examines the important role of art making in promoting resilience in individuals, families and communities; explores the role the arts play in addressing issues of inequality and injustice; and building strong and caring communities are examined. BA in Art Therapy majors engage in fieldwork experience as art facilitators with individuals and groups at pre-approved fieldwork sites. Philosophies of therapeutic art making practices and experience with appropriate materials; resources related to art therapy with individuals who have diverse educational, social, emotional, communicative and physical needs are explored. Readings, group discussions, and processing of the art-making experiences will be utilized.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ARTE 2011 and ARTE 3004.

Art History (ARTH)

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ARTH 0803. The Art of Sacred Space. 3 Credit Hours.

From curse tablets to animal sacrifice to places where the divinity was approached, human beings in every period and culture have communicated with the divine. We will explore together how a given culture used art to communicate with the deity, interrogate the meaning of a sacred space itself, and look closely at the literary and material evidence for rituals and beliefs. Through the lens of a chosen time period, we will analyze and critique practices and behaviors through topics such as festivals, burial practices, magical ceremonies, and rites of passage, with a view to understanding the place of sacred space in our own lives. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed REL 0803 or GRC 0803/0903.

Course Attributes: GA

Repeatability: This course may not be repeated for additional credits.

ARTH 0808. Art Matters: Ideas in Art and Architecture. 4 Credit Hours.

This course is an introduction to looking at art and appreciating the wide range of art and architecture that surrounds us in our contemporary world. We will think about, engage with, and learn how to look at the visual arts of the present and the past, and understand their contexts, subjects, and styles. At the same time, we will study monuments across the globe that place the visual arts in a broad cultural framework. Close attention is given to visual literacy, as well as the concepts that connect artistic communication and expression from the art and architecture of the ancient world through modern times. Through local museum and gallery visits, we will also become familiar with the ways that the arts connect to our everyday lives. Prior to Fall 2023, this course was titled "Arts of the Western World: The Visual Experience." NOTE: (1) Field trips outside of regularly-scheduled class time are mandatory for this class. (2) This course fulfills the Arts (GA) requirement for students under GenEd.

Course Attributes: GA

Repeatability: This course may not be repeated for additional credits.

ARTH 0813. The History of Art in Rome. 4 Credit Hours.

Weekly class lectures and on-site visits provide a survey of Roman art from the Etruscan through the Baroque periods, and therefore, from the founding of the ancient city in the 8th century B.C. to circa 1700. Students study each period's art and architecture and define its place within the general context of Roman civilization. Rome's position as both capital of the ancient empire and of the Western Latin Church has earned her the well-recognized sobriquet, Eternal City. Consequently, students confront how the idea of Rome had bearing upon the formation of its art and architecture within the chronological context. The course as a whole can be considered an introduction to art history in the field, as each week the class visits a historical site or museum in order to reconstruct through living examples the artistic fabric of the city. NOTE: This course is taught in Rome.

Course Attributes: GA

Repeatability: This course may not be repeated for additional credits.

ARTH 1003. History of Art in Rome. 4 Credit Hours.

Weekly class lectures and on-site visits provide a survey of Roman art from the Etruscan through the Baroque periods, and therefore, from the founding of the ancient city in the 8th century B.C. to circa 1700. Students study each period's art and architecture and define its place within the general context of Roman civilization. Rome's position as both capital of the ancient empire and of the Western Latin Church has earned her the well-recognized sobriquet, Eternal City. Consequently, students confront how the idea of Rome had bearing upon the formation of its art and architecture within the chronological context. The course as a whole can be considered an introduction to art history in the field, as each week the class visits a historical site or museum in order to reconstruct through living examples the artistic fabric of the city. NOTE: This course is taught in Rome. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AR

Repeatability: This course may not be repeated for additional credits.

ARTH 1103. Introduction to Methods and Theories. 3 Credit Hours.

This course is an introduction to the key methodologies and theories that have been used in the field of art history and visual studies to understand art and other visual phenomena. By reading and responding critically to some of the most influential texts that have shaped the field, we will consider the history and transformation of the field itself. Through lectures, discussions, and writing, students will be equipped with tools to critically assess artworks and other visual phenomena as well as their own practice and begin to stake out their own position in relation to the debates that have transformed the critical interpretation of visual culture. NOTE: This course is taught at TU Japan.

Repeatability: This course may not be repeated for additional credits.

ARTH 1148. International Cinema. 3 Credit Hours.

A selection of films from modern Europe and Third World cultures which demonstrate both their interaction with postmodern politics, theory and culture, and the development of an international alternative discourse to Hollywood commercial film-making. Films will be selected according to a theme each semester. Past courses: Italian Neo-Realism, Independent Film Makers, and Women in Film. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. NOTE: This course is taught in Rome.

Course Attributes: IS

Repeatability: This course may not be repeated for additional credits.

ARTH 1155. Arts of the World I: Prehistoric to 1300. 3 Credit Hours.

Students in this course examine and analyze the architecture, sculpture, and painting of the art from cultures around the world from the era of Prehistory to ca. 1300. Students analyze the forms, techniques, styles, subjects, and symbolism represented in architecture, sculpture, and painting both historically and in relation to the impact of societal beliefs and values to develop an understanding of global artistic traditions. Students employ contemporary methods in the interpretation of forms, subjects, and artistic differences and parallels. NOTE: Field trips are mandatory for this class. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AR

Repeatability: This course may not be repeated for additional credits.

ARTH 1156. Arts of the World II: 1300 to the 21st Century. 3 Credit Hours.

Students in this course examine and analyze the art from cultures around the world, including architecture, sculpture, painting, and modern media, from ca.1300-the 21st Century. Students analyze the forms, techniques, styles, subjects, and symbolism represented in art and architecture both historically and in relation to the impact of societal beliefs and values to develop an understanding of global artistic traditions. Students employ contemporary methods in the interpretation of forms, subjects, and artistic differences and parallels. NOTE: Field trips are mandatory for this class. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AR

Repeatability: This course may not be repeated for additional credits.

ARTH 1801. Arts of Asia. 3 Credit Hours.

Architecture, sculpture, painting and the functional arts of Asia (India, China, Japan and Southeast Asia). A historical examination of the art as a religious expression and as a product of changing social and economic conditions. The material culture of Asia will be examined with an emphasis on differing world views and perspectives with which to "see" art. NOTE: (1) Field trips are mandatory for this class. (2) This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. NOTE: This course is only taught at TU Japan.

Course Attributes: AR

Repeatability: This course may not be repeated for additional credits.

ARTH 1955. Honors Arts of the World I: Prehistoric to 1300. 3 Credit Hours.

Students in this course examine and analyze the architecture, sculpture, and painting of the art from cultures around the world from the era of Prehistory to ca. 1300. Students analyze the forms, techniques, styles, subjects, and symbolism represented in architecture, sculpture, and painting both historically and in relation to the impact of societal beliefs and values to develop an understanding of global artistic traditions. Students employ contemporary methods in the interpretation of forms, subjects, and artistic differences and parallels. NOTE: Field trips are mandatory for this class. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: AR, HO

Repeatability: This course may not be repeated for additional credits.

ARTH 1956. Honors Arts of the World II: 1300 to the 21st Century. 3 Credit Hours.

Students in this course examine and analyze the art from cultures around the world, including architecture, sculpture, painting, and modern media, from ca.1300-the 21st Century. Students analyze the forms, techniques, styles, subjects, and symbolism represented in art and architecture both historically and in relation to the impact of societal beliefs and values to develop an understanding of global artistic traditions. Students employ contemporary methods in the interpretation of forms, subjects, and artistic differences and parallels. NOTE: Field trips are mandatory for this class. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: AR, HO

Repeatability: This course may not be repeated for additional credits.

ARTH 2000. Topics in Art History. 1 to 4 Credit Hour.

A selected topic from a specific period in the history of art will be examined. NOTE: Field trips are mandatory for this course.

Repeatability: This course may be repeated for additional credit.

ARTH 2002. History of Modern Crafts. 4 Credit Hours.

Traces the ideas, personnel, workshops, objects & styles of the Arts & Crafts Movement from William Morris to Henry Mercer (1850s-ca. 1915), in Europe and the United States. Charles & Margaret Mackintosh in Scotland, Eliel Saarinen in Finland, Charles Ashbee and the Guild of Handicraft in England will be studied, among others; Stickley, Roycroft, Frank Lloyd Wright, Tiffany, etc., in the U.S., and other key designers/crafters of clay, metal, fiber, wood, glass. The influence of Japanese art & craft is a key issue for this course; also the development of the various forms of Art Nouveau. NOTE: Field trips are mandatory for this class.

Repeatability: This course may not be repeated for additional credits.

ARTH 2003. History of Modern Crafts and Design: Design Movements from the Crystal Palace until Today. 4 Credit Hours.

This course will examine the interwoven histories of craft and design in the 20th and 21st centuries, with a special focus on how craft and design not only mirror the various artistic, cultural, political, social, and technological contexts in which they are created, but also how they are able to critique and change those contexts. Students will gain familiarity with a selection of influential objects, makers, materials, and movements from around the world. Through the lens of craft and design, they will also explore topics and frameworks including production and consumerism, sustainability and environmental responsibility, popular culture, activism and reform, intersectionality, diversity, and accessibility. NOTE: Field trips are mandatory for this class.

Repeatability: This course may not be repeated for additional credits.

ARTH 2004. History of Printmaking. 4 Credit Hours.

The invention of the printing press in the 1400s contributed to important and lasting changes about how people thought about images and image-making. In addition to gaining an understanding of the technical processes involved in the production of books, woodcuts, engravings, etchings, lithographs and screenprints, students will focus on the social and economic facets of prints as an aesthetic and as a compelling component of visual culture. The course will cover material from c. 1480 to the present, with the aim of relating the history of European printmaking and print culture to traditions of printmaking in Japan, China, the United States and Mexico. Central issues we shall discuss are the nature of the 'original' vs. the 'copy'; the space of prints as a realm for experimentation and new subject matter; the tension between collaboration and individual graphic virtuosity; the functional range of prints from devotion to documentation, from propaganda to social protest; the modern 'print revivals' of the 19th and 20th centuries; and the persistent but dynamic relationship between prints and other media. We also shall reevaluate certain myths about the so-called printing revolution, poised as we are in a new digital age defined as another kind of explosion of images. Field trips are mandatory for this course.

Repeatability: This course may not be repeated for additional credits.

ARTH 2005. Cultural Heritage Preservation. 4 Credit Hours.

Globalism and the international expansion of heritage tourism coupled with 21st century challenges, such as sustainability, natural disasters, climate change, and war, have increased the need for forward thinking management and preservation strategies related to cultural heritage. Italy, where a significant proportion of the world's art and cultural landscape lies, and with Rome as a hub for cultural heritage conservation practice, offers an ideal setting to explore these issues. This course will immerse students in a broad range of cultural heritage preservation issues, including the World Heritage Movement, ways to read the cultural landscape, preservation law, ethics and community partnerships, heritage preservation during war, digital technology, mapping and conservation, and management and leadership in the cultural heritage sector. Students will reflect on these topics against a background of visits to ancient Roman sites, international conservation and preservation centers, the historic center of Rome, a memorial site of conscience, and storage deposits of antiquities recovered by Italian art police squads. Students will gain theoretical and practical knowledge about a field that embraces our shared humanity for the purpose of improving a global society. NOTE: This course is taught in Rome.

Course Attributes: SE, SI, SS

Repeatability: This course may not be repeated for additional credits.

ARTH 2006. Curatorial Methodologies. 4 Credit Hours.

The role of the curator has rapidly expanded in the public's imagination over the past forty years. This class will explore the growing applications of curatorial practice within the field of visual arts - from museums and pop-up galleries to biennials, and public art. Our research will be gathered through texts, site visits, and guest speakers including artists and curators. Class assignments will include writing a case study of a curatorial model of your choosing and presenting your research to the class.

Repeatability: This course may be repeated for additional credit.

ARTH 2007. World Photography. 4 Credit Hours.

This course explores the history of photography as a global phenomenon and includes museum trips that offer direct engagement with current exhibitions in the field. Assigned readings and lectures provide insight to the artistic and political currents that have shaped photography's form, use, and consumption from its introduction in the nineteenth century to its digital proliferation in contemporary social media. NOTE: Field trips are mandatory for this class. Prior to fall 2023, the course title was "World Photography Since 1839."

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

ARTH 2008. History of Photography. 3 Credit Hours.

This course explores key moments in the global history of photography. Assigned readings and lectures provide insight to the artistic and political currents that have shaped photography's form, use and consumption from its introduction in the nineteenth century to its digital proliferation in contemporary social media.

Repeatability: This course may not be repeated for additional credits.

ARTH 2010. Topics in Art History. 1 to 4 Credit Hour.

A selected topic from a specific period in the history of art will be examined.

Repeatability: This course may be repeated for additional credit.

ARTH 2043. Islamic Art and Architecture, 650-1250: From Mohammad to the Mongols. 4 Credit Hours.

The revelation of the Qur'an in the 7th-century was a watershed moment that introduced the world to Islam - today one of the most wide-spread and fastest-growing faith traditions. In this course, students are introduced to the rich and varied visual cultures of Islam in the Mediterranean and the Middle East, ca. 650-1250. Through an examination of key objects and architectural monuments, students will be encouraged to consider how aspects of art production and the built environment relate to the social and political contexts in which they were created. Emphasis will be placed on the establishment of new spatial and visual vocabularies, the legacies of classical and late antique traditions in the formation of Islamic art, as well as cross-cultural exchange between the Islamic lands and their neighbors - particularly Western Europe and East Asia. We will also address the importance of modern interpretations of early Islamic art, especially the politics of collecting and museum display. This course is designed for non-specialists; information about major events and historical figures as well as topics related to Islamic society and culture will be introduced and discussed as needed. Field trips are mandatory for this course. Note: Prior to Fall 2023, the course was titled "Early Islamic Art and Architecture."

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

ARTH 2044. Islamic Art and Architecture, 1250-1750: From the Mongols to the Mughals. 4 Credit Hours.

This course provides students with an introduction to the art and architecture of the Islamic lands within an increasingly globalized early modern world, ca. 1250-1750. Our sessions begin with the Mongol sack of Baghdad in 1258, which ushered in a new era of small but influential regional dynasties that were eventually superseded by the so-called "Gunpowder Empires" - the Ottomans, Safavids, and Mughals. We will investigate how each of these polities developed rich and distinctive forms of display and art-making, touching upon shifts in patronage patterns, the arts of the book, and the role of figural painting and calligraphy. Emphasis will be placed on cross-cultural encounters and the exchange of ideas, artists, and objects across space and time. We will also address accidents of preservation and the politics of collecting and heritage management, highlighting how the art and architecture from this period has been interpreted for the purposes of nation-building, as well as the numerous ways non-Muslims have participated within Islamic visual culture. This course is designed for non-specialists; information about major events and figures of Islamic history and topics related to Islamic culture will be introduced and discussed as needed. Field trips are required. Note: Prior to Fall 2023, the course was titled "Later Islamic Art: From the Mongols to the Mughals."

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

ARTH 2090. Topics in Arts Administration Practice. 3 Credit Hours.

Selected topics in arts administration, focusing on contemporary arts of interest, such as mission, values and community; philanthropy in arts administration.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

ARTH 2096. Art History Writing Intensive. 4 Credit Hours.

A selected topic from a specific period in the history of art will be examined. NOTE: This is a Writing Intensive Course. Field trips are mandatory for this class.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Course Attributes: WI

Repeatability: This course may be repeated for additional credit.

ARTH 2097. Art History Writing Intensive. 3 Credit Hours.

A selected topic from a specific period in the history of art will be examined. NOTE: This is a Writing Intensive Course. Field trips are mandatory for this class.

Course Attributes: WI

Repeatability: This course may be repeated for additional credit.

ARTH 2098. Art History Writing Intensive. 4 Credit Hours.

A selected topic from a specific period in the history of art will be examined. NOTE: This is a Writing Intensive Course. Field trips are mandatory for this class.

Course Attributes: WI

Repeatability: This course may be repeated for additional credit.

ARTH 2101. Art of Ancient Egypt and the Aegean. 4 Credit Hours.

This course is an introduction to the arts of ancient Egypt, Crete, and Greece during the Bronze Age (3000-1000 BCE), including painting, sculpture, architecture, and material culture. We will explore how these arts were influenced by the society's religions, social organization, and trade connections. Field trips are mandatory for this course.

Repeatability: This course may not be repeated for additional credits.

ARTH 2105. Roman Art and Archaeology. 4 Credit Hours.

From a group of thatched huts on the banks of the Tiber River, to a wall built to keep the Picts out of England; from the marble temples to the emperors in modern Turkey to the houses of North Africa; from the theaters in Roman Gaul to the destroyed town of Pompeii, the Romans inhabited the entire Mediterranean basin and formed a diverse urban society. We will explore how the Romans built and decorated their houses, how they buried their dead, how they interacted in public spaces, and how they used art in the service of the sacred. We will begin with the formation of Rome in the 8th century BCE, and finish when Constantine moves the capital of the Empire to the east. In this chronological unfolding of the Roman world, we will explore how the Romans developed different building types for their new urban needs; developed the art of interior painting and mosaic; used sculpture to glorify the individual and explain what it means to be a "Roman." We will pay particular attention to the interplay between the city of Rome and its monuments and the larger cultural world the Romans inhabited, especially where they met other art styles that influenced the development of their own - in Greece, France, Asia Minor, the Middle East and Africa. Field trips are mandatory for this class.

Repeatability: This course may not be repeated for additional credits.

ARTH 2110. Topics in Ancient Art. 4 Credit Hours.

A selected topic from the Ancient period in the history of art will be examined. NOTE: Field trips are mandatory for this class.

Repeatability: This course may be repeated for additional credit.

ARTH 2117. Archaeological Excavation. 1 to 6 Credit Hour.

Requires permission of the instructor. Credit given for participating in an archaeological excavation.

Repeatability: This course may be repeated for additional credit.

ARTH 2129. Greek and Roman Sculpture. 4 Credit Hours.

When is a naked male a god? Are females a sum of their hairstyles and clothes? We begin our exploration of the sculptor's view of the human body in the 7th century BCE and finish as the rise of a newly legal religion changes the form of sculpture in the early 4th century CE. Along the way we will investigate the portrayal of the body in space, the use of emotion, the changing role of nudity as costume, and the depiction of different ethnic groups and ages, the beginning of portraiture, and the representation of non-humans, as the Greek and Roman sculptors portray the Other, the emperor, the god, and more. NOTE: Field trips are mandatory for this class.

Repeatability: This course may not be repeated for additional credits.

ARTH 2135. Art and Culture in Ancient Rome. 4 Credit Hours.

Weekly class lectures and on-site visits provide an outline of the origins and development of Italian and Roman art between the 8th century B.C. and the 4th century A.D. Special attention is paid to the cultures that influenced the formation of Roman art: the Greeks in southern Italy and the Etruscans in Tuscany and Latium. The course deals with architecture (and urban design), sculpture, painting, and mosaics. To complete the picture of Roman art, a survey is also given of Roman art in the provinces of the Empire. The course includes a weekend excursion outside of Rome. NOTE: This course is taught in Rome.

Repeatability: This course may not be repeated for additional credits.

ARTH 2196. Greek and Roman Sculpture. 4 Credit Hours.

When is a naked male a god? Are females a sum of their hairstyles and clothes? We begin our exploration of the sculptor's view of the human body in the 7th century BCE and finish as the rise of a newly legal religion changes the form of sculpture in the early 4th century CE. Along the way we will investigate the portrayal of the body in space, the use of emotion, the changing role of nudity as costume, and the depiction of different ethnic groups and ages, the beginning of portraiture, and the representation of non-humans, as the Greek and Roman sculptors portray the Other, the emperor, the god, and more. NOTE: This is a Writing Intensive Course. Field trips are mandatory for this class.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ARTH 2197. Art History Writing Intensive. 4 Credit Hours.

A selected topic from a specific period in the history of art will be examined. NOTE: This is a Writing Intensive Course.

Course Attributes: WI

Repeatability: This course may be repeated for additional credit.

ARTH 2200. Topics in Medieval Art. 4 Credit Hours.

A selected topic from the Medieval period in the history of art will be examined.

Repeatability: This course may be repeated for additional credit.

ARTH 2215. Holy Image, Glittering Mosaic: The Art of the Byzantine Empire. 4 Credit Hours.

If you saw a saint in a dream, how would you recognize them? Is a dome only structural, or can it also be symbolic? How did artists represent God in a picture - or not? These questions, and more, were explored by the people of the Mediterranean during the period of Late Antiquity and the Middle Ages, during which the ancient Roman world transformed into the culture of the Eastern Roman Empire - what we often call Byzantium. In this class, we especially consider the religious pluralism of Late Antiquity; the social and religious functions of images and architecture; the purpose of icons; and the settings where these objects were found, including imperial capitals, monasteries and churches. We will use the wealth of local resources in and around Philadelphia to examine manuscripts, relics, coins and other objects from this culture up close. NOTE: Field trips outside of regularly-scheduled class time are mandatory for this class. Prior to Fall 2023 the course was titled "Late Antique/Byzantine."

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

ARTH 2216. Early Medieval Visual Culture. 4 Credit Hours.

How did powerful warrior kings, monks living in caves, and travelers crossing continents demonstrate political, spiritual, and holy power through art and architecture? Why are snakes, otters, peacocks, lions, and rabbits tucked away in the corners of religious books? How did monasteries display capsules containing inspirited matter called reliquaries? Explore with us these questions in the visual culture of Late Antiquity and the Early Middle Ages in Eurasia, from Scandinavia to the Mediterranean and North Africa to the Levant, circa 400 to 1000 CE. From the monastery of Skellig Michael in Ireland to the caliphal courts of Baghdad, we will consider how art and architecture from this vital period shaped ideas about institutions of kingship, monasticism, and understandings of divinity across Christian, Jewish, and Muslim communities. We will investigate precious manuscripts, golden treasures from Viking burials, and churches along the route of pilgrimage destinations, among other art forms. NOTE: Field trips outside of regularly-scheduled class time are mandatory for this class.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

ARTH 2217. Art of the Global Middle Ages 1000-1400. 4 Credit Hours.

During the Late Middle Ages, the towering Gothic cathedrals of Europe flooded light into the interior through a fusion of architecture, stained glass and sculpture. At the same time, Mansa Musa, the richest person ever to live, held reign in the Mali Empire. In Ethiopia, a recreated Jerusalem was carved out of living rock, while in Japan, artists produced work to satisfy both warlike shogun and priests making Buddhism available to the illiterate. Through select case studies from the period 1000-1400 CE, we will engage with the art and architecture of the late Middle Ages in Europe, Africa, Asia, Australasia and the Americas, and explore the ideas, individuals and narratives that these objects and structures convey. Particular attention will be given to the connections between art forms and across cultures through objects and ideas that travel. NOTE: Field trips outside of regularly-scheduled class time are mandatory for this class. Prior to Fall 2023 this course was titled "Gothic Art."

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

ARTH 2218. From Constantine to Mohammed: Art & Architecture of the Mediterranean from the 4th to 8th Century AD. 4 Credit Hours.

Weekly class lectures and on-site visits examine the period from the time of Constantine (312-337 AD) until the time of Mohammed and the early Islamic period. Through a survey of architecture forms, sculpture (portraiture, historical relief, sarcophagi) and decorative systems (wall paintings, mosaics), students explore fundamental political, religious and cultural changes in the Mediterranean world and their implications on art and architecture up to the 8th century AD. Special attention is drawn to the changing formal and stylistic language of late Roman art, the rise of Christianity and the origins of its art, the influence of the Byzantine world (Constantinople) on the art of the West and on the early Islamic art. The course includes a three-day academic excursion to north eastern Italy centered around Ravenna, residence of Roman emperors, Germanic kings and Byzantine representatives in the 5th and 6th century AD. NOTE: This course is taught in Rome.

Repeatability: This course may not be repeated for additional credits.

ARTH 2296. Topics in Islamic Art and Architecture. 4 Credit Hours.

This course will examine buildings, built environments, and objects created by and for cultures in which Islam was the dominant culture practiced either by a minority ruling elite or by a majority of the populace. Sample topics include "Imperial Cities/Global Early Modern Period" and "The Modern Mosque: Religious Identity, Power, and 'Starchitecture'". Field trips are mandatory for this class.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ARTH 2300. Special Topics. 1 to 3 Credit Hour.

A selected topic in the history of art will be examined. NOTE: Field trips are mandatory for this class.

Repeatability: This course may be repeated for additional credit.

ARTH 2310. Topics in Renaissance Art. 4 Credit Hours.

A selected topic in Renaissance art will be examined. NOTE: Field trips are mandatory for this class.

Repeatability: This course may be repeated for additional credit.

ARTH 2321. Masters of Renaissance Art. 4 Credit Hours.

This course will explore the construction of artistic identity and style from the mid-fifteenth century to the early-seventeenth century through visual analyses, readings of contemporary sources (biographies/autobiographies, art treatises, and correspondences), and modern scholarship in an attempt to demystify the "Masters" of the Italian Renaissance. NOTE: Field trips are mandatory for this class.

Repeatability: This course may not be repeated for additional credits.

ARTH 2323. Early Renaissance Art in Italy. 4 Credit Hours.

This course is a survey of Italian painting and sculpture from the 13th through the early 16th centuries. An analysis of the "revival" of painting beginning in the Proto-Renaissance by Cimabue, Cavallini, Duccio and Giotto is followed by a study of significant artistic inventions in the Early Renaissance by Masaccio, Brunelleschi, Ghiberti, Donatello and others. The course concludes with the inception of the High Renaissance with works by Leonardo, Michelangelo and Raphael. The artistic culture in Rome and its relationship to Florence are examined. NOTE: Two weekend field trips are mandatory.

Repeatability: This course may not be repeated for additional credits.

ARTH 2325. Art in the Age of Exploration: 1400-1600. 4 Credit Hours.

This course is an overview of the arts created North of the Alps, c. 1400-1600, with attention to the period's early consciousness of globalism. This is a period of dramatic change, with the introduction of the printing press, religious and political turmoil of the Protestant Reformation, the European "discovery" of the Americas, incursions from the Ottoman Turks, and expanding travel across Europe and around the coast of Africa to India. We will examine fundamental artistic developments on the cusp of the modern era, including technical innovations in oil paint and printmaking, developments in mapmaking, the decline of the altarpiece, and the rise of new secular subjects in art, including images of witches, peasants, independent landscapes and portraiture. We will explore the ways in which works of art - by artists such as Van Eyck, Durer, Holbein, Bosch, and Bruegel - both reflected and contributed to the rapidly changing worldview. We will examine a wide range of media and materials, including carved altarpieces, panel paintings, book illuminations, prints, and so-called "feather paintings" from the Americas. We will study the territory of the Burgundian court and the Holy Roman Empire, looking at the cosmopolitan centers of Bruges, Nuremberg, Wittenberg, and Antwerp, but also at the movement of artists, patrons, works of art, and ideas as they are received from Italy, the Ottoman Empire, parts of Africa, and the Americas. Field trips are mandatory for this class. Note: Prior to Fall 2023 this course was titled "Northern Renaissance Art 1350-1550."

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

ARTH 2329. Italian Architecture 1400-1700. 4 Credit Hours.

Architects of the 14th century were the first to describe themselves as "modern," although they looked back to ancient Rome and cultivated ideas about architecture as a profession, urban planning and conservation. The aim of this course is to provide a basis for the recognition of Italian Renaissance and Baroque buildings and typologies, architects - from Brunelleschi to Michelangelo through Bernini - and elements of architectural language, within a framework of critical visual and historical analysis. Relationships to local architectural heritage in Philadelphia will be encouraged - consider the Palladian window from Independence Hall to your local McMansion - just one of the types of innovation we will explore for its contribution to our own environment. Field trips are mandatory for this course. Note: Prior to Fall 2023 this course was titled "Renaissance and Baroque Architecture in Italy."

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

ARTH 2350. Topics in Early Modern Art, 1400-1750. 4 Credit Hours.

A selected topic in Early Modern Art will be examined. NOTE: Field trips are mandatory for this class.

Repeatability: This course may be repeated for additional credit.

ARTH 2400. Topics in Global Baroque Art. 4 Credit Hours.

A selected topic from the Baroque period in the history of art will be examined. NOTE: Field trips are mandatory for this class.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may be repeated for additional credit.

ARTH 2428. Wonders of Rome: Art and Culture of the Baroque Era. 4 Credit Hours.

Weekly class lectures and on-site visits in Rome provide students an unparalleled opportunity to examine firsthand painting, sculpture and architecture (from c.1585 to c.1750) in their original settings. Organized chronologically from the papacy of Paul V Borghese to that of Alexander VII Chigi, this course gives particular attention to Caravaggio's paintings, Lanfranco's frescoes, Bernini's statues and fountains, Borromini's churches, the Barberini Palace, Piazza Navona, and Saint Peter's Basilica and Square. Works inciting wonder (or "meraviglia") and viewer participation shall be studied from the perspective of the culture of seventeenth-century Rome, as relating to the Counter-Reformation and Catholic Revival, papal propaganda and nepotism, and the rise of powerful new orders, such as the Jesuits. The course includes a two-day field trip to Naples to view seventeenth-century art in the Capodimonte Museum, Certosa di San Martino, and churches in the historic center, "Spaccanapoli", and to consider artistic production in Naples as a striking foil to that of Rome. NOTE: This course is taught in Rome only.

Repeatability: This course may not be repeated for additional credits.

ARTH 2431. Early Modern Italy and Spain in the 17th Century. 4 Credit Hours.

This course will focus on the birth of Baroque art in Southern Europe, originating in Rome, with concentration on its development there and its migration to other centers, such as Naples and Madrid, Spain, and its global spread as an instrument of persuasion and propaganda. Great personalities emerge: from the rebel painter of naturalism, Caravaggio, to the rise of such female artists as Artemisia, to the exponents of art academies, the Carracci, to papal darling Bernini, and the courtier Velazquez, as well as the enslaved Juan de Pareja. The aim of this course is to provide a basis for the recognition of the Baroque work of art, its practitioners and cultural stimuli by looking in depth at the achievements of such key artists and their career trajectories. Emphasis is placed on the expressive qualities of style, meaning, materials and techniques as practiced by these artists in this period. Museum visits form a part of this course! Note: Prior to Fall 2023 this course was titled "Southern Baroque Art: Italy and Spain."

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

ARTH 2432. Northern and Global Baroque Art: Art in the Age of Rubens, Rembrandt, Vermeer. 4 Credit Hours.

The period from approximately 1600 through 1750 saw warfare and unstable truces as constants among political rivals and monarchies; the Reformation and Counter-Reformation continued to impact European society and culture; and scientific advancements and global trade reshaped how people understood their place in the world and in nature. This also was a time of exceptional artistic talent - the age of Rubens, Rembrandt, Vermeer, and increasing numbers of women artists such as Judith Leyster and Maria Sibylla Merian - with artworks produced and transported on an unprecedented scale in European cultural centers, at home and abroad, in cities and courts and communities overseas. Global trade and efforts to spread Christianity were also heavily implicated in colonialism, and art of all kinds - large paintings, architecture, prints - played an enormous role in those stories. We not only will look at art of this so-called Baroque Golden Age, but also at its darker underbelly and the 'non-Golden Age' of early colonialism that deserves our attention. Field trips are mandatory for this course. Note: Prior to Fall 2023, the course was titled "Northern Baroque Art."

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

ARTH 2450. Topics in Eighteenth Century Art. 4 Credit Hours.

A selected topic in eighteenth-century art will be examined. NOTE: Field trips are mandatory for this class.

Repeatability: This course may be repeated for additional credit.

ARTH 2500. Topics in 19th Century Art. 4 Credit Hours.

A selected topic in the history of art from the 19th century will be examined. Field trips are required.

Repeatability: This course may be repeated for additional credit.

ARTH 2535. Art in the Age of Revolution. 4 Credit Hours.

This course considers Western art from 1750 to 1850 (Neoclassicism, Romanticism and early Realism) within its context of political and socioeconomic upheaval. The industrial and scientific revolutions also expanded technical possibilities and broadened the audiences for the visual arts. Likewise, they reframed conceptions of the physical universe and accelerated and intensified global contact, with a multidirectional exchange of images and objects, iconography and style, impacting the visual culture of exploitation and emancipation, aggression and emancipation, reaction and resistance. The course concludes at the world fairs in London (1851) and Paris (1855). NOTE: Field trips are mandatory for this class.

Repeatability: This course may not be repeated for additional credits.

ARTH 2543. Transnational Impressionisms. 4 Credit Hours.

This course begins with the study of plein-air painting focusing on Paris. The artists known as the "impressionists" operated within a transnational context. Their painting was informed by the capitalist, industrial and imperialist modernity of urban Paris. We will consider the significance and reception of palette, brushstrokes, and light in France, but also in other locations. The course also includes challenges to the precepts of impressionism and revivals and revisions to this style. Methodologies such as feminism, postcolonial and transnational perspectives will be engaged to analyze the artists and their art making in a variety of media. NOTE: Field trips are mandatory for this class.

Repeatability: This course may not be repeated for additional credits.

ARTH 2600. Topics in 20th Century Art. 4 Credit Hours.

A selected topic in the history of art from the 20th century will be examined. NOTE: Two weekend field trips are mandatory for this course.

Repeatability: This course may be repeated for additional credit.

ARTH 2601. History of Modern Graphic Design. 4 Credit Hours.

The mixture of image and type we view today as graphic design has a history rooted in the earliest pictographs on pre-historic cave walls, evolving through such experiences as Roman political campaigns, medieval illuminated manuscripts, Renaissance book design, and the Industrial Revolution before arriving in the twentieth century. Keeping this rich heritage in mind, this course will investigate the development of graphic design from the mid-nineteenth century to the present, as a result of technological advances, political upheaval, commerce, and cultural and artistic exchange. We will discuss issues and works that are relevant to the field of graphic design in order to enrich your practice and develop critical thinking skills that will be useful to you throughout your academic and professional careers in other environments as well.

Repeatability: This course may not be repeated for additional credits.

ARTH 2610. Topics in Modern and Contemporary Art. 4 Credit Hours.

A selected topic in Modern and Contemporary Art will be examined. NOTE: Field trips are mandatory for this class.

Repeatability: This course may be repeated for additional credit.

ARTH 2611. Introduction to African Art. 4 Credit Hours.

This course is an introductory survey of African art spanning from prehistoric rock art to contemporary African art throughout the entire continent. Students will be asked to consider how African works force us to reconsider what the term "art" means in an African context, particularly the ways that African art is interwoven into society through various means including rites of passage, masquerade, and altars. The course will examine the history of the exhibition of African art in museums and the ways it is antithetical to the life of works intended to be activated by the communities that created them. Further, it will examine the history of the formation of significant collections of African art, particularly those in former colonial centers. The course will begin by asking what art means in an African context. It will move through Africa by region, focusing on the art production of various ethnic groups within those regions. It will end by examining the role of photography in Africa and the massive production of contemporary art within the continent. Field trips are mandatory for this class.

Repeatability: This course may not be repeated for additional credits.

ARTH 2612. Introduction to Caribbean Art. 4 Credit Hours.

This course is a broad survey of art from the Caribbean region, spanning from indigenous Taino and Carib art through to contemporary art of the Caribbean and its diaspora. The course will expose students to the history of the region including indigenous cultures before European exploration, European arrivals and conceptions of the "New World", plantation economies from sugar to coffee, the transatlantic slave trade, the Haitian Revolution, art of maroon communities, and the syncretism of African religious practices in Afro-Caribbean faiths like Vodoun and Santeria. Throughout the semester, we will examine definitions of the term "Caribbean". For example, is the term limited geographically to the Caribbean basin or should it take on a more cultural valence, expanding to places like Louisiana and Brazil, both of which share significant historical and cultural similarities with the countries from the Caribbean basin. Major themes of the class will include the impacts of colonialism, the transatlantic slave trade, the formation of the Afro-Atlantic diaspora, and legacies of the transatlantic slave trade in contemporary art. Field trips are mandatory for this class.

Repeatability: This course may not be repeated for additional credits.

ARTH 2622. Galleries and Studios of Rome. 4 Credit Hours.

A course designed to give an overview of the artistic developments in Rome during the past 25 years and to offer insight into the diverse trends of contemporary art in the city. Visits are made to galleries, specific exhibitions, and artists' studios. This course is taught in Rome only.

Repeatability: This course may be repeated for additional credit.

ARTH 2642. Modern Art, 1900-1945. 4 Credit Hours.

This course examines the idea of the "modern" across different geographic contexts and histories. Students will study how artists broke from the concept of art as mimesis as a way to represent their own experiences of modernity. To explore these experiences, topics such as urban life, technological innovations, revolution and war, and histories of colonization will be discussed. Considering the focus of the class on global modern art, we will compare how its genres and styles traveled, often unevenly, across the world, questioning the role of center and periphery in its development. Field trips are mandatory for this class.

Repeatability: This course may not be repeated for additional credits.

ARTH 2644. Post-War Art, 1945-1989. 4 Credit Hours.

This course examines the major artists and movements in art from 1945 to 1989, placing them within the larger social and political contexts. Artistic practices in American, European and Global movements such as abstract expressionism, experimental art, and avant-garde art will be theorized against the backdrop of the politics, technology, and visual culture of the mid-20th century to 1989. Field trips are mandatory for this class.

Repeatability: This course may not be repeated for additional credits.

ARTH 2646. Contemporary Art, 1989 to Present. 4 Credit Hours.

This course studies the global production of art after 1989 with a special focus on the development of non-traditional media. Topics covered may include, but are not limited to, performance art, video art and social practice, large-scale photography, conceptual practices, institutional critique, installation art, and site-specific art. We will discuss the periodization of contemporary art and the increasing significance of curators, the biennial system, and the art market. Breaking from a chronological survey of art and a Europe-US axis, the course addresses themes and issues such as relational aesthetics, social practice, collaboration, and globalization in order to understand how art has been re-invented with the contemporary period and across the world. Field trips are mandatory for this class.

Repeatability: This course may not be repeated for additional credits.

ARTH 2660. Topics in International Cinema. 4 Credit Hours.

Students in this course study a selection of films from modern Europe and Third World cultures which demonstrate both their interaction with postmodern politics, theory and culture, and the development of an international alternative discourse to Hollywood commercial film-making. Films will be selected according to a theme each semester. Past themes have included Italian Neo-Realism, Independent Film Makers, and Women in Film.

Repeatability: This course may be repeated for additional credit.

ARTH 2670. Topics in Contemporary Art. 3 or 4 Credit Hours.

A selected topic on contemporary art and visual culture will be examined. NOTE: Field trips are mandatory for this class.

Repeatability: This course may be repeated for additional credit.

ARTH 2680. Topics in Global Art. 4 Credit Hours.

A selected topic on global art and visual culture will be examined. NOTE: Field trips are mandatory for this class.

Repeatability: This course may be repeated for additional credit.

ARTH 2696. Graphic Design Theory. 3 Credit Hours.

This course will introduce students to contemporary design theories and discourse. It will examine the theoretical aspects of artifacts through their making, reading and dissemination. Graphic design and visual communication theories will be compared to those in literature and architecture. Students will use discussion, writing, presentations and design to investigate contemporary design issues. Emphasis will be placed on forming and articulating an individual point-of-view (POV) in discussion and writing. Based on the semester-long discussion about how we visually communicate, all students will draw a revised diagram of the Communication Model developed by Meredith Davis in 2012. Graduate students will also write a 1000-word reflection on the factors that have influenced this eight-year evolution.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ARTH 2700. Topics in American Art. 4 Credit Hours.

A selected topic in American Art will be examined. NOTE: Field trips are mandatory for this class.

Repeatability: This course may be repeated for additional credit.

ARTH 2701. Modern Art in the United States. 4 Credit Hours.

During the 20th century, artists working in the United States redefined art in an energetic quest to express what they believed to be authentically modern, and/or authentically American, while developing new visual languages for expressing personal and national identity through their work. This course surveys modern art in the US from 1900 to 1990, a period when art, along with culture and society more generally, oscillated between qualities associated with the modern (speed, technology, machines, the future) and the anti-modern (tradition, nostalgia, handicrafts, roots). We will explore modern art's diverse definitions and forms through painting, sculpture, photography, graphic arts and design, and artistic movements including the Ashcan School, the Harlem Renaissance, abstract expressionism, Minimalism, Pop Art, Graffiti Art, and the emergence of post-modernism in the US. NOTE: Field trips are mandatory for this course. Prior to Fall 2023 this course was titled "Main Trends in American 20th Century Painting."

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

ARTH 2704. Art in the United States to 1900. 4 Credit Hours.

Nothing characterizes American art so much as the rich diversity of communities, cultural traditions and media that contributed to its development. This course examines the history of art and visual culture in the United States from the precontact settlements of Indigenous peoples through the emergence of modern art around the year 1900. Among the topics we will consider are art and nationalism, folk art and vernacular creative traditions, race and representation, photography and the emergence of mass culture, and the ways that gender, ethnicity, and histories of museums and art markets shaped appreciation and access to art in US society. NOTE: Field trips are mandatory for this class. Prior to Fall 2023 this course was titled "19th Century American Art."

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

ARTH 2753. Art and Environment in American Culture. 4 Credit Hours.

Does our present global environmental crisis demand a new way of thinking about art and its history? What role has art played in constructing an image of our environment as natural resource, scientific specimen, mythic Eden, arena of struggle, and/or fragile ecosystem? Can art and art history help envision a more sustainable world or are they part of the problem? As a way of addressing such questions, this course takes an "ecocritical" perspective on American art from the late 19th century (when the word "ecology" first appeared) to the present. More than any other single nation, the United States bears responsibility for the ecological challenges facing our planet, even as its citizens arguably enjoy unparalleled opportunities for creative freedom. By highlighting the interconnectedness of human beings with their environment in America, as well as the power of art to re-imagine that relationship, the course provokes students to re-think accepted canons and practices in light of other criteria having to do with sustainability, environmental justice, and our ethical responsibility to non-human life. Covering a wide range of artists and media - from the Romantic paintings and writings of Thomas Cole and John James Audubon to more recent work by Edward Burtynsky, Subhankar Banerjee, Mierle Laderman Ukeles, Robert Smithson, Helen and Newton Harrison, Eduardo Kac, Alexis Rockman, Mark Dion and other contemporary artists active in this country - the course gives students a new and richly diverse opportunity to think about American art. NOTE: Field trips are mandatory for this course.

Course Attributes: SF, SS

Repeatability: This course may not be repeated for additional credits.

ARTH 2760. Topics in the Art of Latin America. 4 Credit Hours.

A selected topic on Latin American art and visual culture will be examined. Topics can range from Pre-Colombian and Mesoamerican to colonial and postcolonial, U.S. Latino, and modern and contemporary art of Latin America. NOTE: Field trips are mandatory for this class.

Repeatability: This course may be repeated for additional credit.

ARTH 2765. Revolution and Beyond: Modern & Contemporary Art in Latin America. 4 Credit Hours.

This course examines art in Latin America from 1900 to the present. Covering a period of tumultuous societal change in the region, from revolutions to economic booms and military dictatorships, discussions will focus on understanding the distinct contexts of artistic production in various Latin American centers, with particular attention to the artists and artistic movements of Brazil and Mexico and including consideration of major architectural projects. We will examine how artists conceived of their work in relationship to local and international aesthetic and political debates. Students will read criticism and artists' writing from the period as well as recent theory and historical analysis and attention will be placed on developing skills to analyze a range of media and styles, including figurative and abstract practices. NOTE: Field trips are mandatory for this class.

Repeatability: This course may not be repeated for additional credits.

ARTH 2800. Topics in Non-Western Art. 4 Credit Hours.

A selected topic in the Non-Western history of art will be examined. NOTE: Field trips are mandatory for this class. This course is taught in TU Japan only.

Repeatability: This course may be repeated for additional credit.

ARTH 2807. East Meets West. 4 Credit Hours.

This course focuses on topics related to the correspondence between the arts of Eastern and Western cultures. Past and future topics include: American chromolithography and Japanese woodblock prints; religious iconography in the East and West; art and technology in modern Eastern and Western art and culture; trade and commerce and the interchange of artistic motifs, philosophies and techniques. NOTE: Field trips are mandatory for this class. Temple Japan campus only.

Repeatability: This course may not be repeated for additional credits.

ARTH 2815. Pre-Modern Japanese Art up to the Edo Period. 4 Credit Hours.

This course is an introductory survey to Japan's long and rich artistic traditions from the prehistoric period to the Edo period marking the end of the feudal samurai government in the late 19th century. Students explore the visual arts of Japan as a reflection of Japanese culture. Lectures focus on selected works of painting, sculpture, architecture, gardens, prints and ceramics while considering themes such as subject matter, style, patronage, and political/social changes. Lectures also address the aesthetic sensibilities, ideas, and beliefs that have developed in Japan in order to provide a glimpse into the culture within which artworks were created and appreciated by the people. Students also study some of the methods and materials used in creating Japanese art. NOTE: Field trips are mandatory for this class. Temple Japan campus only.

Repeatability: This course may not be repeated for additional credits.

ARTH 2816. Art and the City: Tokyo in the 1960s and 1970s. 4 Credit Hours.

This course examines the urban practices of experimental art and visual culture in Tokyo in the turbulent decades of the 1960s and 1970s. Premised on an understanding that Tokyo's changing urban environment shaped the artistic practices of the time, this course thematically explores some of the major theoretical issues that surround contemporary Japanese art and visual culture of the period. Critical readings will provide social, historical, and political contexts for understanding a broad range of visual cultural practices including art, design, and film. While Japan's postwar "miraculous" economic growth was accompanied by conservative ideals such as the homogenous middle class and contemporaneous urban developments reorganized the city to promote market activity, the 1960s and 1970s were also extremely productive decades for the arts. Alongside increased political activism and direct action by students and workers, who took to the streets, new developments in street performances, experimental theater works, graphic design, experimental cinema, and underground comics would irrevocably change the course of Japanese visual culture. Paying attention to the thick connections between artists working in various media of the time, we will explore how Tokyo both shaped the artists and their works and served as their subject. NOTE: Temple Japan campus only.

Repeatability: This course may not be repeated for additional credits.

ARTH 2817. Japanese Art Before and After WWII: National Identities in Modernization. 4 Credit Hours.

This course introduces Japanese art from the early 20th century to present day, focusing on traditional aspects of Japanese culture. Through this course you will study Japan's relationship with modernization and its influence on arts and cultures such as painting, sculpture, manga, films, animation, performance art, and more. The artists who will be discussed in this course will include Hayao Miyazaki, Osamu Tezuka, Leonard Tsuguharu Fujita, Isamu Noguchi, Yasujiro Ozu, Yoko Ono, Yukio Mishima, and Yasumasa Morimura. Special attention will be paid to the historical context of Japan's modernization, World War II, and their influences on Japanese contemporary art. NOTE: This course is taught at TU Japan.

Repeatability: This course may not be repeated for additional credits.

ARTH 2819. Southeast Asian Art. 4 Credit Hours.

The art and civilization of Sri Lanka, Burma, Thailand, Cambodia, Vietnam, and Indonesia, focusing on the key aspects that have shaped cultures from the 5th century AD to modern times. NOTE: Field trips are mandatory for this class. Temple Japan campus only.

Repeatability: This course may not be repeated for additional credits.

ARTH 2868. Arts of Asia. 4 Credit Hours.

Architecture, sculpture, painting and the functional art of Asia (India, China, Japan and Southeast Asia). A historical examination of the art as a religious expression and as a product of changing social and economic conditions. NOTE: Field trips are mandatory for this class. Temple Japan campus only.

Repeatability: This course may not be repeated for additional credits.

ARTH 2871. Chinese Art. 4 Credit Hours.

This course is an introductory survey of the arts of China from the Neolithic period to the 20th century. Looking primarily at works in situ and in Asian collections, we will investigate how art objects and monuments reflect the religious beliefs, political agendas and aesthetic preferences of the artists and patrons who created them. We will also pay particular attention to the roles that media and technology play in the appearance of and status attached to the finished products. Another major theme will be the development of indigenous and imported religions, and their impact on iconography. Finally, time permitting, we will touch on related contemporary subjects, such as forgeries and the illegal trade in looted art. NOTE: Field trips are mandatory for this class. Temple Japan campus only.

Repeatability: This course may not be repeated for additional credits.

ARTH 2896. Modern Japanese Art and Visual Culture, from late Edo to Showa. 4 Credit Hours.

This course will examine Japanese visual expressions created from ca. 1720 during the Edo period to 1956 during the Showa period. This span of time can be characterized by Japan's modernization efforts and engagement in wars, beginning with the lifting of the ban on western books after almost 200 years of isolation from the outside world. This policy change triggered an influx of European thought into Japan and ensuing westernization as Japan faced the imperialist powers of Europe. Thereafter, Japan experienced two watershed events pertaining to the West: the collapse of centuries-old samurai feudalism in 1868 and Japan's defeat in the Second World War in 1945. In the development of Japanese modern visual arts, Western knowledge and culture played a crucial role, and often challenged Japan's long-standing traditional values and artistic practices. The course will explore the transformation that Japanese visual arts experienced against the backdrop of political and social upheaval of this period. Japan struggled to keep up with an increasingly globalizing world. Japanese artists had to question and gauge their own artistic practice and style to cope with internal and external factors. After the defeat by the Western Allies in the Second World War, Japanese artists again struggled to find their voices in society. As a Writing Intensive Art History course, students will be instructed on proper research and writing in the discipline and will prepare and refine a research paper. Taught at Temple Japan campus only.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ARTH 2897. Writing for Art History: Art History Writing Intensive Seminar. 4 Credit Hours.

This course is designed to provide students with opportunities to become familiar with different kinds of art historical writing, with the ultimate aim of pulling together these skills for a final project of researching and writing a virtual exhibition catalog. Students will build on smaller assignments that involve formal description and analysis of visual images, research and contextual interpretation of images, critical reading of secondary sources, and the writing of extended catalog essays. The course will be thematically based according to the instructor's area of expertise and will include two mandatory group field trips to local and regional museums. Examples of possible topics offered in the future are: Renaissance Portraiture; The Development of Landscape in Western Art; Abstraction; Sacred Images from Antiquity to the Baroque Period.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ARTH 2898. Contemporary Japanese Art and Visual Culture, from 1945 to the present. 4 Credit Hours.

This course examines the development of Japanese art and visual culture in the postwar period. Instead of providing a linear history of formal developments, this course thematically explores some of the major theoretical issues that surround contemporary Japanese art and visual culture. Critical readings will provide social, historical, and political contexts for understanding a broad range of visual cultural practices. Through the course we will consider topics such as the question of modernity and the West in Japanese art; underground art and political dissent in the 1960s; and roles of gender, cuteness, and fantasy. Based on (but not limited to) the ideas and materials presented in class, students will pursue a research topic of their own interest, which will culminate in a PowerPoint presentation and final research paper. If completed successfully, this course will provide students with a solid grounding in art historical writing that combines critical thinking, formal analysis, research (secondary sources and, if possible, primary materials), and methodological awareness. As a Writing Intensive course, students will produce a sizeable quantity of writing during the semester, for which they will receive substantial feedback from the instructor and also from fellow classmates. The philosophy of this course is that one does not only think in order to write, but that one must also write in order to think. Taught at Temple Japan campus only.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ARTH 2904. Honors Counterfeiting, Looting and the Ethics of Collecting Ancient Art. 3 Credit Hours.

Did you know that the Getty Museum paid over 9 million dollars for a statue that many now consider a fake? That some curators believe that 40% of the art on the market today is fake or so restored that we can consider the pieces fake? We will begin looking at some prominent fakes that took in scholars (the Metropolitan's "Etruscan" Warriors), talk about when something becomes a fake, and problematic pieces that are still on display. Fakes are made because there is so much money in the art market, and we will see how this market developed. In doing so we will see how Napoleon's policies ultimately lead to the looting on a massive scale in Nazi Germany; discuss the modern development of international law on looting and the protection of antiquities; and argue about what is the United States' responsibility in Iraq now. Finally, we will look at various means of how governments try to protect their antiquities (paying attention to the real-life soap operas like the Lydian Hoard); what is the role of museums in protecting antiquities (looking at the major news story on the indictment of the curator of the Getty, and the return of the stolen Euphronios vase by the Metropolitan Museum); what dealers do; and how an ethical collector can pursue his/her hobby responsibly. NOTE: This course is for Honors students.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

ARTH 2910. Honors Special Topics. 4 Credit Hours.

Selected topic in art history, focusing on methodology, art criticism, or art of a particular period or geographical area. NOTE: This course is for Honors students. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. The course may require local field trips to museums or other institutions housing art.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

ARTH 2990. Honors Special Topics. 4 Credit Hours.

Selected topic in art history, focusing on methodology, art criticism, or art of a particular period or geographical area. NOTE: This course is for Honors students. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. This course requires two field trips, one local and one to New York, to museums or other institutions housing art.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

ARTH 3082. Independent Study. 1 to 3 Credit Hour.

Intensive study in a specific area under individual guidance. Students must get permission from their department before attempting independent study.

Repeatability: This course may be repeated for additional credit.

ARTH 3097. Art History Capstone. 4 Credit Hours.

Undergraduate Capstone seminar in methodology, historiography, and or criticism of art and art history. Specific topics will vary by semester. This course is required of all art history majors for graduation and should be taken in their junior or senior year. NOTE: This is a Writing Intensive Course. This course fulfills the capstone requirement for Tyler Art History majors who entered the university in fall 2008 or later.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in 16 credits needed: (ARTH 2000 or ARTH U000 (TR or higher))

ARTH 3182. Independent Study. 1 to 3 Credit Hour.

Intensive study in a specific area under individual guidance. Students must get permission from their department before attempting independent study.

Repeatability: This course may be repeated for additional credit.

ARTH 3301. Michelangelo. 4 Credit Hours.

Profoundly impressive both for his technique and expressive content - emotional, dramatic, heroic, but always human - Michelangelo Buonarroti (1475-1564) continues to be a vital element in the history of art, as he was during the Renaissance. Weekly class lectures examine his drawing, painting, sculpture and architecture in the context of the art and patronage of his own time, starting with a study of Classical Roman Antiquity. NOTE: This course is taught in Rome.

Repeatability: This course may not be repeated for additional credits.

ARTH 3302. Women and Art. 3 Credit Hours.

A study of women as subjects of art, as patrons, as creators. The course is organized around the roles of women as represented over the course of western art. Note: Prior to spring 2017, the course title was "Images of Women."

Repeatability: This course may not be repeated for additional credits.

ARTH 3324. High Renaissance Art in Italy. 4 Credit Hours.

The course initially focuses on the first three decades of the 16th century, when Rome replaced Florence as the capital of the arts. Attention is given to the Rome of Julius II and the Medici popes, and to the great protagonists of that age: Leonardo, Raphael and especially Michelangelo, the creator of the "grande Maniera Moderna" (great Modern Manner). The course spans the entire 16th century and also considers artistic production in other areas of Italy, such as Venice and Florence.

Repeatability: This course may not be repeated for additional credits.

ARTH 4082. Independent Study. 1 to 4 Credit Hour.

Intensive study in a specific area under individual guidance. Students must get permission from their department before attempting independent study.

Repeatability: This course may be repeated for additional credit.

ARTH 4182. Independent Study. 4 Credit Hours.

Intensive study in a specific area under individual guidance. Students must get permission from their department before attempting independent study.

Repeatability: This course may be repeated for additional credit.

ARTH 4285. Internship. 1 to 6 Credit Hour.

Students working on relevant projects at area museums or galleries may receive Temple credit toward an art history major or minor. Variable credit depending on the number of hours worked per week, up to six credits maximum. Students will maintain a regular record of activities. Prior arrangements must be made with a host museum or gallery. Requires the permission of the Undergraduate Advisor of the Art History Department.

Repeatability: This course may be repeated for additional credit.

Art Therapy (ARTT)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ARTT 2011. Creative Process in Art Therapy. 3 Credit Hours.

This course explores creativity theory and applies concepts from art therapy and related fields and presents a blend of approaches including Eastern traditions, Jungian psychology, and other cross-cultural sources. Art making and reflective writing are used as tools to understand the creative process in art therapy and cultivate the discipline of self-awareness. Readings, seminar-style discussions, and processing of the art-making experiences will be utilized.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (Art requirements: (ARTU 1401 or ART 1503), (ARTU 1201 or ART 1011), and (ARTU 1501 or ART 1012), (FDPR 1511 and FDPR 1521), or Select 2 from the following: VS 1151, VS 1351, and VS 1451) and ARTT 3004.

ARTT 3004. Introduction to Art Therapy. 3 Credit Hours.

This course is designed to offer students a didactic and experiential overview of the field of art therapy. Material covered will include history, theory, and practice of art therapy processes and approaches as well as a survey of populations, settings, and applications. Lectures, readings, seminar-style discussion, audiovisual presentations, experiential exercises, and guest presentations comprise the structure of this course. Students complete Volunteer work in this course. Students must have current FBI Clearance, Child Abuse Clearance, Pennsylvania State Criminal Record Check, and a TB Test to take this course.

Repeatability: This course may not be repeated for additional credits.

ARTT 4082. Independent Study. 1 to 3 Credit Hour.

Self-directed study and research initiated by a student with an independent study contract developed in conjunction with, and supervised by, a faculty member in art therapy.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may be repeated for additional credit.

ARTT 4289. Field Work in Art Therapy. 4 Credit Hours.

The course examines the important role of art making in promoting resilience in individuals, families and communities; explores the role the arts play in addressing issues of inequality and injustice; and building strong and caring communities are examined. BA in Art Therapy majors engage in fieldwork experience as art facilitators with individuals and groups at pre-approved fieldwork sites. Philosophies of therapeutic art making practices and experience with appropriate materials; resources related to art therapy with individuals who have diverse educational, social, emotional, communicative and physical needs are explored. Readings, group discussions, and processing of the art-making experiences will be utilized. Applications for this course are due October 1 for Spring; March 1 for Fall. Students will be registered by the department after applications are vetted. Students must have current FBI Clearance, Child Abuse Clearance, Pennsylvania State Criminal Record Check, and a TB Test to take this course.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ARTE 2011 or CART 2011) and (ARTE 3004 or CART 3004)

Asian Studies (ASST)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ASST 0811. Asian Behavior & Thought. 3 Credit Hours.

This course is an introduction to some of the major philosophical and religious traditions of Asia, and their roles in Asia and the world today. You will learn about some of the dominant features of these traditions and be exposed to several important ideas, institutions, and practices. How do these ideas influence the behavior of individuals and communities? How does individual and communal behavior and beliefs differ regionally and historically? We will read and discuss selections from primary works as well as secondary scholarship, while surveying key doctrines and historical developments. Note: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: CRIT 0811, PHIL 0811, CHI 0811, JPNS 0811, REL 0811, or REL 0911.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

ASST 0857. The Detective Novel. 3 Credit Hours.

The detective novel remains the most popular of literary forms since its American origins in Edgar Allan Poe. The form has spread to virtually every part of the world, taking on different perspectives in the different societies where it has prospered. Our course analyzes the global travels of this prolific literary genre, paying particular attention to the manner in which its formula of crime-detection-resolution has evolved from its classic phase in the Sherlock Holmes mysteries, to its hard-boiled phase in the 1940's US, to the transformation of the private detective working outside the formal apparatus of the law into the police detective working within the law in places as different as Sweden, Holland, Nigeria, and India. We will read bestselling detective novels by figures such as Emile Gaboriau, Poe, Arthur Conan Doyle, Wilkie Collins, Agatha Christie, Raymond Chandler, Jorge Borges (Argentina), Vikram Chandra (India), Henning Mankell (Sweden), Janwillem van de Wetering (Holland), Kole Omotosho (Nigeria), and Soji Shimada (Japan). We will pay special attention to the conventions of the form and analyze its evolution as it travels the world. In exploring its global travels, we will attend to a number of issues, including: the changing definition of crime; the evolving representation of the criminal; the changing methods for "solving" the crime; the ideology of justice; the conflicts between community and individuality; and the varying social and national anxieties that the form reveals. **DUPLICATE CREDIT WARNING:** Students who have received credit for English 0857 or Critical Languages 0857 will not receive additional credits for this course.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

ASST 0862. Development & Globalization. 3 Credit Hours.

Use historical and case study methods to study the differences between rich and poor nations and the varied strategies available for development in a globalizing world. Examine the challenges facing developing countries in historical and contemporary context and analyze the main social, cultural, and political factors that interact with the dynamic forces of the world economy. These include imperialism/colonialism, state formation, labor migration, demographic trends, gender issues in development, religious movements and nationalism, the challenges to national sovereignty, waves of democratization, culture and mass media, struggles for human rights, environmental sustainability, the advantages and disadvantages of globalization, and movements of resistance. **NOTE:** This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: History 0862, POLS 0862/0962, or SOC 0862/0962.

Course Attributes: GG, SI

Repeatability: This course may not be repeated for additional credits.

ASST 0863. Religion in the World. 3 Credit Hours.

Learn about the major religious traditions found worldwide today: Hinduism, Buddhism, Judaism, Christianity, Islam, and several indigenous traditions. Examine the beliefs, practices, and values of these groups in order to understand the worldviews and ways of life of the people who practice them. Our interdisciplinary analysis and interpretation of specific examples of religious experience will help shed light on the overall meaning of religion and human existence. We will carefully consider examples while also focusing on particular thematic issues, like cosmology and ritual. Develop appreciation for the religious vibrancy and diversity that exist in human cultures while you actively engage in the learning process through class presentation, class participation, paper-writing, and a self-selected field trip. **NOTE:** This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. **Duplicate Credit Warning:** Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: Religion 0863, 0963, 1101, C053, Asian Studies 0863, Critical Languages 0863, or Philosophy 0863.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

ASST 0868. World Society in Literature & Film. 3 Credit Hours.

Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindi, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

ASST 0871. Arts in Cultural Context. 4 Credit Hours.

View the arts as an expression of cultural identity as it occurs across the globe. Each semester, we will focus on a particular world region or country, including but not limited to Russia, Japan, and Latin America. The exploration of cultural identity begins with an overview of the region or country's historical and religious influences and then studies the culture's arts, including the visual arts (painting, sculpture), musical traditions, literature (folktales, national mythology), the vernacular arts (crafts, storytelling), film and theater. You will take field trips or have experiences that will allow you to encounter the region's arts firsthand, and to develop a blended understanding of a people's cultural identity and the larger world. Note: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0871, Hebrew 0871 or Russian 0871.

Course Attributes: GA

Repeatability: This course may not be repeated for additional credits.

ASST 2000. Special Topics in Asian Studies I. 2 to 4 Credit Hours.

Provides a cross listing for regular and writing intensive courses in other departments when they have substantial Asian Studies content. Also used for directed readings and new courses. NOTE: Cross listing arranged by Asian Studies Director.

Repeatability: This course may be repeated for additional credit.

ASST 2001. Practical Asian Society and Culture. 3 Credit Hours.

Emphasizes practical Asian Studies knowledge and skills. This course provides a foundation for living and working in four countries: China, Japan, Korea, and India. It includes basic aspects of the culture of daily life and work, such as meeting people, communication patterns, entertaining, holidays, and taboos. The course also builds fundamental skills for independent research on Asian society and culture and develops basic presentation skills for use in the workplace and the Asian Studies capstone course. Student teams select and research one aspect of a society or culture, using print and online sources. NOTE: Required for Asian Business & Society Certificate.

Repeatability: This course may not be repeated for additional credits.

ASST 2011. Survey of Japanese Literature Before 1868. 3 Credit Hours.

Novels, poetry, travel diaries, plays, and other genres from Japan's Heian through Edo periods. No knowledge of Japanese language expected. Note: Students who have already taken JPNS 2011 will not receive duplicate credit for ASST 2011.

Repeatability: This course may not be repeated for additional credits.

ASST 2012. Modern and Contemporary Japanese Literature in Translation. 3 Credit Hours.

Major writers and works of late 19th, 20th, and 21st century Japanese literature. NOTE: No knowledge of Japanese language expected. Prior to fall 2009, the course title was "Survey of Japanese Modern Literature." Note: This course is cross-listed with Japanese 2012. Students may only receive credit for one of these courses: ASST 2012 or JPNS 2012.

Repeatability: This course may not be repeated for additional credits.

ASST 2013. Modern and Contemporary Chinese Literature in Translation. 3 Credit Hours.

This course focuses on 20th- and 21st-century literature from China. Among the major themes of the course are socio-political and cultural upheaval and transformation, fiction and nation, and gender, race and class relations. Students will read representative short stories, novels, poetry, and essays. Selected documentaries and feature films will supplement the literary texts. The course will help familiarize students with major writers and with the cultural and historical contexts in which they produced their works. NOTE: This course is equivalent to CHI 2013. Students will earn credit only once for either ASST 2013 or CHI 2013.

Repeatability: This course may not be repeated for additional credits.

ASST 2014. Pre-Modern Chinese Literature. 3 Credit Hours.

This course provides an interdisciplinary introduction to Chinese literature from its inception to the early 18th century. Some of the course's readings are drawn from works well known in the west like the "Book of Songs," "Zhuangzi," the poems of the Tang poets Wang Wei, Li Bai, Du Fu, and Bai Juyi, and the Song poet Su Shi, and short stories by the dramatist and novelist Li Yu. Other readings include works less well known in the west but long considered central to various literary and performance traditions by many Chinese. This course will present its readings with an emphasis on their cultural and historical contexts. Special attention will be paid to the place they have in various Chinese literary traditions and how these traditions have contributed to both Chinese ways of understanding their own cultural heritage and how they have influenced western understandings of that heritage. Note: This course is cross-listed with Chinese 2011. Students may only receive credit for one of these courses: ASST 2014 or CHI 2011.

Repeatability: This course may not be repeated for additional credits.

ASST 2015. Tokyo in Literature and Film. 3 Credit Hours.

Like all great cities, Tokyo simultaneously fascinates and frightens us. The course explores this fascination and fear through the work of leading writers and directors who have responded to and shaped the city in their work. Readings will include essays, short stories, and novels by authors such as Yasunari Kawabata, Fumiko Hayashi, Banana Yoshimoto, and Haruki Murakami. Films by directors such as Yasujiro Ozu, Satoshi Kon, and Shosuke Murakami will be reviewed and discussed. Note: This course is cross-listed with Japanese 2015. Students may only receive credit for one of these courses: ASST 2015 or JPNS 2015.

Repeatability: This course may not be repeated for additional credits.

ASST 2016. Mystery and Crime Fiction in Japan. 3 Credit Hours.

This course examines mystery and crime fiction in Japan through the work of writers such as Edogawa Rampo, Matsumoto Seicho, and Kirino Natsuo. Through critical analysis of novels and short stories, we'll seek insights into the anxieties and tensions of life in modern and contemporary Japan. We'll explore a range of socio-cultural issues in areas such as family life, education, careers, and gender relations. All readings and discussions are in English. Note: This course is cross-listed with Japanese 2016. Students may only receive credit for one of these courses: ASST 2016 or JPNS 2016.

Repeatability: This course may not be repeated for additional credits.

ASST 2017. Stories of Parents and Children in Japanese Literature and Film. 3 Credit Hours.

This course explores the portrayal of family relationships in modern and contemporary Japanese fiction and film. Topics for study and discussion include the tension between older and younger generations, and changing understandings of the family within Japanese society. The work of writers and filmmakers such as Soseki Natsume, Yasujiro Ojo, Kafu Nagai, Hirokazu Kore-eda, and Haruki Murakami will be examined. Class discussions and activities, readings, and written assignments aim at developing students' critical skills. Knowledge of Japanese is not required. Note: This course is cross-listed with Japanese 2017. Students may only receive credit for one of these courses: ASST 2017 or JPNS 2017.

Repeatability: This course may not be repeated for additional credits.

ASST 2021. Japanese Literature in Film. 3 Credit Hours.

Cinematic adaptations of Japanese novels and short stories, with the focus on principal figures of film and literature such as Kurosawa and Akutagawa. NOTE: No knowledge of Japanese language expected. Note: This course is cross-listed with Japanese 2021. Students may only receive credit for one of these courses: ASST 2021, ASST 2921, JPNS 2021, or JPNS 2921.

Repeatability: This course may not be repeated for additional credits.

ASST 2022. Contemporary Chinese Urban Film and Fiction in Translation. 3 Credit Hours.

This course looks at a selection of Chinese cinematic and literary texts by contemporary filmmakers and writers from China, Taiwan, and Hong Kong. Through the study of film and fiction, we will examine how urban spaces and subjects have been delineated and imagined within the context of recent social and economic transformation and globalization. In particular, we will examine the different ways in which cinematic images and narrative structures celebrate the metropolis and convey the anxieties associated with it. We will explore a wide range of urban subjects as represented in film and fiction, and the ways in which they are shaped by and at the same time are shaping society and culture in China, Taiwan, and Hong Kong today. Note: This course is cross-listed with Chinese 2022. Students may only receive credit for one of these courses: ASST 2022 or CHI 2022.

Repeatability: This course may not be repeated for additional credits.

ASST 2030. Special Topics I. 3 Credit Hours.

Arranged each semester, please consult with the instructor or the Asian Studies web site (http://www.temple.edu/asian_studies/) for a detailed description.

Repeatability: This course may be repeated for additional credit.

ASST 2040. Special Topics II. 4 Credit Hours.

Arranged each semester, please consult with the instructor or the Asian Studies web site (http://www.temple.edu/asian_studies/) for a detailed description.

Repeatability: This course may be repeated for additional credit.

ASST 2050. The Japanese Writer in Focus. 3 Credit Hours.

This special topics course offers students the opportunity for in-depth reading, study, and discussion of the novels and short stories of one or two modern or contemporary Japanese writers. The work of writers who are highly regarded both in Japan and globally - such as Haruki Murakami, Kenzaburo Oe, Natsume Soseki, and Yukio Mishima - will be the focus of the course. Students will also be introduced to published scholarship on the writer's work. All readings are English translations of work originally published in Japanese. Note: This course is cross-listed with Japanese 2050. Students may only receive credit for one of these courses: ASST 2050 or JPNS 2050.

Repeatability: This course may be repeated for additional credit.

ASST 2074. Geography of East and South Asia. 3 Credit Hours.

Introduction to the natural environments and diverse contemporary societies that comprise East, Southeast, and South Asia. Emphasis on such topics as poverty, economic development, and social conditions in India, Thailand, and the Philippines, as well as China, Japan, and Korea. NOTE: (1) AS Foundation Course. (2) This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Note: This course is cross-listed with Geography and Urban Studies 2074. Students may only receive credit for one of these courses: GUS 2074 or ASST 2074.

Course Attributes: IS, SF

Repeatability: This course may not be repeated for additional credits.

ASST 2098. Japanese Popular Culture and its Literature. 3 Credit Hours.

Contemporary culture and literature of Japan. NOTE: No knowledge of Japanese language expected.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ASST 2101. Religions of India. 3 Credit Hours.

An introduction to the foundations, nature, and principles of classical Hinduism. An introduction to the fundamentals of Buddhism and Jainism. Note: This course is cross-listed with Religion 2101. Students may only receive credit for one of these courses: ASST 2101 or REL 2101.

Repeatability: This course may not be repeated for additional credits.

ASST 2102. Introduction to Buddhism. 3 Credit Hours.

Introduction to the historical development of Buddhism in relation to other East Asian religions. Topics include the Four Noble Truths of Basic Buddhism, the Hinayana Mahayana controversy over Buddhist Dharma and practice, as well as the development of Buddhist thought throughout Asia. Note: This course is cross-listed with Religion 2102. Students may only receive credit for one of these courses: ASST 2102 or REL 2102.

Repeatability: This course may not be repeated for additional credits.

ASST 2107. Asian American Experiences. 3 Credit Hours.

This introductory survey analyzes commonalities and differences in the historical and contemporary experiences of Asian American ethnic groups, Chinese, Japanese, Filipinos, Koreans, and South and Southeast Asians. It explores important ideas about the position of Asians in U.S. society, including racialization, assimilation, cultural pluralism, model minority thesis, split labor market, and internal colonialism. It begins with the arrival of the Chinese in the 1830s and ends with contemporary issues. Lectures and videos; emphasis on active student participation in learning through discussion and response papers. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. Note: This course is cross-listed with American Studies 2107, History 2107, and Sociology 3223. Students may only receive credit for one of these courses: ASST 2107, AMST 2107, HIST 2107, or SOC 3223.

Course Attributes: RS

Repeatability: This course may not be repeated for additional credits.

ASST 2111. Japanese Literature: From Classical to Contemporary. 3 Credit Hours.

Students taking this course will have the opportunity to learn about Japan's long literary history by reading, discussing, and analyzing selected novels, short stories, poems, and literary essays. The first half of the semester will focus on work produced up through the pre-modern period, with the second half covering the modern and contemporary periods. Writers ranging from Murasaki Shikibu and Yoshida Kenko to Natsume Soseki and Murakami Haruki will be introduced. Class discussions and assignments will help students become acquainted with current theoretical and methodological approaches in the fields of Japanese studies (and, more broadly, Asian Studies) and literary studies. All readings are English translations of work originally published in Japanese. NOTE: Students can receive credit only once for either ASST 2111 or Japanese 2111.

Repeatability: This course may not be repeated for additional credits.

ASST 2112. Chinese Literature: From Classical to Contemporary. 3 Credit Hours.

Students taking this course will have the opportunity to learn about China's long literary history by reading, discussing, and analyzing selected novels, short stories, poems, and literary essays. The first half of the semester will focus on work produced from around 1000 B.C.E. through the middle of the 19th century, with the second half covering the modern and contemporary periods. Ancient and classical writers (such as Zhuang Zi, Bai Juyi and Su Dongpo) and modern and contemporary writers (such as Lao She and Mo Yan) will be introduced. Class discussions and assignments will help students become acquainted with current theoretical and methodological approaches in the fields of Chinese. NOTE: Students can receive credit only once for either ASST 2112 or CHI 2112.

Repeatability: This course may not be repeated for additional credits.

ASST 2196. Writing in the City. 3 Credit Hours.

Novels, short stories, poetry, and other literary forms both shape and reflect how cities are understood and experienced. "Writing in the City" focuses on literary expressions of the modern and contemporary urban experience in cities such as Shanghai, Seoul, Singapore, Taipei, and Tokyo. This writing-intensive course will offer students the chance to engage with writing from at least two cities (in different Asian countries), focusing on thematic areas that include gender and family, history and memory, and crime and corruption. The main writing-related goals of this course include developing the skills to present evidence-based arguments supported by research, to use a close reading methodology to write an analysis of a literary text, and to carry out effective scholarly peer review. Class discussions and assignments will help students become acquainted with current theoretical and methodological approaches in the fields of Asian studies and literary studies. All readings are English translations of work originally published in languages that include Chinese, Japanese, and Korean.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ASST 2201. Chinese Religions. 3 Credit Hours.

Critical study of the development of Chinese religions from the time of Confucius to Mao, including the problem of ideological continuity in contemporary China (Maoist Marxism versus Confucianism). Note: This course is cross-listed with Religion 2201. Students may only receive credit for one of these courses: ASST 2201 or REL 2201.

Repeatability: This course may not be repeated for additional credits.

ASST 2217. The Vietnam War. 3 Credit Hours.

An attempt to probe in-depth one of the most significant and controversial episodes of recent American history. The history of Vietnam since the 19th century with equal emphasis on the First and Second Indochina Wars. The impact of the war on the domestic and international scenes and its multiple legacies. Television and film from the period and guest speakers. Note: This course is cross-listed with American Studies 2217 and History 2217. Students may only receive credit once for these courses: AMST 2217, ASST 2217, or HIST 2217.

Repeatability: This course may not be repeated for additional credits.

ASST 2238. Visual Anthropology of Modern Japan. 3 Credit Hours.

This course offers an anthropological approach to systems of visual communication that are central to understanding Japanese society and culture. Themes and perspectives from visual anthropology will be applied to visual sign systems of everyday life (writing, clothes, food, etc.), to the prevalence and influences of popular culture emphasizing mass mediated forms of manga (comic books), advertisements, etc. The course will also include ethnographic films about Japanese culture as well as a review of how Japanese culture is communicated to mass audiences through classic and contemporary feature films as well as network television. We will try to unpack some of the stereotypic reductions common to superficial knowledge of Japan and Japanese culture.

Repeatability: This course may not be repeated for additional credits.

ASST 2301. Zen Buddhism. 3 Credit Hours.

This course surveys the historical development of Zen Buddhism as it unfolds in India, China, and Japan, and focuses on the examination of the nature of satori experience. Analyzes its existential meaning from perspectives of therapy, Zen practice, and philosophy. NOTE: Formerly titled "Introduction to Zen Buddhism." Students who earned credit under the original title will not receive additional credits for this course. This course is equivalent to REL 2301. Students will earn credit only once for either ASST 2301 or REL 2301.

Repeatability: This course may not be repeated for additional credits.

ASST 2351. Japan in a Changing World. 3 Credit Hours.

An examination and analysis of the key elements that contribute to Japan's behavior in the global arena. The development of Japan's interaction with foreign powers, the psychological underpinnings of its diplomacy, and the creation of Tokyo's world view will be discussed. Note: This course is cross-listed with Political Science 2351. Students may only receive credit once for these courses: ASST 2351 or POLS 2351.

Repeatability: This course may not be repeated for additional credits.

ASST 2367. South Asia: Peoples, Culture, Experiences. 3 Credit Hours.

An introduction to the peoples and cultures of the Indian subcontinent. The course will focus on the indigenous religions of India: Hinduism, Jainism, and Buddhism as well as Islam, Christianity, and Zoroastrianism as brought to western India by migrants. Note: This course is cross-listed with Anthropology 2367. Students may only receive credit once for these courses: ASST 2367 or ANTH 2367.

Repeatability: This course may not be repeated for additional credits.

ASST 2373. Japanese Culture. 3 Credit Hours.

Introduction to traditional and contemporary Japanese culture. Topics covered include: early literature, aesthetic principles as expressed in art and architecture, religion, gender roles, Japan's shifting relationships with the outside world, rural communities and urban centers in the 20th century, and the construction of the self in modern Japan. Note: This course is cross-listed with Anthropology 2373. Students may only receive credit for one of these courses: ANTH 2373 or ASST 2373.

Repeatability: This course may not be repeated for additional credits.

ASST 2374. The Anthropology of Modern China. 3 Credit Hours.

This course provides an introduction to the culture and society of the contemporary People's Republic of China (P.R.C.). The first half of the course explores the dramatic changes in both rural and urban sectors of Chinese society since the turn of the century, with a particular focus on post-1949 Maoist and post-Mao socialist transformations. The second half of the course examines such topics as gender and the status of women, ethnic minorities, religion and healing, the self and society, the Party and the state, and P.R.C. narratives of modernity. Throughout, the P.R.C. will be examined as a society that embodies a distinctively Chinese synthesis of tradition and modernity.

Repeatability: This course may not be repeated for additional credits.

ASST 2501. Introduction to East Asia: China. 3 Credit Hours.

Within the context of larger processes of socioeconomic and cultural change, this course examines the development of characteristic institutions and thought in traditional China and revolutionary transformation in the modern era. This approach is designed to provide the student with a basic understanding of state, society, and culture in China, the major themes of Chinese history, and more generally, broad processes of social change. NOTE: AS Foundation Course. Usually offered in alternate years or summer on Main Campus. Note: This course is cross-listed with History 2501. Students may only receive credit once for these courses: ASST 2501 or HIST 2501.

Repeatability: This course may not be repeated for additional credits.

ASST 2502. Introduction to East Asia: Japan. 3 Credit Hours.

A survey of Japanese history to the 20th century. Major themes include religious, political, and social change. Major topics are: the early centralized state, the rise of aristocratic culture, the emergence of the warrior class, and the modern transformation into an urban, industrial empire. Course materials include primary documents in translation and videos. NOTE: AS Foundation Course. Usually offered in alternate years on Main Campus. Note: This course is cross-listed with History 2502. Students may only receive credit once for these courses: ASST 2502 or HIST 2502.

Repeatability: This course may not be repeated for additional credits.

ASST 2503. Introduction to Southeast Asia: Insular. 3 Credit Hours.

Covers the histories of the Philippines, Indonesia, Malaysia, and Singapore from the 16th century until modern times. The course will introduce students to the island worlds of Southeast Asia, its peoples, their histories, societies, and economies. To familiarize students with non-Western worlds, lectures will be illustrated with videotapes, slides, and transparencies. Excerpts of articles and indigenous documents will also be used for discussion. Note: This course is cross-listed with History 2503. Students may only receive credit once for these courses: ASST 2503 or HIST 2503.

Repeatability: This course may not be repeated for additional credits.

ASST 2504. Introduction to Southeast Asia: Mainland. 3 Credit Hours.

Covers the histories of Myanmar (Burma), Thailand, Laos, Cambodia, and Vietnam, from the 16th century until modern times. It is a course designed to introduce students to the analysis of such forces as religion, statecraft, and trade, and the manner in which they have shaped the mainland countries of Southeast Asia. Reference will be made to contemporary events taking place in the region, and students will be encouraged to follow these developments through the media and integrate their knowledge in class discussions. Course work will include readings, discussions, films, examinations, and book reviews. Note: This course is cross-listed with History 2504. Students may only receive credit once for these courses: ASST 2504 or HIST 2504.

Repeatability: This course may not be repeated for additional credits.

ASST 2511. Introduction to Asian Business. 3 Credit Hours.

An overview of Asian business practices and their economic, political, and social contexts, with emphasis on Japan, China, Korea, and India. Asian Studies and other non-business majors/minors are welcome. NOTE: Required for Asian Business and Society Certificate.

Repeatability: This course may not be repeated for additional credits.

ASST 2807. East Meets West. 4 Credit Hours.

A study of the impact of East-West cultural exchanges throughout Japanese art history, concentrating on four main areas: early Buddhist imagery and the influence of Hellenistic and Indian sculpture and paintings; Namban art (art of the southern barbarians) and the effect of the Western approach on the treatment of space in two-dimensional Japanese art; Japonisme and the impact of wood-block prints on European and American artists (Degas, Lautrec, Whistler, Mary Cassatt, etc.); Japanese architecture as an inspiration for modern architects (Bruno Taut, Le Corbusier, F. L. Wright) and cross-cultural Western influences on Japanese architects (Tange, Isozaki, Edward Suzuki, etc.).

Repeatability: This course may not be repeated for additional credits.

ASST 2815. Japanese Art. 4 Credit Hours.

A look at Japanese history through art, with the primary focus on design and pattern. The course will examine all the major art forms from the earliest times to the present.

Repeatability: This course may not be repeated for additional credits.

ASST 3000. Special Topics in Asian Studies II. 2 to 4 Credit Hours.

Provides a cross listing for regular and writing intensive courses in other departments when they have substantial Asian Studies content. Also used for directed readings and new courses. NOTE: Cross listing arranged by Asian Studies Director.

Repeatability: This course may be repeated for additional credit.

ASST 3001. Earth Ethics. 3 Credit Hours.

This course examines the relationship of human and environmental science to ethical principles. By analyzing case studies that deal with resource sustainability, environmental protection, divergent views of technology and respect for all forms of life, students will assess individual life-styles and alternative visions of the good life on planet earth. Note: This course is cross-listed with Religion 3001 and Environmental Studies 3001. Students may only receive credit once for these courses: ASST 3001, ASST 3904, ENST 3001, ENST 3904, REL 3001, or REL 3904.

Course Attributes: SF, SS

Repeatability: This course may not be repeated for additional credits.

ASST 3011. Monks, Masters, and Magicians: Religion in Premodern Chinese Literature. 3 Credit Hours.

This course offers an introduction into the rich heritage of Chinese literature before 1911 with a focus on religious culture. We will follow Buddhist nuns and monks, Daoist masters and Confucian scholars on their adventures through 2000 years of Chinese history. Thematically, the class will focus on texts that show how Chinese religious traditions (Confucianism, Daoism, and Buddhism) were depicted in secular literature, but will also include narrative religious texts. From 3rd century miracle tales, to the classical novels of the Ming and Qing dynasty, we will look at Chinese religion through the lens of literature. Next to the readings themselves, we will cover more general aspects such as the relationship of literature to historical facts and notions of genre and motif as they apply to China. NOTE: This course is equivalent to REL 3011. Students will receive credit only once for either ASST 3011 or REL 3011.

Repeatability: This course may not be repeated for additional credits.

ASST 3030. Special Topics III. 3 Credit Hours.

Arranged each semester, please consult with the instructor or the Asian Studies web site (http://www.temple.edu/asian_studies/) for a detailed description.

Repeatability: This course may be repeated for additional credit.

ASST 3031. Women in Chinese Literature. 3 Credit Hours.

This course focuses on women writers and women as characters in premodern, modern, and contemporary Chinese literature. Texts will include poetry, novels, short stories, and drama. Gender, representation, and women's roles in the history of Chinese literature are among the topics that will be covered. Knowledge of Chinese is not required. The class will be conducted in English, and all readings will be in English translation. Note: This course is cross-listed with Chinese 3031 and Gender, Sexuality, and Women's Studies 3031. Students may only receive credit once for these courses: ASST 3031, CHI 3031, or GSWS 3031.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

ASST 3040. Special Topics IV. 4 Credit Hours.

Arranged each semester, please consult with the instructor or the Asian Studies web site (http://www.temple.edu/asian_studies/) for a detailed description.

Repeatability: This course may be repeated for additional credit.

ASST 3052. Environmental Problems in Asia. 3 Credit Hours.

Japan is used as an introduction and model for examining environmental issues in several east and southeast Asian countries. Emphasis is on deforestation, river basin development, urban planning, ecotourism, and role of non-governmental organizations. Note: This course is cross-listed with Geography and Urban Studies 3052 and Environmental Studies 3052. Students may only receive credit once for these courses: ASST 3052, ENST 3052, or GUS 3052.

Course Attributes: SE, SF, SP, SS

Repeatability: This course may not be repeated for additional credits.

ASST 3076. Metropolitan Tokyo. 3 Credit Hours.

The growth and development of Tokyo, past and present. The course includes a profile of the city's many neighborhoods, economic activities, architecture, and challenges for urban planners.

Repeatability: This course may not be repeated for additional credits.

ASST 3082. Independent Study. 1 to 4 Credit Hour.

Directed reading and/or research on an Asian Studies topic. Required: A faculty supervisor, good study skills, and the ability to work independently.

Repeatability: This course may be repeated for additional credit.

ASST 3101. Yoga and Tantric Mysticism. 3 Credit Hours.

Explores Yoga as well as Tantric Mysticism in India and South Asia. Note: This course is cross-listed with Religion 3101. Students may only receive credit once for these courses: ASST 3101 or REL 3101.

Repeatability: This course may not be repeated for additional credits.

ASST 3201. I-Ching, Tao, and Ch'an/Zen. 3 Credit Hours.

This course covers selected topics in the history of Taoist ideas and religious practice, which have broadly influenced China for two and a half millennia. Discussion topics include: symbols and divination; the philosophy of Lao-tzu and Chuang-tzu; the interaction between Taoism and Ch'an/Zen Buddhism; the Taoist/Ch'an influence on the Chinese literary tradition and ideals of beauty; the Taoist view on ch'i energy, meditation, sexuality, and the good life; and Taoism/Zen in America today. Note: This course is cross-listed with Religion 3201. Students may only receive credit once for these courses: ASST 3201 or REL 3201.

Repeatability: This course may not be repeated for additional credits.

ASST 3247. Ideology and Social Change in Japan. 3 Credit Hours.

A sociological look at the conditions that have contributed to Japan's emergence as a world-class economic force. How do culture, social organization, life style, ideology, and global political change to affect Japan's rapid rise to power? Is Japan a closed society? What significance do factors such as racism, religion, education, family, the military, class, and population changes hold for understanding what happened in Japan and in Japan's relations with outsiders, particularly the U.S.? How does this analysis affect the future of American sociology? Duplicate credit warning: This course is regularly cross-listed with SOC 3247. Students may receive credit for only one course from: ASST 3247, ASST 3947, SOC 3247, or SOC 3947.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

ASST 3251. China: State and Society. 3 Credit Hours.

Contemporary Chinese government and politics, together with a survey of the political history of China in the 20th century. Emphasis is on the evolution of the political system and political culture through successive periods of reform and repression. Note: Prior to fall 2010, the course title was "China: Politics and Revolution." This course is typically cross-listed with POLS 3251. Students may only earn credit for one course from ASST 3251 and POLS 3251.

Repeatability: This course may not be repeated for additional credits.

ASST 3252. East Asia and the United States. 3 Credit Hours.

This course introduces Japan and its distinctive model of political economy. The course then reviews how this model has been copied by many other countries in Asia. The course also includes an analysis of Asia's international economic and political relations, especially with the United States. This course is typically cross-listed with POLS 3252. Students may only earn credit for one course from ASST 3252 and POLS 3252.

Repeatability: This course may not be repeated for additional credits.

ASST 3301. Japanese Religions. 3 Credit Hours.

An introduction to Japanese religions, their origins, and development in the social, cultural and intellectual history of Japan. Religions covered are: Shinto, Japanese Buddhism, folk religions, Japanese Confucianism, and the New Religions. Some attention to expression of Japanese spirituality in the fine arts, martial arts, festivals, and rituals.

Repeatability: This course may not be repeated for additional credits.

ASST 3302. Japanese Buddhism. 3 Credit Hours.

Introduction to classical thinkers of Japanese Buddhism: Kukai, Dogen, Shinran, Nichiran, Hakuin. Schools covered are: Shingon, Pure Land, Soto Zen, Rinzaï Zen, Nichiren. Note: This course is equivalent to REL 3302; students will receive credit only once for either ASST 3302 or REL 3302.

Repeatability: This course may not be repeated for additional credits.

ASST 3522. Contemporary China. 3 Credit Hours.

The rise of nationalism, social-cultural changes, and revolutions since the late 19th century. Developments after 1949 in detail. Note: This course is cross-listed with History 3522. Students may only receive credit once for these courses: ASST 3522 or HIST 3522.

Repeatability: This course may not be repeated for additional credits.

ASST 3541. Japan Today. 3 Credit Hours.

Examines significant social, economic, and cultural trends in Japan from 1945 to the 1990s-the Occupation; the 'economic miracle,' state and society; the world of work; family, women and gender; international relations; impact of affluence; post-bubble Japan; and varying approaches to the study of postwar Japanese history and society. NOTE: Usually offered alternate years on Main Campus. Note: Students will receive credit only once for either ASST 3541 or HIST 3541.

Repeatability: This course may not be repeated for additional credits.

ASST 3542. Women and Society in Japan. 3 Credit Hours.

This course analyzes the changing position of women in Japanese society from ancient times to the present. Through discussions, lectures, and audiovisual materials, students learn about goddesses, female diviners, empresses, the classical female writers, women in warrior culture, women in industrializing Japan, and Japanese women's movements. NOTE: Students will receive credit only once for either ASST 3542, ASST 3942, HIST 3542, or GSWS 3542.

Repeatability: This course may not be repeated for additional credits.

ASST 3606. Asian Women in Transition. 3 Credit Hours.

This course introduces and compares the experiences of women in Asia and Asian women in migration to the United States in the modern period, including rural and urban women, and ordinary and elite women in the late 19th and 20th centuries. Topics include women in households, women and work, and women's activism. Duplicate credit warning: Students may only receive credit for one of the following: ASST 3696, HIST 3696, GSWS 4696, HIST 3606, or GSWS 3606.

Repeatability: This course may not be repeated for additional credits.

ASST 3636. Asian Women in Transition. 3 Credit Hours.

This course introduces and compares the experiences of women in Asia and Asian women in migration to the United States in the modern period, including rural and urban women, and ordinary and elite women in the late 19th and 20th centuries. Topics include women in households, women and work, and women's activism.

Repeatability: This course may not be repeated for additional credits.

ASST 3900. Honors Topics in Asian Studies II. 3 Credit Hours.

Provides a cross listing for honors courses in other departments when they have substantial Asian Studies content. Also used for directed readings and new courses.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

ASST 4096. Seminar in Asian Studies. 3 Credit Hours.

In this capstone writing course you will do independent research on Asia. You'll deepen your skills in choosing bibliographic tools, in finding and evaluating authoritative sources, including primary materials translated from Asian languages, and organizing and properly formatting a research paper. In consultation with the instructor, you'll choose a topic to meet your interests and professional needs. Required for majors; good to take in junior year. NOTE: Required for the Asian Studies major.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ASST 4624. Modern Japan: Empire, War, Society. 3 Credit Hours.

Was early modern Japan (1600-1867) static or dynamic? Do the roots of Japan's modern achievements (1868-1945) lie in her early modern culture? What happened to Japan after the 1868 Meiji Restoration, and why? Was modernity a blessing or a curse? We'll find answers to questions like these as we survey Japanese society, culture, and events and trends at home and abroad from the Tokugawa shogunate to the Pacific War. Assignments focus on writing a comparative review.

Repeatability: This course may not be repeated for additional credits.

ASST 4696. Modern Japan: Empire, War, Society. 3 Credit Hours.

Was early modern Japan (1600-1867) static or dynamic? Do the roots of Japan's modern achievements (1868-1945) lie in her early modern culture? What happened to Japan after the 1868 Meiji Restoration, and why? Was modernity a blessing or a curse? We'll find answers to questions like these as we survey Japanese society, culture, and events and trends at home and abroad from the Tokugawa shogunate to the Pacific War. Assignments focus on writing a comparative review. Note: This course is cross-listed with History 4697. Students may only receive credit once for these courses: ASST 4696 or HIST 4697.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Audio and Live Entertainment (ALE)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ALE 3565. Music Publishing. 3 Credit Hours.

An examination of the revenue streams generated by, legal structures governing, and business practices involved in the commercialization of songwriters' copyrights. Topics covered include copyright law, ownership, transfer, and licensing for public performance, recording, and synchronization to audio-visual media, and the management of revenues generated thereby.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MSP 2663.

ALE 3590. Intermediate Topics in Audio and Live Entertainment. 2 to 4 Credit Hours.

This course provides flexible opportunities to offer specialized instruction within the ALE curriculum responsive to creative or experimental business or production practices, new technologies, timely marketplace developments, etc. Specific topic covered varies each semester. Please view the course schedule or consult with the instructor for details.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in MSP 1701.

ALE 4565. Artist Management. 3 Credit Hours.

A successful artist manager wears so many hats for their client - trusted career advisor, advocate and ally, planner and coordinator. Managers handle the booking of performances, coordinate the schedule of recording releases with labels, plan tours, negotiate contracts, and manage partnerships. Students will discuss and begin to develop the knowledge base, skill set, and mindset necessary to fill all of these roles and meet all of these responsibilities.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MSP 2663.

ALE 4571. International Studies in Media and Communication. 1 to 6 Credit Hour.

Offered through Klein Global Opportunities (Klein GO) and taught outside of the U.S. This course is an immersive study of media and communication institutions, practices, norms, societal, governmental, and legal structures in a culture outside of the U.S. that is conducted during a Klein GO! program. Klein faculty lead students, while living abroad, in media consumption, in comparative analysis and evaluation of media and non-mediated communication, in interaction with local media and communication leaders in the program location. The specific aspects of media and communication to be covered will vary from city to city, and semester to semester, depending on the events of the day. NOTE: Available only to students participating in a Klein GO! Program. For more information and an application, students should visit the Klein GO! web site at <https://temple-smcsa.terradotta.com>.

Repeatability: This course may be repeated for additional credit.

ALE 4590. Advanced Topics in Audio and Live Entertainment. 2 to 4 Credit Hours.

This course provides flexible opportunities to offer specialized, advanced-level instruction within the ALE curriculum responsive to creative or experimental business or production practices, new technologies, timely marketplace developments, etc. Specific topic covered varies each semester. Please view course schedule or consult with instructor for details.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in MSP 1701.

ALE 4755. Advanced Live Sound. 4 Credit Hours.

Building on skills gained in Live Sound Production, students will focus on designing, mounting, and running sound for large-scale concert halls, arenas, and outdoor shows. Logistics, speaker plotting, line array configuration, delay towers, tour management relations, productive mindset, and rigging safety are all covered.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MSP 3755.

Basic Core Medical Science (BCMS)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

BCMS 4003. Fundamentals of Biochemistry for Pre-Health Postbaccalaureates. 4 Credit Hours.

This course is for students enrolled in the CST Post-Baccalaureate Pre-Health Program. The goal of Fundamentals of Biochemistry (Biochemistry BCMS-4003) is to provide students with an understanding of the basic principles of biochemistry expected for Medical School Admission Tests. By the end of the course students should be familiar with basic biochemical concepts related to Protein Structure and Function; Enzyme Function and Regulation; Transmission of genetic information; Membrane Structure and Composition; Bioenergetics and Fuel Metabolism; Cell Signaling. Throughout the course, biochemical concepts will be emphasized. As the course proceeds, students should develop an understanding of key biochemical concepts and be able to identify and correctly interpret these concepts from passages on health-related biochemical topics. Note: To register for this course, students must satisfy the prerequisites or obtain permission from the program director.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Postbaccalaureate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in CHEM 2251 and CHEM 2253.

Bioengineering (BIOE)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

BIOE 0844. The Bionic Human. 3 Credit Hours.

Can we replace our "worn-out" body parts with space-age materials? Will the day come when an injured athlete buys a tendon for the next big game? If so, who will have access, and when do we cease to be human? Become familiar with the extraordinary advances happening in bioengineering, including regenerative medicine, gene therapy, and mRNA vaccines, with the potential to cure diseases and create designer babies. Discuss science and pseudoscience: Goop, gurus, and the FDA, all the while getting a birds' eye view of the US and global health care systems. By the time you finish this course, you'll know how a pig heart could save your life, how stem cell research could affect your future, the purpose of animal testing, and whether we're going to have Iron Man suits any time soon. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot receive credit for this course if they have successfully completed BIOE 0944, MEE 0844, or MEE 0944.

Course Attributes: GS

Repeatability: This course may not be repeated for additional credits.

BIOE 0856. Ethical Issues in Biomedical Science, Engineering and Technology. 3 Credit Hours.

At some point in our lives, it is likely that each of us will be confronted with an ethical dilemma related to a biomedical technology. This course is designed to enable you to critically address important issues that arise as a result of advances in biomedical science, bioengineering and biotechnology. We will learn the science behind new technology such as genetic testing, gene editing, tissue engineering, human enhancement, artificial intelligence and medical imaging, with specific topics varying by semester. Challenging ethical questions will be considered using principles of ethical theories and frameworks, such as, is it ethical to create "designer babies", or what are the limits on what humans can do to enhance their performance? Material from peer-reviewed journal articles and reputable news sources will provide the basis for in-class discussions, scientific lectures, discussion boards, and structured debates. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot receive credit for this course if they have successfully completed BIOE 0956.

Course Attributes: GS

Repeatability: This course may not be repeated for additional credits.

BIOE 0944. Honors Bionic Human. 3 Credit Hours.

Can we replace our "worn-out" body parts with space-age materials? Will the day come when an injured athlete buys a tendon for the next big game? If so, who will have access, and when do we cease to be human? Become familiar with the extraordinary advances happening in bioengineering, including regenerative medicine, gene therapy, and mRNA vaccines, with the potential to cure diseases and create designer babies. Discuss science and pseudoscience: Goop, gurus, and the FDA, all the while getting a birds' eye view of the US and global health care systems. By the time you finish this course, you'll know how a pig heart could save your life, how stem cell research could affect your future, the purpose of animal testing, and whether we're going to have Iron Man suits any time soon. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot receive credit for this course if they have successfully completed BIOE 0844, MEE 0844, or MEE 0944.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GS, HO

Repeatability: This course may not be repeated for additional credits.

BIOE 0956. Honors Ethical Issues in Biomedical Science, Engineering and Technology. 3 Credit Hours.

At some point in our lives, it is likely that each of us will be confronted with an ethical dilemma related to a biomedical technology. This course is designed to enable you to critically address important issues that arise as a result of advances in biomedical science, bioengineering and biotechnology. We will learn the science behind new technology such as genetic testing, gene editing, tissue engineering, human enhancement, artificial intelligence and medical imaging, with specific topics varying by semester. Challenging ethical questions will be considered using principles of ethical theories and frameworks, such as, is it ethical to create "designer babies", or what are the limits on what humans can do to enhance their performance? Material from peer-reviewed journal articles and reputable news sources will provide the basis for in-class discussions, scientific lectures, discussion boards, and structured debates. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot receive credit for this course if they have successfully completed BIOE 0856.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: UHONORS, UHONORSTR.

Course Attributes: GS, HO

Repeatability: This course may not be repeated for additional credits.

BIOE 2001. Frontiers in Bioengineering. 2 Credit Hours.

This survey course will provide a first introduction to the wide scope of biomedical engineering, with emphasis on the application of engineering principles to solving problems in biology and medicine. Specific topics will include biomechanics; bioimaging; bioinstrumentation and biomedical devices; artificial organs; computational biology and bioinformatics; biomaterials and drug delivery; cellular, tissue and regenerative engineering; and nanobiotechnology. At the end of this introductory course the students will be familiar with some of the major molecular, cellular, physiological and engineering principles that allow for problem solving in the vast area of biomedical engineering. Thus the students will be prepared to study in depth some of the specialized topics of bioengineering.

Repeatability: This course may not be repeated for additional credits.

BIOE 2101. Engineering Principles of Physiological Systems. 3 Credit Hours.

This course will introduce biomedical engineering students to quantitative modeling of physiological systems. It will cover fundamental topics in physiology ranging from cell membrane models and chemical messengers to neuronal signaling and control of body movement. In addition, specific physiological systems are discussed in detail, including the cardiovascular, pulmonary, and visual systems. Furthermore, pharmacokinetic models provide quantitative assessment of the dynamics of drug distribution and compartmental interactions. Hands-on laboratories combining actual experiments with computer simulations will reinforce the contents of classroom teaching.

Department Restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Bioengineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 2112 (may be taken concurrently), BIOL 1012 (may be taken concurrently), BIOL 2912 (may be taken concurrently), BIOL 1112 (may be taken concurrently), or 'Y' in BIOW)

BIOE 2201. Modeling Fundamentals in Bioengineering. 1.5 Credit Hour.

This course will introduce students to the fundamentals of modeling, design, and testing within SolidWorks computer aided design software with a focus on Bioengineering applications. Specifically, it will begin with methods of 3D design with an emphasis on iterative and parametric design mentality and design optimization. The course will conclude with a section of finite element analysis including the use of SolidWorks models for mechanical and fluid dynamic testing and analysis.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1041, MATH 1941, MATH 1951, or 'Y' in METW) and (ENGR 1101 or ENGR 1901)

BIOE 2202. Programming Fundamentals in Bioengineering. 1.5 Credit Hour.

This course will introduce students to programmatic methods and matrix algebra with specific applications in Bioengineering. Students will learn programming fundamentals such as loops and conditionals, as well as how to apply these methods to data analysis. In addition to the use of built-in Matlab functions, including those used for basic human interface, students will also learn to write their own functions and the methods to assemble complex programs.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1041, MATH 1941, MATH 1951, or 'Y' in METW)

BIOE 2301. Quantitative Pathophysiology. 3 Credit Hours.

This course will introduce students to fundamental principles of human pathophysiology. Students will gain a systems level understanding of disease processes necessary for the rational design of novel therapeutic and diagnostic technologies. The course will integrate basic biological science and fundamental engineering principles in the evaluation of clinical disease manifestations. Topics that will be covered include: fundamental concepts of cellular homeostasis; cellular responses (adaptation, injury, cell death) induced by stress, injurious stimuli, and disease, and systemic models of major diseases within the US (cardiac, neoplastic, cerebrovascular, traumatic, neurodegenerative, diabetic, and pulmonary).

Department Restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in BIOE 2101.

BIOE 2302. Cellular and Molecular Biology for Bioengineers. 3 Credit Hours.

This course will enhance the basic knowledge of the students in quantitative cell and molecular biology from the vantage point of a bioengineer, focusing on molecular mechanisms and cellular functions, specifically in cell-cell and cell-matrix communications. Textbook learning will be supplemented with results from recent research and technological innovations in biology. After completing this course, bioengineering students will be able to apply their aptitude in the quantitative, physical and engineering sciences to modern biology. Students will also learn the principles how to establish and test biological models.

Department Restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in BIOE 2101.

BIOE 2312. Mechanics for Bioengineering I. 4 Credit Hours.

This course will provide students with an understanding of the application of statics and strength of materials to biomechanical problem analyses. Topics will introduce basic concepts of mechanics and kinetic analyses with application to physiologic loading and motion in the body.

Department Restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PHYS 1062 (may be taken concurrently), PHYS 1962 (may be taken concurrently), PHYS 2022 (may be taken concurrently), or PHYS 2922 (may be taken concurrently)) and (MATH 1042, MATH 1942, 'Y' in MATW, or 'Y' in METW)

BIOE 2401. Biodesign - Needs and Ideation. 3 Credit Hours.

This course will incorporate the 5-steps of the Design Thinking process in a project-based learning (PBL) environment focusing on bioengineering-specific projects. During these open-ended projects, the students will work in small teams that will 1) delve deeply into the development of the problem statements and needs criteria, 2) ideation process, 3) designing potential solutions, 4) proof of concept, and 5) move on to designing and creating prototypes and writing up the supporting documentation.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1042, 'Y' in MATW, or 'Y' in METW), (PHYS 1062 or PHYS 2022), and ENGR 1101.

BIOE 3001. Research Design and Methods in Bioengineering. 2 Credit Hours.

In this course the upper division students will learn how to integrate fundamental principles of biology, chemistry, engineering, mathematics (including statistics) and physics to develop practical solutions for a variety of biomedical problems from cells to organisms. Students will use both engineering (methodology) and scientific (hypothesis) approaches to problem-solving thereby learning to distinguish between the two approaches. This course will teach the students the fundamental principles underlying modern measurements and control instrumentation utilized in science and engineering. Taking a quantitative and hands-on approach to measurement theory and practice, this course will present and analyze example instruments currently used in academic and industrial research. In addition, the students will consider and discuss bioethical issues involving biological and living systems. Specific bioethics topics that will be covered include stem cells, patents, conflict of interest, patient rights, animal rights, organ donation, and data manipulations but are not limited to them.

Department Restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1041, MATH 1941, MATH 1038, 'Y' in MATW, or 'Y' in METW) and (CHEM 1031 or CHEM 1951)

BIOE 3101. Bioelectrical Engineering Lab. 3 Credit Hours.

This laboratory class will introduce students to the empirical study of bioelectric phenomena in physiological systems. This includes the origin of biopotentials, the use of biopotential electrodes in their measurements and subsequent amplification, signal processing and analysis of their physiological relevance. Applications of physical principles and basic electric engineering techniques are emphasized.

Department Restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in BIOE 3201 (may be taken concurrently), (PHYS 1062 or PHYS 2022), (MATH 1042, MATH 1942, 'Y' in MATW, or 'Y' in METW), and BIOE 2001 (may be taken concurrently)

BIOE 3102. Biomaterials Lab. 3 Credit Hours.

This laboratory class will teach students experimental methods used to prepare and characterize biomaterials used in biomedical engineering. Students will learn basic techniques for the fabrication and characterization tools used for polymeric biomaterials, and investigate structure-property relationships as it applies to thermal, mechanical, surface and morphological properties of polymeric biomaterials.

Department Restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in BIOE 2101 (may be taken concurrently) and BIOE 3001.

BIOE 3201. Biomedical Instrumentation. 2 Credit Hours.

This course will introduce the upper division students to the fundamentals of medical instrumentation. Specifically, it will teach the physiological/physicochemical, biomechanical, computational and electronic principles governing the operation of select medical instrumentation. Focusing on classical and modern instrumentation used in specific clinical departments, such as cardiology, pulmonary medicine and critical care, radiology, and anesthesiology, the course will also introduce the students to the operation, safety aspects, and calibration of electronic, optical and acoustical instruments, as well as those involving ionizing radiation.

Department Restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PHYS 1062 or PHYS 2022) and (MATH 1042, MATH 1942, 'Y' in MATW, or 'Y' in METW)

BIOE 3301. Biomedical Signals and Systems. 3 Credit Hours.

This course will expose students to digital signal processing with emphasis on problems in biomedical research and clinical medicine. It covers principles and algorithms for processing signals and systems in both continuous and discrete time domains with examples from biomedical signal processing and control. Theory and practice of Continuous-time linear systems: convolution, steady-state responses, Fourier and Laplace transforms, transfer functions, poles and zeros, stability, sampling, feedback. Discrete-time linear systems: Z transform, filters, Fourier transform, signal processing. This class will make extensive use of Matlab projects.

Department Restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 2101, ENGR 2011, or MEE 2011)

BIOE 3302. Drug Delivery. 3 Credit Hours.

This course will cover the engineering principles utilized in the design of drug delivery systems. Topics will include: drug delivery mechanisms (oral, parenteral, passive, targeted, etc.); therapeutic modalities and mechanisms of action; engineering principles of controlled release and quantitative understanding of drug transport (diffusion, convection); effects of electrostatics, macromolecular conformation, and molecular dynamics on interfacial interactions; thermodynamic principles of self-assembly; chemical and physical characteristics of delivery molecules and assemblies (polymer based, lipid based); significance of biodistributions and pharmacokinetic models; toxicity issues and immune responses.

Department Restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 2041 (may be taken concurrently), MATH 2941 (may be taken concurrently), MATH 3041 (may be taken concurrently), MATH 3941 (may be taken concurrently), or 'Y' in METW)

BIOE 3303. Biotransport Phenomena. 3 Credit Hours.

This course will provide students with a quantitative understanding of mass (convection and diffusion) and momentum transport (viscous flow) in living systems, both at macroscopic and microscopic scales. We'll introduce differential equations to model and quantify aspects of bioengineering systems will be covered. Example systems will include the analysis of fluid flow phenomena in the cardiovascular, respiratory and other human organ systems, membrane transport, drug delivery and molecular transport.

Department Restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ENGR 3571, (MATH 2041 (may be taken concurrently), MATH 2941 (may be taken concurrently), MATH 3041 (may be taken concurrently), MATH 3941 (may be taken concurrently), or 'Y' in METW), and BIOE 2202 (may be taken concurrently)

BIOE 3312. Mechanics for Bioengineering II. 4 Credit Hours.

This course will provide students with an understanding of the application of mechanics of solids and dynamics to engineering problem analyses. Topics will introduce basic concepts of dynamics and mechanics with application to physiologic loading and motion in the body.

Department Restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in BIOE 2312.

BIOE 3331. Principles of Macromolecular Science. 3 Credit Hours.

In this course students will gain an understanding of the fundamentals of polymer physical chemistry. We will cover polymer structure and conformation, bulk and solution thermodynamics and phase behavior, polymer networks, and viscoelasticity. We will also apply engineering principles to the analysis of biomacromolecules, such as proteins, polysaccharides and oligonucleotides. Upon the completion of the course, students should be able to understand the influence of monomer structure, temperature, solution conditions, degree of polymerization and 3D conformation on the function of biopolymers.

Department Restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 1032 or CHEM 1952)

BIOE 3401. Biodesign - Testing and Validation. 3 Credit Hours.

This course aims to reinforce the Design Thinking concepts introduced earlier in the curriculum. Students will apply Design Thinking concepts to team projects. We will introduce topics in project management, machine shop use, computer modeling, ethical conduct of research and translational/entrepreneurial considerations, in addition to building upon the tools acquired and used in the Bioengineering Design I. The first part of the semester will be used for problem statement development and creations of several alternative design solutions. The second part of the semester will then be devoted to prototyping, testing and optimizing the proposed solutions, with oral presentations and written reports of their progress in the project throughout the semester.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1042, 'Y' in MATW, or 'Y' in METW), (PHYS 1062 or PHYS 2022), and ENGR 1101.

BIOE 3402. Design Elective: Biodesign. 3 Credit Hours.

This course aims to reinforce the Design Thinking concepts introduced earlier in the curriculum. Students will apply Design Thinking concepts to team projects. We will introduce topics in project management, machine shop use, computer modeling, ethical conduct of research and translational/entrepreneurial considerations. This course will be an option for the required design elective used as a prerequisite for Senior Design 2 (ENGR 4296). The projects will start with problem statement development and creations of several alternative design solutions and move through prototyping, testing and optimizing the proposed solutions, with oral presentations and written reports of their progress in the project throughout the semester.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (MATH 1042 (C or higher), MATH 1942 (C or higher), or 'Y' in METW), ENGR 2196, BIOE 3201, BIOE 3101, BIOE 3001 (may be taken concurrently), and BIOE 3102 (may be taken concurrently)

BIOE 3511. Interactions of Biomaterials with Living Tissues. 3 Credit Hours.

This course will cover topics that illustrate how biomaterials interact with living tissues, focusing on cell culture, immunology, cell-biomaterial interfaces, and cell signaling. The students will learn the fundamentals maintaining living cells in culture and how these cells react to the presence of biomaterials using lecture and laboratory format.

Department Restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in BIOE 2101 and (CHEM 1031, CHEM 1035, or CHEM 1951)

BIOE 3719. Introduction to Bioengineering. 3 Credit Hours.

Course topics include biomaterials and implant materials, research proposal preparation, tyrosine-derived synthetic polymer devices for tissue engineering spine biomechanics, cellular material biomechanics, orthopedic biomechanics, hydroxyapatite/polymer composites, applications of injury biomechanics, biomechanics of the lower extremities, principles of polymers used in dental and biomaterials, interfaces in biomaterials. Students will be required to prepare a proposal for a design-oriented term project (i.e. rationale, concept and design, but no actual construction).

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Repeatability: This course may not be repeated for additional credits.

BIOE 3725. Cell Biology for Engineers. 3 Credit Hours.

Cell Biology for Engineers is a basic course that introduces biological concepts in modern cellular and molecular biology to engineering students. Topics will include the chemical composition of cells, bioenergetics and metabolism, structure and function of the plasma membrane, transport across membranes, the cytoplasmic membrane system, the extracellular matrix, interactions between cells and their environment, the cytoskeleton and cell motility, sensory systems, and cell signaling. In addition, an introduction to basic anatomy and physiology of vertebrates will include the skeletal system, muscle system, cardiovascular system, and nervous system.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 1031, CHEM 1035, or CHEM 1951)

BIOE 4101. Biomechanics Lab. 3 Credit Hours.

In this course students will apply principles of engineering mechanics in the design and utilization of biomechanical instrumentation. Principles of transduction, mechanics, sampling theory, strain, temperature, and flow measurement as applied to biomechanical systems will be covered. A background in data acquisition, electrical safety, operational amplifier and bridge circuits, and measurements is provided. Students will investigate the biomechanics of the musculoskeletal and cardiovascular systems in normal and pathological states.

Department Restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in BIOE 3101, BIOE 2201, and BIOE 2202.

BIOE 4182. Independent Study in Bioengineering. 1 to 5 Credit Hour.

Independent study course in bioengineering. Credits are arranged with instructor.

Repeatability: This course may be repeated for additional credit.

BIOE 4278. Cardiac Devices. 3 Credit Hours.

Intended for electrical engineering, biology, and bioengineering students. No course prerequisites. This course will cover cardiac anatomy and physiology, the heart's electrical system in health and disease, cardiac ECG rhythm interpretation, design and function of ECG monitoring devices, pacemakers and external and implanted defibrillators, and arrhythmia detection algorithms. The course will include observation of pacemaker implants, and troubleshooting in a pacemaker follow-up clinic. The course will prepare students to take the Heart Rhythm Society Allied Professional Pacemaker Certification examination. It is intended to put students in a competitive advantage for getting jobs in the expanding pacemaker and other medical electronics device industries.

Repeatability: This course may not be repeated for additional credits.

BIOE 4301. Bioengineering Seminar. 1 Credit Hour.

This seminar is intended for bioengineering students who are interested in acquiring hands-on presentation skills and, in addition, keeping up-to-date with the bioengineering research fields. The aim of the class is to allow upper division students to present a summarized view of a specific bioengineering or biomedical engineering topic. Specific topics that will be suggested to be covered (by the students) are biomaterials, tissue/regenerative engineering, bioimaging, biosensing, bionanotechnology (or nanobiotechnology), neuroengineering, bioinformatics (computational), biomechanics, (but are not limited to them). Guest lecturers from academia and industry will be invited to talk on several occasions.

Department Restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in BIOE 2001.

BIOE 4311. The Entrepreneurial Bioengineer. 3 Credit Hours.

Recognizing the increasingly entrepreneurial landscape of Bioengineering, this course will introduce the students to the fundamentals of entrepreneurship and is designed to provide students with a working knowledge of the modern entrepreneurial and business planning and the regulatory process with the special focus on translational development of bioengineering products from the bench to the bedside.

Department Restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in BIOE 2001 (may be taken concurrently)

BIOE 4333. Capstone Elective: Applied Biospectroscopy. 3 Credit Hours.

This course introduces the basics of light propagation in tissue and other turbid media, vibrational spectroscopy, absorption and fluorescence, and emerging spectroscopic applications. Emphasis is on applications for assessment of biomolecules, engineered tissues and clinically-relevant analyses including musculoskeletal disease and cancer diagnosis. Multivariate analyses for complex spectral data sets will also be introduced.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in BIOE 2101, BIOE 3001, and BIOE 3101.

BIOE 4411. Capstone Elective: Biomaterials. 3 Credit Hours.

This course will focus on materials and design parameters used to develop human implant devices, bulk and surface characterization methods for biomaterials, biocompatibility, failure mechanisms of current biomaterials, and regulatory requirements for design and testing of human implant devices. Special attention will be given to biomaterials used in tissue regeneration, orthopedics, and controlled drug delivery.

Department Restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in BIOE 2101 and CHEM 2201.

BIOE 4421. Capstone Elective: Bionanotechnology. 3 Credit Hours.

This course is intended for upper division students interested in acquiring knowledge involving nanometer-sized objects frequently utilized within the biomedical sciences and engineering areas. The aim of the class is to introduce fundamental concepts critical in the design, preparation, analysis, and usage of bionanotechnology (or nanobiotechnology) and its multiple bottom-up and top-down approaches. Multiple nanomaterials categories, such as nanoparticles, nanotubes, biomacromolecules, synthetic polymers, and self-assembled structures, will be covered in detail along with their applications.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CHEM 2201 and BIOE 1301.

BIOE 4431. Capstone Elective: Neuroengineering. 3 Credit Hours.

This course will teach students how signals are generated and propagated in neurons and neuronal circuits, and how this knowledge can be utilized to engineer devices to assist people with neurologic disease or injury. The functions of neurons as discrete elements and as parts of neuronal assemblies will be examined; generator and action potentials; conduction in nerve fibers and across synaptic junctions; analysis of sensory and neuromuscular systems; EEG and EKG waveforms. At the completion of the course, students will have gained a fundamental understanding of neural interface/prosthetics design parameters from basic neural physiology to models of neural mechanisms. We will also review advanced neural interfaces currently being developed and or produced commercially by the field.

Department Restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in BIOE 2101 and (MATH 2041 (may be taken concurrently), MATH 2941 (may be taken concurrently), MATH 3041 (may be taken concurrently), MATH 3941 (may be taken concurrently), or 'Y' in METW)

BIOE 4441. Capstone Elective: Biomechanics. 3 Credit Hours.

This course will provide an integrative and multi-scale understanding of biomechanics that spans from tissues, to organs, to the dynamics of an intact, running body. Foundational topics will include muscle mechanics, skeletal mechanics, gait and whole body dynamics. The course will then move on to cover selected topics at the forefront of applied biomechanics including clinical biomechanics and the design and optimization of prosthetic limbs. Finally, frontiers in neural-interfacing for prostheses and rehabilitation, including optogenetics and other emerging areas affecting biomechanics, including robotics and robotic exoskeletons, will be covered.

Department Restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOE 2101 or BIOE 3725) and (BIOE 3312 or (ENGR 2332 and ENGR 2333))

BIOE 4451. Capstone Elective: Biomedical Imaging. 3 Credit Hours.

In this course students learn how light, X-rays, radiopharmaceuticals, ultrasound, magnetic fields, and other energy probes are generated and how they interact with tissues and detectors to produce useful image contrast. Practical issues such as beam generation, dose limitations, patient motion, spatial resolution and dynamic range limitations, and cost-effectiveness will be addressed. Emphasis will be placed on diagnostic radiological imaging physics, including the planar X-ray, digital subtraction angiography mammography, computed tomography, nuclear medicine, ultrasound, and magnetic resonance imaging modalities.

Department Restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in PHYS 1062, (CHEM 1031, CHEM 1035, or CHEM 1951), (BIOL 1111, BIOL 1012, BIOL 2112, BIOL 1911, BIOL 2912, or 'Y' in BIOW), and (MATH 2041, MATH 2941, MATH 3041, MATH 3941, or 'Y' in METW)

BIOE 4461. Capstone Elective: Principles of Tissue Engineering. 3 Credit Hours.

This course will introduce fundamental concepts of tissue engineering and regenerative medicine, focusing on biomaterials used for scaffolds, mechanisms of cell-biomaterial interactions, biocompatibility and foreign body response, cellular engineering, and tissue biomechanics. Principles of cell/developmental and stem cell biology will be introduced, which will enable the students to apply a multidisciplinary approach to engineering select tissues and organs, such as the musculoskeletal system, cardiovascular tissues, the nervous system, and to design artificial organs. These topics will also be discussed in the context of scale-up, manufacturing, ethical and regulatory concerns. Note: Prior to fall 2017, the course title was "Capstone Elective: Principles of Tissue and Regenerative Engineering."

Department Restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in BIOE 2101 and CHEM 2202.

BIOE 4471. Mechanobiology. 3 Credit Hours.

Mechanobiology is an emerging interdisciplinary field that focuses on the role of mechanical cues in governing cellular behavior. This course will address the means by which a cell utilizes its adhesions to neighboring cells and to the surrounding extracellular matrix to sense external forces and furthermore, how these forces are transduced within the cell to alter cellular behavior and regulate tissue architecture. This course will also discuss how the extracellular matrix influences cellular behavior during development, health, and disease. Furthermore, this course will also discuss the various tools and techniques developed that pushed the field of mechanobiology forward.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1012, BIOL 1112, BIOL 1912, BIOL 2112, or BIOL 2912), BIOE 3001, and (BIOE 2312 or BIOE 4101)

BIOE 4500. Special Topics in Bioengineering. 3 Credit Hours.

An emerging or advanced area of bioengineering research will be covered. Topics vary by semester.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Bioengineering.

Repeatability: This course may be repeated for additional credit.

BIOE 4501. Capstone Elective: Regenerative Engineering. 3 Credit Hours.

This course is a continuation of fundamental concepts introduced in Principles of Tissue and Regenerative Engineering focusing on developmental biology used in tissue engineering and regenerative medicine. Principles of cell development/biology, cell-cell interactions, signal transduction, and stem cell biology will be discussed with applications to regenerative medicine. These topics will also be discussed in the context of scale-up, manufacturing, ethical and regulatory concerns.

Department Restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in BIOE 2101 and (CHEM 2202 or CHEM 2922)

BIOE 4555. Capstone Elective - Biophotonics: Seeing is Believing. 3 Credit Hours.

Only a small portion of the world around us is visible to the human eye. With revolutionary microscopy developments there are ways to visualize drug effects, forces, viral infection, or cancer metastasis, and use light to control biological processes. Once we see biology happen, the result is not just a pretty image. We can use machine learning and artificial intelligence (AI) to improve resolution and quantify the imaging data. In this course students will learn how light can be used to visualize and manipulate biomaterials at molecular, cellular and tissue scale. The first part of the course will provide a review of light and optics. We will cover typical hardware used for imaging in biology, such as light sources, objectives and detectors used to generate images. The second part of the course will include hands-on fluorescent microscopy, the main tool for imaging in life sciences, and it will include imaging of cell cultures in 2D and 3D and tissue sections. We will use typical image processing tools, including Fiji, Matlab and selected Python plugins, and learn how to implement AI tools to improve images and imaging data. Final sessions will include presentations on specialized techniques by students.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PHYS 1062 or PHYS 2022), CHEM 2202, and (BIOL 1012, BIOL 1112, BIOL 2112, BIOL 2912, or BIOE 3102 (may be taken concurrently))

BIOE 4741. Biomaterials for Engineers. 3 Credit Hours.

This course introduces engineering students to materials as they interact with biological systems, primarily in medicine. Topics will include a review of properties of materials, the classes of materials, tissues that come into contact with materials, the degradation of materials in the biological environment, the application of materials for specific uses, tissue engineering, and biomaterials standards and regulations.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Bioengineering.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 1031, CHEM 1035, or CHEM 1951)

Biology (BIOL)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

BIOL 0848. DNA: Friend or Foe. 3 Credit Hours.

This course is typically offered in Fall.

Through the study of basic biological concepts, think critically about modern biotechnology. Consider questions like: What are the ethical and legal implications involving the gathering and analysis of DNA samples for forensic analysis and DNA fingerprinting? Are there potential discriminatory implications that might result from the human genome project? What are embryonic stem cells, and why has this topic become an important social and political issue? Will advances in medicine allow humans to live considerably longer, and how will a longer human life span affect life on earth? We will learn through lectures, lecture demonstrations, problem solving in small groups and classroom discussion, and make vivid use of technology, including short videos from internet sources such as YouTube, electronic quizzes, imaging and video microscopy. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and the Science & Technology Second Level (SB) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed Biology 0948.

Course Attributes: GS

Repeatability: This course may not be repeated for additional credits.

BIOL 0948. Honors DNA: Friend or Foe. 3 Credit Hours.

This course is not offered every year.

Through the study of basic biological concepts, think critically about modern biotechnology. Consider questions like: What are the ethical and legal implications involving the gathering and analysis of DNA samples for forensic analysis and DNA fingerprinting? Are there potential discriminatory implications that might result from the human genome project? What are embryonic stem cells, and why has this topic become an important social and political issue? Will advances in medicine allow humans to live considerably longer, and how will a longer human life span affect life on earth? We will learn through lectures, lecture demonstrations, problem solving in small groups and classroom discussion, and make vivid use of technology, including short videos from internet sources such as YouTube, electronic quizzes, imaging and video microscopy. (This is an Honors course.) NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and the Science & Technology Second Level (SB) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed Biology 0848.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GS, HO

Repeatability: This course may not be repeated for additional credits.

BIOL 1001. Human Biology. 4 Credit Hours.

This course is typically offered in Fall, Spring, and Summer I.

An introduction to the principles of biology using the human as a model organism. The course covers biomolecules; the heredity, development, structure and function of the human body; and the relationship of humans to their environment. NOTE: (1) Laboratory requires dissection. Not available for Biology major credit; no credit if Biology 1011 (C083) is previously taken. (2) This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement.

Course Attributes: SA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 0701 to 0702 (may be taken concurrently), any MATH course numbered 0800 to 4999 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC3A, 'Y' in MC6A, STAT 1001, 'Y' in STT2, STAT 1102, STAT 1902, 'Y' in MATW, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

BIOL 1004. Medical Terminology for Pre-Health Postbaccalaureates. 1 Credit Hour.

In this course, students will learn to understand the terms used in medicine. This course focuses on teaching the meanings of root words and how they are put together so that students can break down the meanings of complex medical terms. Understanding medical terms is necessary for clear communication between healthcare providers when caring for patients.

Repeatability: This course may not be repeated for additional credits.

BIOL 1009. Biological Reasoning. 3 Credit Hours.

This course is typically offered in Fall.

This course is a transition semester of biology to be taken before Introductory Biology 1111 or 1112 for students who have not had advanced biology in high school or who wish to increase their reasoning skills before taking the Introductory Biology sequence. The course will focus on the analysis of biological data as well as understanding how these data support or contradict foundational concepts including biological evolution, structure and function, information exchange, energy transformation and flow and systems. The course format will involve group exercises designed to increase diagrammatic and quantitative reasoning in biology using examples from introductory textbooks. Understanding and developing concept maps will provide students with an effective approach for studying biology. The course will prepare students for the content and pace required to be successful in the Introductory Biology sequence.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 0702 (may be taken concurrently), any MATH course numbered 0800 to 4999 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC3A, 'Y' in MC6A, STAT 1001, 'Y' in STT2, STAT 1102, STAT 1902, 'Y' in MATW, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

BIOL 1011. General Biology I. 4 Credit Hours.

This course is typically offered in Fall and Summer I.

General introductory biology for non-biology majors. Topics include cell physiology (introduction), origins of life, taxonomy, principles of evolution, animal evolution, and a survey of physiology. NOTE: (1) Laboratory required. (2) This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.

Course Attributes: SA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 0701 to 0702 (may be taken concurrently), any MATH course numbered 0800 to 4999 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC3A, 'Y' in MC6A, STAT 1001, 'Y' in STT2, STAT 1102, STAT 1902, 'Y' in MATW, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

BIOL 1012. General Biology II. 4 Credit Hours.

This course is typically offered in Spring and Summer II.

General introductory biology for non-biology majors. Topics include biological molecules, biochemistry, molecular biology, and genetics. NOTE: (1) Laboratory required. (2) This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.

Course Attributes: SB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 0701 to 0702 (may be taken concurrently), any MATH course numbered 0800 to 4999 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC3A, 'Y' in MC6A, STAT 1001, 'Y' in STT2, STAT 1102, STAT 1902, 'Y' in MATW, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

BIOL 1111. Introduction to Organismal Biology. 0 or 4 Credit Hours.

This course, with Biology 1112 or 2112, makes up the introductory series for Biology majors. Biology 1111 is designed to be taken during the first year. This course covers evolutionary principles, an introduction to ecology, and anatomy and physiology of plants and animals with an emphasis on vertebrate systems. Concepts and facts discussed in lecture will be closely integrated with laboratory observation and experimentation. NOTE: This is part of the introductory series for Biology majors. There are weekly laboratories that emphasize hands-on experience with living material.

Two sections are required for this course. This course requires registration for a 0.0 credit Recitation section in addition to the 4.0 credit Lecture & Laboratory section. The Recitation sections corresponding to a course are listed under the same course number as the Lecture & Laboratory sections, but have unique section numbers.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 0702, any MATH course numbered 0800 to 4999 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC3A, 'Y' in MC6A, STAT 1001, 'Y' in STT2, STAT 1102, STAT 1902, 'Y' in MATW, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

BIOL 1112. Introduction to Biomolecules, Cells and Genomes. 4 Credit Hours.

This course (or Biology 2112), with Biology 1111, makes up the introductory series for Biology majors. Biology 1112 is designed to be taken in either semester of the Freshman year. While either 1112 or 2112 will satisfy the requirement for Biology majors and the prerequisites for the 2nd level core Biology courses, students who are interested in focusing on Biochemistry are encouraged to take 2112 instead. This course will be an introduction to the Biology of organisms at the cellular and sub-cellular levels, and will provide an introduction to the fundamental concepts of cell biology, molecular biology, and genetics. Topics covered include the flow of information from DNA to RNA to proteins and the implications for evolution, metabolic pathways, photosynthesis, and cell changes during mitosis and meiosis. Finally, the course will introduce students to cutting-edge tools in bioinformatics and genomics. There are weekly laboratories that reinforce the concepts covered during the lecture and emphasize generating and analyzing data in the Cell and Molecular Biology disciplines.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 0702, any MATH course numbered 0800 to 4999 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC3A, 'Y' in MC6A, STAT 1001, 'Y' in STT2, STAT 1102, STAT 1902, 'Y' in MATW, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

BIOL 1211. Basic Core Introduction to Biology for Pre-Medical Post-Baccalaureates II. 4 Credit Hours.

This course is typically offered in Spring.

Biology 1211 begins with a survey of the cell theory, basic microbiology, and embryogenesis, the process whereby cells are organized into the tissues that make up the major organ systems. The structure, function, and coordination of each of the major organ systems are examined. The course concludes with a study of evolutionary biology topics including natural selection, genetic drift, and speciation.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in CHEM 1052.

BIOL 1911. Honors Introduction to Organismal Biology. 4 Credit Hours.

This course, with Biology 1112/1912 or 2112/2912, makes up the introductory series for Biology majors. Biology 1911 is designed to be taken during the first year. This course covers evolutionary principles, an introduction to ecology, and anatomy and physiology of plants and animals with an emphasis on vertebrate systems. Concepts and facts discussed in lecture will be closely integrated with laboratory observation and experimentation. NOTE: (1) This course can substitute for Biology 1111 as part of the introductory series for Biology majors. (2) This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, SA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 0702, any MATH course numbered 0800 to 4999 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC3A, 'Y' in MC6A, STAT 1001, 'Y' in STT2, STAT 1102, STAT 1902, 'Y' in MATW, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

BIOL 1912. Honors Introduction to Biomolecules, Cells and Genomes. 4 Credit Hours.

This course (or Biology 2912), with Biology 1911, makes up the introductory series for Biology majors in the Honors Program. Biology 1912 is designed to be taken in the Spring of the Freshman year. While either 1912 or 2912 will satisfy the requirement for Biology majors and the prerequisites for the 2nd level core Biology courses, students who are interested in focusing on Biochemistry are encouraged to take 2912 instead. This course will be an introduction to the Biology of organisms at the cellular and sub-cellular levels, and will provide an introduction to the fundamental concepts of cell biology, molecular biology, and genetics. Topics covered include the flow of information from DNA to RNA to proteins and the implications for evolution, metabolic pathways, photosynthesis, and cell changes during mitosis and meiosis. Finally, the course will introduce students to cutting-edge tools in bioinformatics and genomics. There are weekly laboratories that reinforce the concepts covered during the lecture and emphasize generating and analyzing data in the Cell and Molecular Biology disciplines.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 0702, any MATH course numbered 0800 to 4999 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC3A, 'Y' in MC6A, STAT 1001, 'Y' in STT2, STAT 1102, STAT 1902, 'Y' in MATW, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

BIOL 2001. Clinical Microbiology. 4 Credit Hours.

This course is typically offered in Fall.

This course is an introduction to the microorganisms that cause infectious diseases around the world. The nonspecific and specific host defense mechanisms are discussed. Methods for diagnosis, including culturing and immunological procedures, are covered. Other topics include disinfection, sterilization, standard precautions, antimicrobials, disease prevention and control. Laboratory related learning experiences, involving the testing of scientific principles related to lecture/discussion content, are integrated to support concepts introduced during lectures. NOTE: Not available for Biology major credit.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 1021, CHEM 1031, or CHEM 1951), (BIOL 1012, BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, or 'Y' in BLOW), and KINS 1224.

BIOL 2003. Introductory Laboratory for Transfer Students. 1 Credit Hour.

This course is typically offered in Fall and Spring.

For transfer students only. Instruction to satisfy the laboratory component of either Biology 1111 or Biology 2112 for students that transfer courses from other institutions that are similar in topic to those offered by the Biology Department, but lack a laboratory. This course allows such students to register solely for the laboratory component of the relevant course. This course does not serve as a Biology elective.

Repeatability: This course may not be repeated for additional credits.

BIOL 2005. Laboratory for Transfer Students. 1 Credit Hour.

This course is typically offered in Fall and Spring.

For transfer students only. Instruction to satisfy the laboratory component of either Biology 2296 or Biology 3096 for students that transfer courses from other institutions that are similar in topic to those offered by the Biology Department, but lack a laboratory. This course allows such students to register solely for the laboratory component of the relevant course. This course does not serve as a Biology elective.

Repeatability: This course may not be repeated for additional credits.

BIOL 2082. Independent Research I. 1 to 4 Credit Hour.

This course is typically offered in Fall, Spring, Summer I and Summer II.

Research under the direction of a faculty member in the Department of Biology or under joint supervision of an approved outside preceptor and a member of the Biology department. The Temple Biology faculty member oversees their work and acts as a liaison between an outside institution and the Department of Biology. All students must obtain the approval of an advisor from their major. Students must have completed Biology 1111/1911 OR Biology 1112/1912 OR Biology 2112/2912. NOTE: Not available for major credit. This course is not repeatable.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, 'Y' in BIO3, BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, 'Y' in BIO4, or 'Y' in BLOW)

BIOL 2112. Introduction to Cellular and Molecular Biology. 4 Credit Hours.

This course is typically offered in Fall and Spring.

This course (or Biology 1112), with Biology 1111, makes up the introductory series for Biology majors. This course provides an introduction to the fundamental concepts of biochemistry, cell biology, molecular biology and genetics. Topics covered include the structure of important biological macromolecules, enzyme kinetics, metabolic pathways, photosynthesis, cell changes during mitosis and meiosis, DNA replication, transcription, translation and genetic analysis. NOTE: This course is part of the introductory series for Biology majors. There are weekly laboratories that emphasize hands-on experience with living material.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 1031, CHEM 1951, or 'Y' in CHM1), (CHEM 1032 (may be taken concurrently), CHEM 1952 (may be taken concurrently), or 'Y' in CHM2), and (MATH 1022 (may be taken concurrently), any MATH course numbered 1038 to 4999 (may be taken concurrently), 'Y' in MC6, 'Y' in MA04, 'Y' in MC6A, 'Y' in MATW, or 'Y' in MC6T)

BIOL 2133. Human Anatomy. 3 Credit Hours.

The fundamentals of human anatomical structure are examined. A primary goal will be the development of a comprehensive vocabulary, including the learning of Latin and Greek root words underlying medical terminology. Students will progress from a review of the history of anatomy; to the study of anatomy at the microscopic level of cells, organelles and tissues; and finally to the organ systems level. Muscular, skeletal, nervous, endocrine, cardiovascular, gastrointestinal and respiratory systems will be covered.

Repeatability: This course may not be repeated for additional credits.

BIOL 2207. Genetics. 3 Credit Hours.

This lecture course is typically offered in Spring.

Examines the basic principles and problems of classical, biochemical, and molecular genetics. NOTE: BIOL 2297 Research Techniques in Genetics is a required co-requisite WI course.

Co-requisites: BIOL 2297.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, 'Y' in BIO3, or 'Y' in BIOW), (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, 'Y' in BIO4, or 'Y' in BIOW), and (CHEM 2201 (may be taken concurrently) or CHEM 2921 (may be taken concurrently))

BIOL 2211. Introduction to Biology II for Pre-Health Postbaccalaureates. 4 Credit Hours.

This course is typically offered in Spring.

Biology 2211 begins with a survey of the cell theory, basic microbiology, and embryogenesis, the process whereby cells are organized into the tissues that make up the major organ systems. The structure, function, and coordination of each of the major organ systems are examined. The course concludes with a study of evolutionary biology topics including natural selection, genetic drift, and speciation. Note: To register for this course, students must satisfy the prerequisites or obtain permission from the program director.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in CHEM 1052 and BIOL 2212.

BIOL 2212. Introduction to Biology I for Pre-Health Postbaccalaureates. 4 Credit Hours.

This course is typically offered in Fall.

Biology 2212 examines living systems at the most fundamental levels. Topics include chemical bonds, the unique properties of water, carbon chemistry, the structures and functions of macromolecules, as well as the thermodynamic and kinetic properties of enzymes. At the cellular level, we will study the components of cell-to-cell communication, cellular signaling, the regulation of the cell cycle, and cell motility. An examination of the processes of gene expression and DNA replication lead into studies on chromosome behavior during meiosis and the field of genetics. This course finishes with a survey of viruses, biotechnology, and two compelling biological processes: cancer and aging. Note: To register for this course, students must satisfy the prerequisites or obtain permission from the program director.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in CHEM 1052 and CHEM 2251 (may be taken concurrently)

BIOL 2227. Principles of Ecology. 3 Credit Hours.

This course provides an overview of ecology from the level of the individual organism to populations, communities and ecosystems. It examines the physical, chemical, and biological components of ecological interactions, and includes a comparative treatment of terrestrial and aquatic ecosystems.

Course Attributes: SE, SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, 'Y' in BIO3, or 'Y' in BIOW)

BIOL 2228. Ornithology. 4 Credit Hours.

The course focuses on how the study of birds has contributed to our understanding of basic principles in evolution, ecology, biogeography, behavior, neurobiology, life history theory, biodiversity and conservation. Lectures, small group discussions from primary literature, case studies and field work during the laboratory, will highlight these empirical advances. The course is available for all biology majors, but is geared specifically for those majoring in Ecology, Evolution and Biodiversity.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111 or BIOL 1911)

BIOL 2233. Mammalian Anatomy. 4 Credit Hours.

This course is typically offered in Fall.

A study of the development and gross anatomy of the human. In the laboratory, the dissection of the cat, together with pertinent illustrations from humans and other animals, provides a comparative survey of the anatomical structure of mammals.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, 'Y' in BIO3, or 'Y' in BIOW) and (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, 'Y' in BIO4, or 'Y' in BIOW)

BIOL 2234. Dinosaur Paleobiology. 3 Credit Hours.

Examines "non-avian dinosaurs" as objects of valid scientific inquiry and where appropriate, evaluates media hype surrounding them. Among topics examined in detail are: evolutionary relationships (including phylogeny, together with relationships to modern birds), ecology (including survey of other Mesozoic vertebrate groups, important invertebrates, plant life, biogeography), anatomy (hard and soft tissues), physiology (particularly but not limited to understanding dinosaur temperature regulatory physiology, paleoneurology, molecular traces, growth), behavior (locomotion, posture, reproduction, etc.), and how these animals are reconstructed and restored as living animals (including what is actually known from fossil evidence). This course highlights how applying basic biological principles is used to gain significant insights about what can actually be known about long extinct animals.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (BIOL 1111, BIOL 1911, 'Y' in BIOW, 'Y' in CRBI02, or 'Y' in CRBI03)

BIOL 2235. General Histology. 4 Credit Hours.

This course is typically offered in Spring.

A study of the fundamental techniques used in preparing tissues for microscopic examinations, followed by a detailed study of the various types of normal tissues and organs in mammals with emphasis on correlations between structure and function.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, 'Y' in BIO3, or 'Y' in BIOW)

BIOL 2241. Invertebrate Biology. 4 Credit Hours.

This course is typically offered in Spring.

An introduction to the biology of the invertebrate phyla including insects. Demonstrations of the patterns of invertebrate evolution by consideration of morphology, behavior, development, physiology, and ecology of representative organisms.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, 'Y' in BIO3, or 'Y' in BIOW)

BIOL 2296. Genetics. 4 Credit Hours.

This course is typically offered in Spring.

Examines the basic principles and problems of classical, biochemical, and molecular genetics. NOTE: Required for majors in Biology. There are weekly laboratories that emphasize hands-on experience with living material.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, 'Y' in BIO3, or 'Y' in BIOW), (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, 'Y' in BIO4, or 'Y' in BIOW), and (CHEM 2201 (may be taken concurrently) or CHEM 2921 (may be taken concurrently))

BIOL 2297. Research Techniques in Genetics. 3 Credit Hours.

This is the companion course to Genetics, whose dual purposes are to teach you the techniques used by geneticists to elucidate key genetic principles and for you to learn to communicate your findings in IMRD format. Major techniques covered include molecular cloning, PCR, restriction mapping, and gene mapping. You will gain hands-on experience working with several genetic model organisms, clone a gene, determine which variant of a particular gene you have, and delve into the vast (and ever-growing) genetic databases. This course will fulfill 3 credits of the writing intensive requirement.

Co-requisites: BIOL 2207.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, 'Y' in BIO3, or 'Y' in BIOW), (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, 'Y' in BIO4, or 'Y' in BIOW), and (CHEM 2201 (may be taken concurrently) or CHEM 2921 (may be taken concurrently))

BIOL 2512. Genomic Foundations of Medicine. 3 Credit Hours.

At the beginning of the 21st century, the genome sequence of only a single human being was completed. Since that time, the application of genomics has grown exponentially. Genomics is now revolutionizing the practice of medicine such that almost every area of medicine has been affected. The practice of medicine thus now requires grounding in genomic principles and knowledge and understanding how current genomic knowledge is scientifically justified. This course introduces major medical disorders affecting humans and surveys their genetic and genomic basis.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 2112, BIOL 2912, BIOL 1112, or BIOL 1912)

BIOL 2525. Nutrigenomics: From Molecular Nutrition to Disease Prevention. 3 Credit Hours.

Nutrigenomics is a field of study that explores the relationship between nutrition and genetics. It focuses on how diet interacts with an individual's genes, influencing health and susceptibility to diseases. Nutrigenomics examines how variations in an individual's genetic makeup can impact their response to specific diet and food choices. By understanding these interactions, nutrigenomics aims to provide guidance on the optimal diet for optimal health and manage chronic diseases. In this course, students will delve into the fascinating world of nutrigenomics, exploring the cutting-edge research and applications that are revolutionizing the field of nutrition. Through a combination of theoretical knowledge and practical insights, students will gain a deep understanding of how nutrients and bioactive compounds in food interact with the human genome. We will examine the influence of genetic variations on individual responses to specific nutrients and explore how dietary factors can modulate gene expression, metabolism, and physiological processes. The course will cover a range of topics, starting with an introduction to basic genetics and the fundamentals of nutrition. Students will then delve into the exciting field of nutrigenomics, examining the latest advancements in genomic medicine and molecular technologies that are shaping our understanding of the Genome-Food interface.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111 or BIOL 1911) and (BIOL 1112, BIOL 1912, BIOL 2112, or BIOL 2912)

BIOL 2812. Principles of Medical Genetics. 3 Credit Hours.

Understanding of genetics is central for many biological disciplines, including medicine. This course examines the basic principles and problems of classical, biochemical, and molecular genetics to enable the student to apply them in solving medical problems.

Repeatability: This course may not be repeated for additional credits.

BIOL 2912. Honors Introduction to Cellular and Molecular Biology. 4 Credit Hours.

This course is typically offered in Fall.

This course (or Biology 1912), with Biology 1911 or Biology 1111, makes up the introductory series for Biology majors. This course provides an introduction to the fundamental concepts of biochemistry, cell biology, molecular biology and genetics. Topics covered include the structure of important biological macromolecules, enzyme kinetics, metabolic pathways, photosynthesis, cell changes during mitosis and meiosis, DNA replication, transcription, translation and genetic analysis. NOTE: (1) This course can substitute for Biology 2112 as part of the introductory series for Biology majors. There are weekly laboratories. (2) This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, SB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 1031, CHEM 1951, or 'Y' in CHM1), (CHEM 1032 (may be taken concurrently), CHEM 1952 (may be taken concurrently), or 'Y' in CHM2), and (MATH 1022 (may be taken concurrently), any MATH course numbered 1038 to 4999 (may be taken concurrently), 'Y' in MC6, 'Y' in MA04, 'Y' in MC6A, 'Y' in MATW, or 'Y' in MC6T)

BIOL 3011. Integrative Cell and Tissue Biology. 3 Credit Hours.

This course will provide essential information on how cells work together in tissue and organ function. Students will be provided with modern key concepts on system biology paradigms in the analysis of biological processes. Topics covered in this course will include genome-scale in silico models, dissecting transcriptional control networks, circadian rhythms, applicability of modern system biology in human disease and cancer. In the first part of the course, students will learn about the "omics" science, and how omics technologies are used to measure and functionally characterize bio-molecular networks in cells or tissues. In the second part of the course, students will learn about omics applications to understand cell-type diversity of human organ systems, cellular alteration and disease.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111 or BIOL 1911) and (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, or 'Y' in BIOW)

BIOL 3082. Independent Research II. 1 to 4 Credit Hour.

This course is typically offered in Fall, Spring, Summer I and Summer II.

Research under the direction of a faculty member in the Department of Biology or under joint supervision of an approved outside preceptor and a member of the Biology department. The Temple Biology faculty member oversees student work and acts as a liaison between an outside institution and the Biology Department. All students must obtain the approval of the Biology Department Advisor. Students must have either completed Biology 2082: Independent Research I or have completed at least 60 credits (Junior or Senior standing). NOTE: Not available for major credit. This course is repeatable.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits.

Repeatability: This course may be repeated for additional credit.

BIOL 3083. Directed Readings. 3 Credit Hours.

This course is typically offered in Fall, Spring, Summer I and Summer II.

Prerequisites: Junior standing and a GPA of 3.2 or better with recommendation of a faculty sponsor and approval of the Biology Honors Committee.

This course is repeatable. A tutorial opportunity for a student to work with a faculty member to investigate areas of study not covered by courses in the department. Available as an elective for Biology major credit by petition to the Biology Honors Committee prior to registration. The student must make a written agreement with a Biology faculty member detailing the course of study to be followed and the mechanism of evaluation. NOTE: Agreement must be submitted to the Biology Undergraduate Advisor and the Biology Honors Committee for approval. This course can be taken a maximum of two times; only one of these can count toward Biology elective requirements as well as GPA requirements.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

BIOL 3091. Research Methods. 3 Credit Hours.

This course is typically offered in Spring.

Research Methods is required for all of the TUteach with Teaching majors. It is one of several content courses specially designed to meet the needs of future teachers. Sections meet two hours per week for non-traditional, interactive lectures and two hours per week for lab. The course is cross-listed in Biology, Chemistry, Earth and Environmental Science, and Physics. The goals of the course are (1) to provide students with the tools that scientists use to solve scientific problems; (2) to give students the opportunity to use these tools in a laboratory setting; (3) to make students aware of how scientists communicate with each other through peer-reviewed scientific literature; and (4) to enable students to understand how scientists develop new knowledge and insights, the most important of which are eventually presented in textbooks and taught in conventional science classes. Students design and carry out four independent inquiries, which they write up and present in the manner that is common in the scientific community. The inquiries incorporate mathematics and the various science disciplines, thus the team of instructors teaching this course have expertise in different disciplines and are available to supervise all students as they work on their inquiries in the lab. The combination of Research Methods and the TUteach course "Perspectives on Science and Mathematics" (Philosophy 2196) provides prospective science and mathematics teachers with an in-depth understanding of how the scientific enterprise works. NOTE: Biology 3091 is only available for major credit in the Biology with Teaching BS program.

College Restrictions: Must be enrolled in one of the following Colleges: Science & Technology.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (SCTC 1289 or SCTC 1389)

BIOL 3096. Cell Structure and Function. 4 Credit Hours.

This course is typically offered in Fall.

The chemistry and biological functions of important small molecules and macromolecules of the cell. Concept: the functions of cells are rooted in structures, and the structures themselves derive their characteristics from their chemical components. NOTE: Required for majors in Biology. There are weekly laboratories that emphasize hands-on experience with living material.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, 'Y' in BIO3, or 'Y' in BIOW), (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, 'Y' in BIO4, or 'Y' in BIOW), (CHEM 2201 (may be taken concurrently) or CHEM 2921 (may be taken concurrently)), and (PHYS 1021 (may be taken concurrently), PHYS 1061 (may be taken concurrently), PHYS 1961 (may be taken concurrently), PHYS 2021 (may be taken concurrently), or PHYS 2921 (may be taken concurrently))

BIOL 3101. Evolution. 3 Credit Hours.

This course is typically offered in Fall.

Students acquire a strong foundation in evolutionary biology, including its historical development and basic concepts such as the origin of life, natural selection, adaptation, population genetics, speciation, phylogeny, coevolution, taxonomy, and biogeography. Students who successfully complete the course will also have a broad understanding of the planetary environment, the fossil and molecular records of life, conservation of biodiversity, and astrobiology.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, 'Y' in BIO3, or 'Y' in BIOW) and (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, 'Y' in BIO4, or 'Y' in BIOW)

BIOL 3111. Genomics in Medicine. 3 Credit Hours.

This course is typically offered in Fall.

The completion of the Human Genome Project in 2003 began a revolution in the treatment of human disease. More than 10 years later, the promise of personalized genome-guided medical treatment is becoming reality. This course will explore how genomic information has enhanced our understanding of human genetic variation and disease susceptibility. Students will develop familiarity with main areas in genomic medicine through lectures from intra- and extramural experts, and they will be involved in classroom discussions.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, or 'Y' in BIOW)

BIOL 3112. Fundamentals of Genomic Evolutionary Medicine. 3 Credit Hours.

This course is typically offered in Spring.

Modern evolutionary theory offers a conceptual framework for understanding human health and disease. In this course we will examine human disease in evolutionary contexts with a focus on modern techniques and genome-scale datasets. We ask: What can evolution teach us about human populations? How can we understand disease from molecular evolutionary perspectives? What are the relative roles of negative and positive selection in disease? How do we apply evolutionary principles in diagnosing diseases and developing better treatments? Students will conduct case studies of a variety of diseases and phenotypes in a group setting.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, 'Y' in BIO4, or 'Y' in BIOW)

BIOL 3113. Genome Analytics. 3 Credit Hours.

The completion of the Human Genome Project in 2003 began a revolution in the diagnostics, treatment, and prevention of human disease. As a part of this revolution, many areas of biology have become data-driven and quantitative. Modern genomic biology, biomedicine, and evolutionary genomics, are vitally dependent on key bioinformatic tools and algorithms. This course is designed to introduce students to key informatics and algorithmic concepts widely used in bioinformatics and computational biology, and to equip them with operational knowledge of the 'must-know' tools used by scientists and practitioners today. Students will complete an independent project using the tools and techniques learned in the course, integrating literature review, new analyses of published data using software tools and pipelines, data visualization and interpretation, and formal report writing. This course takes the approach of discovery-based learning. Each lecture will be structured to cover one discrete topic, with a brief background, introduction of key concepts, tutorials, and guided software exercises.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, or 'Y' in BIOW) and (BIOL 3111 or BIOL 3112)

BIOL 3114. Evolutionary Ecology. 3 Credit Hours.

This course is typically offered in Fall.

The field of evolutionary ecology deals broadly with understanding how organisms adapt to their abiotic and biotic environments. What is the adaptive significance and evolutionary potential of phenotypic variation in natural populations? How do ecological interactions and genetic constraints shape the course of evolution? The class will cover fundamental ecological and evolutionary theories and approaches used to address questions in evolutionary ecology, including molecular tools, modeling, manipulative field studies, and laboratory- or field-based common garden studies. Topics covered include adaptation and constraint, phenotypic plasticity, life history evolution, ecological speciation, and evolutionary conservation biology. Lectures, assignments, and discussions will explore theoretical and recent empirical advances in the field.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in BIOL 2227.

BIOL 3115. Disturbance Ecology. 3 Credit Hours.

Nature is dynamic, and ecosystems across the globe are defined by their disturbance regimes. Disturbances can be caused by storms, floods, fire, and species interactions. Disturbances can reset an ecosystem and understanding resilience to disturbance is a cornerstone of contemporary ecology. Further, as climate change alters the frequency and severity of storms and other natural events, disturbance regimes are changing, and understanding these dynamics can help predict and mitigate future impacts. In this course students will learn the conceptual foundations of disturbance ecology, while having hands-on opportunities to study disturbance dynamics in the field. Training in field methods and data analysis will be provided. This course is taught at the Temple Ambler Field Station on the Ambler Campus, with natural areas that recently incurred damage from an EF2 tornado. Students should expect to be outdoors regularly, learning about ecological disturbance and recovery as it unfolds in these environments in real time. Students without the designated prerequisites may be considered for registration with instructor permission.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (BIOL 1111, BIOL 1911, BOT 1112 (C or higher), or HORT 1211)

BIOL 3128. Genomics and Infectious Disease Dynamics. 3 Credit Hours.

This course is typically offered in Fall.

Events such as the emergence of avian flu have increased public awareness about the need for incorporating ecology and evolution in decision-making processes that involve infectious diseases. It is evident for the public health community that molecular information, together with concepts from ecology and evolutionary biology, allows for testing of hypotheses and exploration of scenarios that otherwise could not be investigated by traditional epidemiological approaches. Understanding the ecological and evolutionary dynamics of infectious diseases requires the integration of information across organizational levels at various temporal and/or spatial scales. This requirement, together with novel molecular evolution, genomics, and mathematical modeling approaches, has positioned research on Genomics and Infectious Diseases Dynamics at the forefront of Public Health Genomics. The goal of this class is to discuss some of the biological processes leading to the emergence and re-emergence of infectious diseases stressing on evolutionary concepts within an epidemiological context. Basic concepts will be provided by the instructor as part of formal lectures. Our general objective (integrating evolutionary biology into epidemiology) will be fulfilled by discussing research articles. Such discussions will take place during the second half of the semester. "Emerging" perspectives such as One Health and Public Health Genomics will be integrated into the lectures and discussions.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, 'Y' in BIO3, or 'Y' in BIOW) and (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, or 'Y' in BIOW)

BIOL 3181. Cooperative Research in Biochemistry. 3 Credit Hours.

This course is typically offered in Fall, Spring, Summer I and Summer II.

Independent research carried out in an off-campus laboratory. A Biochemistry faculty member and the research director of the off-campus laboratory will jointly supervise research. Written permission must be obtained in advance from the supervising faculty member and one of the co-administrators. Student must present a seminar on campus describing the scientific aims of the project, the experimental design, and the conclusions drawn from the experiments. NOTE: Restricted to Biochemistry majors enrolled in the Cooperative Program.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Biochemistry.

Repeatability: This course may be repeated for additional credit.

BIOL 3201. Human Genetics. 3 Credit Hours.

This course is typically offered in Fall.

The class provides an extensive overview of various human genetics topics, including classical Mendelian genetics, molecular genetics and population genetics. We will delve into questions such as: what does human genome look like? What are the individual differences and how do they translate into phenotypic traits that affect our lives? How do we inherit and transmit this information? How do researchers study our genetic material and how do they find genes responsible for various diseases? What are the dynamic forces that shape genetic composition of human populations and why is it important to understand it? What have we learned about the past of human populations? Finally, is the ability to decipher the genome the ultimate tool to tell the future and are there any ramifications we should be cautious of? The class will integrate lectures and in-class discussion of scientific literature. This course will build upon the basic genetic knowledge acquired in BIOL 2207 (Genetics) and BIOL 2297 (Research Techniques in Genetics).

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((BIOL 2207 and BIOL 2297) or BIOL 2296)

BIOL 3204. Cell Structure and Function. 4 Credit Hours.

This course is typically offered in Fall.

The chemistry and biological functions of important small molecules and macromolecules of the cell. Concept: the functions of cells are rooted in structures, and the structures themselves derive their characteristics from their chemical components. There are weekly laboratories that emphasize hands-on experience with living material. Prior to Fall 2023, this course was taught as a WI-course, BIOL 3096.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, 'Y' in BIO3, or 'Y' in BIOW), (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, 'Y' in BIO4, or 'Y' in BIOW), (CHEM 2201 (may be taken concurrently) or CHEM 2921 (may be taken concurrently)), and (PHYS 1021 (may be taken concurrently), PHYS 1061 (may be taken concurrently), PHYS 1961 (may be taken concurrently), PHYS 2021 (may be taken concurrently), or PHYS 2921 (may be taken concurrently))

BIOL 3211. Human Evolution. 3 Credit Hours.

Since we last shared a common ancestor with chimpanzees, over 6 million years ago, the human species experienced a series of unusual adaptations so that today humans dominate planet earth and are masters of arts and letters, science and technology. Humans are both highly intelligent and highly social, so that when we work together extraordinary and unpredictable things can happen. This course will cover the evolutionary history of humans from both phenotypic and genotypic perspectives.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, 'Y' in BIO3, or 'Y' in BIOW) and (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, 'Y' in BIO4, or 'Y' in BIOW)

BIOL 3212. Introduction to Bioinformatics and Computational Biology. 3 Credit Hours.

Introduction to Bioinformatics and Computational Biology presents students without a computational background with an initial presentation of the biological questions that can be addressed computationally using mostly online tools. Beginning with an introduction to the scientific hypothesis testing and computational biology, students will subsequently be introduced to searching the scientific literature and biological datasets and databases, concepts in the organization of genes and genomes, sequence searching (BLAST), pairwise and multiple sequence alignment, phylogenetic tree reconstruction, protein structure and homology modeling, and finally modeling function in metabolic pathways. This course is designed as an applied course and as a prerequisite for more advanced conceptual and technological courses in the department.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, 'Y' in BIO4, or 'Y' in BIOW)

BIOL 3214. Theoretical Population Genetics. 3 Credit Hours.

This course explores the causes and consequences of genetic variation within and between populations. We can now obtain large-scale genetic variation data from a variety of species, and this data can be used to make inferences about demographic history, natural selection, gene flow, and a variety of other evolutionary processes. This course focuses on developing the theoretical machinery necessary to understand the factors that shaped the observed genetic variation, and examines how patterns of genetic variation inform our understanding of those forces. By developing probabilistic models of evolution based on coalescent theory and diffusion theory, students in the course will learn to apply statistical methods such as maximum likelihood and Bayesian inference to genetic data. Students will also gain familiarity with commonly used population genetics software.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1042, MATH 1942, MATH 1044, or 'Y' in MATW) and BIOL 3101.

BIOL 3225. Evolutionary Genetics. 3 Credit Hours.

This course is typically offered in Spring.

This class covers fundamental principles of population and comparative genetics with special attention given to recent advances in genomics. The scope of the class ranges from understanding variation at the population level to addressing species-level questions. Topics covered include classical population genetics, quantitative genetics, comparative genomics, phylogenomics and speciation. Lectures, assignments and discussions will explore theoretical and recent empirical advances.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((BIOL 2207 and BIOL 2297) or BIOL 2296) and (MATH 1042, MATH 1044, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), 'Y' in MA07, or 'Y' in MATW)

BIOL 3232. Behavioral Genetics. 3 Credit Hours.

This course is typically offered in Fall.

This course is an introduction to the interdisciplinary field - behavioral genetics - that combines behavioral sciences and genetics and unifies the long-standing debate on what underlies complex human behavior: "nurture" or "nature." This course will discuss the genetic approaches used to dissect out the genetic determinant of complex human traits. For example, students will learn about genes that influence learning and memory, intelligence (IQ), cognitive disabilities, personality disorders, psychopathology, antisocial behavior, substance abuse, and sexual orientation. In addition, the interplay of environment and genetic factors that create individual differences in behavior will be explored. Because this field represents the intersection between what is known and what might be known in the future about complex and potentially controversial behaviors and characteristics, students will be encouraged to discuss contemporary ethical issues regarding human behavior in realm of the scientific evidence presented.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((BIOL 2207 and BIOL 2297) or BIOL 2296)

BIOL 3241. Genomics and Evolutionary Biology of Parasites and Other Dependent Species. 3 Credit Hours.

This course is typically offered in Spring.

All known multicellular organisms harbor diverse assemblages of dependent species, many of which are considered parasites or pathogens. Yet, in spite of a growing awareness of the importance of dependent species in biodiversity and medicine, many studies are limited to assessing the consequences to their hosts. The goal of this seminar is to discuss some of the biological processes leading to the diversity of dependent species and their functional/evolutionary relationships with their hosts. This general objective will be fulfilled by discussing research articles on the genomics and evolution of dependent species, many of them considered parasites or pathogens. Students are also expected to gain proficiency in writing scientific review papers.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, 'Y' in BIO4, or 'Y' in BIOW) and BIOL 2227.

BIOL 3243. Parasitology. 4 Credit Hours.

This course is not offered every year.

This course will introduce students to the basic concepts of parasitology, including types of animal associations, adaptations to parasitic mode of life, and evolution of parasitism. Parasite life cycles (infection, transmission, pathology, symptoms, diagnosis, treatment) and control of medically and economically important parasites are the main emphasis of this course. Includes a laboratory.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, 'Y' in BIO3, or 'Y' in BIOW) and (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, 'Y' in BIO4, or 'Y' in BIOW)

BIOL 3244. Experimental Marine Biology. 4 Credit Hours.

This course is typically offered in summer.

Experimental Marine Biology is an upper level Biology course focused on the types of experiments that are used to further the science of Marine Biology. The course will be structured around three themes: Oceanography, Physiology, and Ecology. The Oceanography section will examine the marine environment in terms of the physics of current flow and the chemical properties of seawater. The Physiology section will examine how different organisms respond to these abiotic factors. In the Ecology section, we will discuss how organisms interact with each other as individuals and populations, and how communities and ecosystems are structured.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, 'Y' in BIO3, or 'Y' in BIOW)

BIOL 3245. Marine Ecology. 4 Credit Hours.

This course is occasionally offered in Fall.

A survey of the concepts of aquatic ecology in estuarine and marine ecosystems, emphasizing the organization and maintenance of the major aquatic communities in response to the physical, chemical, and biological characteristics of the environment, modes of energy transfer, physiological adaptation, life history characteristics, and functional morphology. Laboratory exercises stress comparative measurement of biological diversity in the marine environment. NOTE: One or more field trips required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in BIOL 2227.

BIOL 3254. Animal Behavior. 3 Credit Hours.

This course is typically offered in Spring.

This course will examine how animals behave, and investigate the proximate (neurological and developmental) and ultimate (functional and evolutionary) explanations for these behaviors. The ecological and evolutionary processes that shape animal behavior will be examined through the study of classic theories and major principles of animal behavior, including a weighing of the experimental and observational evidence for each idea. Concepts will be illustrated with examples from a wide range of taxonomic groups of animals in diverse ecosystems, and emerging theories in animal behavior will be discussed. We will conclude with applications of animal behavior for conservation.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 2227, BIOL 3101, or 'Y' in BIO5)

BIOL 3255. Critical Thinking in Biology. 3 Credit Hours.

The course is designed to improve students' critical thinking in broad areas of biology. Introductory lectures outline the elements and criteria that compose critical thinking, followed by student presentations and discussions based on the primary literature to promote development of this type of thinking in each student. For each session of class, one student will lead the discussion. Discussions will range in content from evolution to ecology and from molecular biology to the pathogenesis of human and animal diseases. Student presentations (one per student), twice weekly homework assignments (20 total), and oral participation in the scientific presentations throughout the semester will be used for grading.

Department Restrictions: Must be enrolled in one of the following Departments: CST:Biology.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Biology.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, or 'Y' in BIOW), (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, or 'Y' in BIOW), and (CHEM 2201, CHEM 2921, CHEM 2202 (may be taken concurrently), or CHEM 2922 (may be taken concurrently))

BIOL 3265. Developmental Biology. 3 Credit Hours.

This course is typically offered in Fall.

This course provides an introduction to invertebrate and vertebrate development. It combines the description of classical examples of experimental embryology with the current study of the mechanisms of development, differentiation, and growth in animals at the molecular, cellular, and genetic levels. Topics covered include embryonic patterning, cell-cell interactions, growth factors and signal transduction, transcriptional control mechanisms and regulatory network, evolutionary mechanisms as well as the discussion of relevant diseases.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((BIOL 2207 and BIOL 2297) or BIOL 2296)

BIOL 3268. Fundamentals of Cell and Cancer Biology. 3 Credit Hours.

This course examines cellular structures and biochemical pathways including those that, while mutated, lead to cellular transformation and formation of cancer.

Repeatability: This course may not be repeated for additional credits.

BIOL 3275. Ecology of Invasive Species. 3 Credit Hours.

This course is typically offered in Fall.

Species that are transported by humans from their native range and successfully establish and spread in a new environment are called invasive species. Invasive species can cause significant ecological and economic impacts and are a growing threat to native species and ecosystems across the globe. Recognition of this problem has led to a recent surge in research on invasive species and a better understanding of the ecology of invasions and approaches for improved prevention and control. Yet many challenges still hinder scientific and applied advancements in this emerging field. In this course we will investigate these challenges and the science of invasive species using interactive activities and student-driven projects.

Course Attributes: SE, SF, SP

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 2227 or 'Y' in BIO5)

BIOL 3301. Advanced Cell Biology. 3 Credit Hours.

This course is typically offered in Fall.

Fundamental knowledge in cell biology will be discussed. Topics include DNAs, RNAs, proteins, cell structure, cell motility, bio-membrane, endocytosis, nucleocytoplasmic transport, vesicular transport, cancers, visualizing macromolecular trafficking in cells with advanced microscopy imaging techniques, and stories of Nobel Prize Winners. Current journal articles reporting up-to-date developments in molecular cell biology will be covered as well. (Prior to Fall 2016, this course was titled "Cell Biology.")

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 3204 or BIOL 3096)

BIOL 3307. Conservation Biology. 3 Credit Hours.

This course is typically offered in Fall.

The Earth harbors an incredible diversity of species and communities, most still poorly understood by science. This biodiversity is essential to the functioning of natural ecosystems and provides a wide array of priceless services to people today and a treasure of benefits for the future. Yet human threats to biodiversity have led us to the brink of the sixth major extinction event in Earth's history. Which populations, species, communities, and ecoregions are most diverse? Which are most threatened, and by which human activities? What is the contribution of biodiversity to human livelihoods? What does the science suggest is needed to conserve biodiversity? How might this best be done given social, economic, and political realities? These questions and more will be examined in this course, focusing on the key principles of conservation biology and the application of those principles to local, national, and international examples.

Course Attributes: SE, SF, SP, SS

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in BIOL 2227.

BIOL 3311. Herpetology. 4 Credit Hours.

This course is typically offered in Spring.

Reptiles and amphibians comprise nearly 7,400 species and can be found on every major and minor landmass in the world except Antarctica. This course will provide a broad, evolutionary survey of the major groups of reptiles and amphibians ("herps"). We will cover topics about their basic biology, including anatomy, physiology, ecology, behavior, and conservation. The laboratory will emphasize taxonomic characters and identification of living and preserved specimens, with emphasis on species found in North America. Additionally several field trips (conducted during lab hours and spring break) will reinforce course material through hands-on experience.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, 'Y' in BIO3, or 'Y' in BIOW) and (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, 'Y' in BIO4, or 'Y' in BIOW)

BIOL 3312. Biostatistics. 3 Credit Hours.

Students will learn the basic tools of statistical analysis for raw data and learn how to apply and interpret the analysis for the type of experiments they will encounter in biology. They will have opportunities to work with raw data using available computer tools such as EXCEL and SPSS.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1042, MATH 1044, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW), (BIOL 1111, BIOL 1911, 'Y' in BIO3, or 'Y' in BIOW), and (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, 'Y' in BIO4, or 'Y' in BIOW)

BIOL 3316. Tropical Marine Biology. 4 Credit Hours.

This course is typically offered in Fall of odd years.

A survey of marine biology focusing on coral reefs of the Atlantic Ocean. Course lectures given at Temple University include regular meetings during the fall semester plus some meetings between semesters during December and January. The course work at Temple is supplemented by a required week of lectures, field trips and field projects on Ambergris Caye in Belize (Central America). Lecture topics include coral biology, reef geology and ecology, coral reef biota, food webs and nutrient transfer in coral reefs, reef community organization, the biology of reef fishes, commensal and symbiotic interactions of reef organisms, and other appropriate topics. Group projects and presentations are required. Additional requirements include a current passport and snorkeling equipment. NOTE: Requires fall plus inter-session attendance, including air travel to a foreign country between fall and spring semesters. Room, board, and boat use in Belize are covered by the course fee; air transportation to Belize is not included. The course web site survey or an application available from the instructor must be completed prior to registration.

Course Attributes: SE, SI

Repeatability: This course may not be repeated for additional credits.

BIOL 3317. General Microbiology. 4 Credit Hours.

This course is typically offered in Spring.

A general survey of bacteria and archaea. Topics include: classification; physiology, growth, and environmental impact; genetics and gene recombination; evolutionary relationships. Laboratory topics include pure culture, identification, growth characteristics, and genetics.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 3204 or BIOL 3096)

BIOL 3321. Plant Community Ecology. 3 Credit Hours.

This course is typically offered in Fall.

This class focuses on fundamental principles in community ecology as they relate to plant systems. The scope of the class ranges from plant-environment interactions and species interactions, to the relationship among communities at larger spatial scales. Lectures and small group discussions will also highlight theoretical and empirical advances made in ecology through classic and contemporary studies of plant communities.

Course Attributes: SE, SI, SS

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in BIOL 2227.

BIOL 3322. Biology of Plants. 3 Credit Hours.

This course is typically offered in Fall.

Plant Biology examines the current cellular, molecular and developmental aspects of higher plants, with an emphasis on Arabidopsis and maize. Topics include plant reproduction, embryonic pattern formation in plants, self-incompatibility, sex chromosomes in plants, polyploidy, chemical signaling in plants including PIN efflux carriers, phytochromes and cryptochromes, chloroplast structure and function, the light reaction of photosynthesis, stem cell populations in plants, leaf morphogenesis, flower development, DNA and histone methylation and epigenetics, RNA silencing in plants, plant genomics, plant viruses, and genetic engineering of monocot and dicot plants.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, or 'Y' in BIOW)

BIOL 3323. Global Change Science: Analytics with R. 3 Credit Hours.

Learn how researchers use data to tackle global problems such as climate change, mass extinction, pandemics, and poverty. Explore interdisciplinary data, from economics to public health, and learn a marketable skill: R, an intuitive computer language. The course is project based, no prior coding experience is necessary, and no tests are given. Instead, student assessment is on project progress and communication of a global change problem of their choice. The most successful students leave class with the quantitative skills to go out and solve our most pressing problems.

Course Attributes: SE, SI, SS

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, or 'Y' in BIOW) and BIOL 2227.

BIOL 3324. Molecular Biology. 3 Credit Hours.

This course is typically offered in Fall.

A comprehensive introduction to molecular genetics and the biochemistry of DNA, RNA, and proteins. The structure and expression of genes in both prokaryotes and eukaryotes will be discussed with special emphasis on DNA replication, transcription, and translation. Current journal articles covering recent developments in modern molecular biology and genetic engineering will be covered.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((BIOL 2207 and BIOL 2297) or BIOL 2296) and (CHEM 2202, CHEM 2212, or CHEM 2922)

BIOL 3325. Research Techniques in Molecular Biology. 3 Credit Hours.

This course is typically offered in Spring.

Instruction in the techniques used in modern molecular biology and molecular genetics. This course takes a problem-oriented approach toward teaching the methods of DNA and RNA analysis that are used in determining the structure and function of genes. Practical experience in the preparation of DNA, modern cloning methods, restriction enzyme mapping, hybridization analysis, DNA sequencing, and PCR techniques will be provided. Students will carry out a research project during the course. NOTE: Biology 3324 is highly recommended, but not required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((BIOL 2207 and BIOL 2297) or BIOL 2296)

BIOL 3327. Immunology. 3 Credit Hours.

This course is typically offered in Spring.

The purpose of the Immunology course is to provide a comprehensive overview of the immune system that in its normal function protects each of us from the harmful effects of microbial invaders. The lectures will describe the general properties and development of immunity, the condition of being protected from infection by microorganisms or the effects of foreign molecules. They will provide systemic coverage of immune responses to viruses, bacteria, protozoa and roundworms as well as the practical aspects of vaccine development. Additional lectures will include a description of various types of primary immunodeficiencies, most prevalent autoimmune disease and cancer.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((BIOL 2207 and BIOL 2297), BIOL 2296, BIOL 3204, or BIOL 3096)

BIOL 3328. Virology. 3 Credit Hours.

This course is typically offered in Fall.

The role of viruses in human diseases, and their potential as tools for research and clinical interventions. The course will focus on virus-induced diseases in man including polio, rabies, hepatitis, herpes, and influenza; recently discovered viruses such as HIV and HTLV-1 will also be studied. Virus-host interactions and the mechanisms involved in disease progression, therapeutic strategies, and vaccines, strategies for viral entry, evasion of the immune system, transmission, and the subversion of host-cell machinery will be emphasized. Potential uses of viruses as vector for gene therapy of genetic disorders, cancers, and infectious diseases will also be discussed.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((BIOL 2207 and BIOL 2297) or BIOL 2296) and (BIOL 3204 or BIOL 3096)

BIOL 3329. Developmental Genetics. 3 Credit Hours.

This course is not offered every year.

The role of genes during the periods of determination and differentiation in eukaryote development. Emphasis on the regulation of gene function and the relationship between gene function and the molecular and developmental interactions that culminate in the adult phenotype.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((BIOL 2207 and BIOL 2297) or BIOL 2296) and (BIOL 3204 or BIOL 3096)

BIOL 3333. Advanced Techniques in Microscopy. 4 Credit Hours.

This course is typically offered in Spring.

A survey of modern techniques in microscopy. Students will acquire a thorough grounding in general principles of optics and their application to the microscope. We will cover the theory of many methods current in Biology and Medicine, including: phase, interference contrast, and fluorescence microscopy, confocal microscopy, video microscopy, and digital image processing and analysis. This course includes extensive laboratory experience.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 3204 or BIOL 3096)

BIOL 3334. Mammalian Physiology. 4 Credit Hours.

This course is typically offered in Spring.

Emphasis on the physiology of normal animals; consideration of disease states as counter-illustrations. Certain comparative aspects of physiology are introduced. Discussions of function extend to the physical and biochemical level.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, 'Y' in BIO3, BIOE 3725, or 'Y' in BIOW), (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, 'Y' in BIO4, BIOE 3725, or 'Y' in BIOW), (CHEM 1032, CHEM 1952, or 'Y' in CHM2), (MATH 1042, MATH 1044, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW), and (PHYS 1022 (may be taken concurrently), PHYS 1062 (may be taken concurrently), PHYS 2022 (may be taken concurrently), or PHYS 2922 (may be taken concurrently))

BIOL 3335. Life at the Extremes - Polar Biology. 3 Credit Hours.

"Life at the Extremes - Polar Biology" is an introduction to polar environments and the biology of aquatic and terrestrial organisms adapted to live in the Arctic and Antarctic. Similarities and differences between the poles as well as anthropogenic impacts on these remote environments will be addressed. Comparisons to other extreme environments will be included.

Course Attributes: SE, SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, or 'Y' in BIOW) and (BIOL 1112 (may be taken concurrently), BIOL 1912 (may be taken concurrently), BIOL 2112 (may be taken concurrently), BIOL 2912 (may be taken concurrently), or 'Y' in BIOW)

BIOL 3336. Freshwater Ecology. 4 Credit Hours.

This course is typically offered in Fall of even years.

The interrelationships between biological, chemical, and physical factors in freshwater environments. Lectures and laboratories address general ecological principles (population dynamics, community structure, energy flow, and nutrient cycling) as they apply to plants and animals in lakes, ponds, streams and wetlands. NOTE: Students are required to participate in up to two field trips, one of which includes weekend travel.

Course Attributes: SE, SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in BIOL 2227.

BIOL 3337. Comparative Biomechanics. 3 Credit Hours.

This course is typically offered in Fall.

An overview of biomechanics with emphasis on locomotion. Students gain a working knowledge of the breadth of biomechanical study ranging across organismal and environmental scales.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, 'Y' in BIO3, or 'Y' in BIOW), (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, 'Y' in BIO4, or 'Y' in BIOW), (MATH 1042, MATH 1044, MATH 1942, MATH 1951, 'Y' in MA07, or 'Y' in MATW), and (PHYS 1021, PHYS 1061, PHYS 1961, PHYS 2021, or PHYS 2921)

BIOL 3352. Systems Neuroscience. 3 Credit Hours.

This course is typically offered in Fall and Spring.

Study of the structure and function of the central nervous system (CNS) with a focus on the functional brain at a systems level. Systems level questions include how circuits are formed and used anatomically and physiologically to produce physiological functions, such as reflexes, sensory integration, motor coordination, emotional responses, learning and memory.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, 'Y' in BIO3, or 'Y' in BIOW), (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, 'Y' in BIO4, or 'Y' in BIOW), (CHEM 2201 (may be taken concurrently) or CHEM 2921 (may be taken concurrently)), and (MATH 1042, MATH 1044, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), 'Y' in MA07, or 'Y' in MATW)

BIOL 3354. Neural Basis of Animal Behavior. 3 Credit Hours.

This course is typically offered in Fall.

An exploration of the relationship of neural activity and connectivity to behavior. Topics include motor control, object recognition, and feedback. Examples from both vertebrate and invertebrate species. Analytic and synthetic approaches.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in BIOL 3352.

BIOL 3356. Organization and Development of the Nervous System. 3 Credit Hours.

This course is typically offered in Spring.

This course covers developmental and anatomical aspects of the nervous system. The relationship of form to function will be studied in a variety of both invertebrate and vertebrate systems. The course is intended to complement Neurobiology 3352 (0352)/5452 (0452) so that students will have a perspective on neuroscience ranging from the molecular to the systems level.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 3204 or BIOL 3096)

BIOL 3358. Cellular and Molecular Neuroscience. 3 Credit Hours.

This course is typically offered in Spring.

The course will focus on the molecular and cellular basis of neurological processing. The fundamentals of action potential generation, synaptic and receptor potentials generation and neuron-neuron communication will be discussed. The contemporary understanding of sensory processing will be covered in great detail with a particular focus on molecular sensors of light, sound, odorants, taste and touch and the signal transduction pathways that underlie the five senses.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 3204 or BIOL 3096) and BIOL 3352.

BIOL 3361. Molecular Neuropharmacology. 3 Credit Hours.

This course will be offered every year in the Fall semester.

In this course we will examine how drugs interact with the nervous system. We will focus specifically on the cellular and molecular actions of drugs on synaptic transmission as a mechanism for understanding the structure and function of the synapse. In addition, we will discuss how toxins and venoms affect synaptic transmission in nature as well as how they have been (and continue to be) used as research tools. We will study the neural substrates of drug action and the sequence of events from how a drug binds initially to its molecular target(s), the resulting changes in the function of its target, the influence of these changes on biochemical networks in neurons, the subsequent alterations in neuronal output, and in the circuit, including non-neuronal cells. Students will be able to appreciate the progress in the discovery of drugs used to treat complex behaviors as well as major neural disorders (neuroinflammation, pain, migraine, sleep, neurodegeneration, addictive disorders, schizophrenia, etc.). In addition, we will learn about the process of drug approval (preclinical, clinical trials, drug monitoring, and FDA's role).

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in BIOL 3352.

BIOL 3363. Mammalian Development. 3 Credit Hours.

This course is not offered every year.

This course covers normal and abnormal embryonic and fetal development; sources of totipotent, pluripotent and determined embryonic and fetal stem cells; the production of gynogenotes and androgenotes and the evaluation of these embryos to determine the contribution of maternal and paternal genomes to the developing embryo; epigenetic and X chromosome imprinting; the use of transgenes to correct genetic defects in developing embryos; and the function of specific genes in determining body pattern.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in BIOL 3265.

BIOL 3364. Theory and Applications of Cancer Biology. 3 Credit Hours.

Students will be working at the Sbarro Institute for Cancer Research and Molecular Medicine, in collaboration with the Department of Medicine, Surgery and Neurosciences at the University of Siena. The program is overseen by Dr. Antonio Giordano, MD, PhD, Temple University professor and director of the Sbarro Health Research Organization, Dr. Luigi Pirtoli, MD, PhD, professor and director of the Radiation Oncology Unit at the University Hospital of Siena, and faculty and researchers at the University of Siena. Students will begin the program at the IES Abroad Siena Center with a comprehensive orientation, before beginning their six weeks of research. Throughout the program students will participate in cultural field trips, basic Italian language training and guided visits to Italian hospitals or labs. NOTE: This course may only be taken by students accepted into the Temple Education Abroad Summer in Italy Siena Biomedical Research Program.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111 or BIOL 1911), (BIOL 1112, BIOL 1912, BIOL 2112, or BIOL 2912), and ((BIOL 2207 and BIOL 2297), BIOL 2296, BIOL 3204, or BIOL 3096)

BIOL 3365. The New Neuroimmunology. 3 Credit Hours.

This course is typically offered in Spring.

It is now recognized that there is extensive communication between the immune and nervous systems. This course will examine the mechanisms and effects of this communication. Potential topics include effects of immune molecules on neuronal synaptic structure and function over the lifespan, and the implications for learning and memory; the biological basis of sickness behavior and links to depression and PTSD; possible effects of the microbiome on brain development and function; and links between immune deregulation and neurodegenerative disease.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in BIOL 3352.

BIOL 3366. Applications of Biotechnology to Historical Preservation. 3 Credit Hours.

This course is central to the Temple Summer in Sicily Study Abroad experience, the Sicily Applied Biotechnology Program. In collaboration with Prof. Franco Palla, coordinator of the 5-year degree in conservation of cultural heritage at the University of Palermo, Italy, students will apply the tools of enzyme biochemistry, protein purification and biochemical techniques, microbe specific metabolic pathways, and biotechnological techniques of DNA sequencing to artifact preservation and restoration. Students will visit specific archeological sites and receive demonstrations of preservation and restoration field work. Students in their sophomore or junior year of study in degree programs within the Biology or Chemistry departments are eligible. Other students, particularly those in Engineering or Architecture programs, may also be considered.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, 'Y' in BIO3, or 'Y' in BIOW) and (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, 'Y' in BIO4, or 'Y' in BIOW)

BIOL 3367. Endocrinology. 3 Credit Hours.

This course is typically offered in Fall.

Broad coverage of "chemical messengers," occurrence, biochemistry, and physiology. Vertebrate endocrinology with minor treatment of invertebrates and plants.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 3204 or BIOL 3096)

BIOL 3368. Biology of Cancer. 3 Credit Hours.

This course is typically offered in Spring.

This course will survey the categories of tumors and their varying natures. Known mechanisms that lead to tumor cell development, multistep tumorigenesis, metastasis, tumor immunology, and cancer treatments will be examined in depth.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((BIOL 2207 and BIOL 2297) or BIOL 2296) and (BIOL 3204 or BIOL 3096)

BIOL 3369. Approaches to Disease Modeling, Diagnosis and Therapy. 3 Credit Hours.

This course is typically offered in Summer.

This course is divided into three stages. The first stage describes current and developing techniques for the study of the pathogenesis and progression of various diseases, along with new models for drug screening and the potential application of stem cells for tissue regeneration and/or repair. The pathological conditions comprise neurological diseases, genetic disorders and cancer. One specific topic is the current status of late stage clinical trials for the treatment of Alzheimer's disease. The second stage focuses on the latest modalities for diagnosis and prognosis of cancer: detection of tumor markers, circulating tumor cells and circulating tumor DNA. The third stage discusses cancer therapy: drug discovery and/or development, mechanisms of drug resistance in malignant cells, gene therapy, radiation therapy and immunotherapy.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, 'Y' in BIO3, or 'Y' in BIOW) and (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, 'Y' in BIO4, or 'Y' in BIOW)

BIOL 3371. Cell Proliferation. 3 Credit Hours.

This course is typically offered in Spring.

Cell proliferation and its control: model systems, comparisons of proliferating cells with non-proliferating cells, controls of cell division and genomic stability and how that control is modified in proliferative diseases such as cancer, and the relationships between proliferation and differentiation.

Readings will be taken from the literature.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((BIOL 2207 and BIOL 2297) or BIOL 2296) and (BIOL 3204 or BIOL 3096)

BIOL 3372. The Molecular Regulation of Cell Migration and Morphogenesis During Development and Disease. 3 Credit Hours.

How cells move and how this process is regulated remains an active area of study. Disruption of cell migration is known to be causative for numerous human pathologies, and as such a major emphasis in the biological sciences is to discern and understand both the mechanisms and logic that drive such cellular migration. This course is an advanced cell biology course that will broadly examine how cell migration is controlled. Students will examine key signaling pathways that regulate cell polarization, cytoskeletal reorganization, cell adhesion and changes to the extracellular matrix for cell migration. Examples of cell migration and morphogenesis will be drawn from both developmental and diseases-based examples to illustrate both the mechanisms and roles of these key processes.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 3204 or BIOL 3096)

BIOL 3373. Cell Signaling. 3 Credit Hours.

This course is typically offered in Spring.

The communication among cells is essential for the regulation of the development of an organism and for the control of its physiology and homeostasis. Aberrant cellular signaling events are often associated with human pathological conditions, such as cancer, neurological disorders, cardiovascular diseases and so on. The full characterization of cell signaling systems may provide useful insights into the pathogenesis of several human maladies. (Prior to spring 2017, this course was titled "Cell Signaling and Motility.")

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 3204 or BIOL 3096)

BIOL 3374. Physical Biochemistry. 3 Credit Hours.

This course is typically offered in Spring.

Physical Biochemistry emphasizes physical techniques that are used in modern biochemical research. Topics include proteomics, protein structure, protein folding, protein misfolding in neurological disorders, interaction of light with proteins including optogenetics, the light reaction of photosynthesis, nitrogen fixation, absorption spectroscopy, emission spectroscopy, bioluminescence and BRET, MALDI-TOF mass spectrometry, NMR spectroscopy, natural and artificial membranes, and single molecule methods in biochemistry.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, 'Y' in BIO4, or 'Y' in BLOW), (MATH 1042, MATH 1044, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), 'Y' in MA07, or 'Y' in MATW), (PHYS 1061, PHYS 2021, or PHYS 2921), and (CHEM 1034 or CHEM 1954)

BIOL 3379. Biotechnology. 3 Credit Hours.

This course is typically offered in Spring.

This course is designed to survey current issues in technologies including therapeutics and diagnostics, and to examine consequences of developments in this area. The course is designed in a Problem Based Learning format, where students research critical areas and provide oral and written reports for other members in the class. The course is organized by topics including Concepts in Genetics, Cloning and Ethics, Gene Therapy, Prenatal Diagnosis, Gene Therapy for Cancer, Cell Replacement Therapy, Genomics and Proteomics, Vaccines, Forensics, Plant Biotechnology, and Instrumentation. At the end of the course, each student makes a formal presentation on a specific advance in biotechnology.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ((BIOL 2207 and BIOL 2297) or BIOL 2296) and (BIOL 3204 or BIOL 3096)

BIOL 3380. Contemporary Biology. 3 Credit Hours.

This course is typically offered in Fall and Spring.

Advanced discussion of selected topics.

This course is repeatable for credit.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, or 'Y' in BLOW) and (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, or 'Y' in BLOW)

BIOL 3389. Field Research in Community Ecology. 3 Credit Hours.

Many fundamental advances in community ecology have emerged from creative, well-designed field studies in natural ecosystems. Field research is therefore a cornerstone of contemporary community ecology. Through this course taught at Temple's Ambler Campus, students will gain hands-on experience designing and conducting field research in community ecology as the lab component of the course. While some activities will be in a classroom, most lab activities will be held outdoors, in the natural environments around Ambler Campus.

Course Attributes: SE, SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1011, BIOL 1111, or BIOL 1911)

BIOL 3396. Scientific Writing for Biology: The Art of Communicating. 3 Credit Hours.

This course is designed for upper-level undergraduate students majoring in a natural science. This seminar course teaches students how to communicate scientific information in written and oral (PowerPoint) formats clearly and succinctly. The development and refinement of the primary research article represents the core of the course; however, other genres of scientific writing (and audiences) are explored. In addition, students develop their skills as revisers, editors, and reviewers through in-class exercises that focus on giving (and receiving) constructive criticism. As part of a secondary goal of the course, other professional forms of writing (e.g., cover letters, personal statements, and resumes) as well as careers in scientific writing are discussed.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((BIOL 2207 and BIOL 2297), BIOL 2296, BIOL 3204, or BIOL 3096)

BIOL 3403. Genomic Biology. 3 Credit Hours.

This course will cover the process of gene inheritance and descriptions of genome structure, as well as a discussion of gene content and function across lineages. Students will learn about genome-related technologies, including genome sequencing. They will also learn about how genomes vary across species, as well as the forces driving these evolutionary changes. A significant part of the course will cover genome-level data analyses, and students will complete assignments and exams to demonstrate understanding of the information present in genomes and how we know it. Note: Prior to fall 2016, the course title was "Genomics." Prior to fall 2015, the course title was "Genomics and Proteomics."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((BIOL 2207 and BIOL 2297), BIOL 2296, BIOL 3101, or BIOL 3212)

BIOL 3511. Pathophysiology of Genomic Medicine. 3 Credit Hours.

Genomics is now revolutionizing the practice of medicine such that almost every area of medicine has been affected. In this companion course to Genomic Foundations of Medicine, we will examine the molecular and cellular consequences of genomic variation in a medical context, focusing on pathophysiology and its impact on cellular and physiological functioning.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in BIOL 2512.

BIOL 3681. Cooperative Studies. 2 to 4 Credit Hours.

This course is typically offered in Fall, Spring, Summer I and Summer II.

Students obtain a job through the Cooperative Placement Office. Course grade based entirely on a research paper, related in subject matter to the job, and prepared under the supervision of a Biology Department faculty member. NOTE: The student is responsible for finding a departmental supervisor. For students enrolled in a Cooperative Program; not available for Biology elective credit. This course is not repeatable.

Repeatability: This course may not be repeated for additional credits.

BIOL 3685. Externship Studies. 3 Credit Hours.

This course is typically offered in Fall, Spring, Summer I and Summer II.

Students who are participating in a formal externship program may apply to receive credit for the experience. The program must require a minimum of 9 hours per week, and require a summary from the preceptor at the end of the experience. A faculty member of the Biology department shall serve as the liaison to the program. All students must obtain the approval of the Biology Undergraduate Committee prior to entering the externship. Students must have completed Biology 1111/1911 and Biology 1112/2912 or 2112/2912. NOTE: Grades will be on a credit/non-credit basis. Not available for major credit.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, 'Y' in BIO3, or 'Y' in BIOW) and (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, 'Y' in BIO4, or 'Y' in BIOW)

BIOL 3941. Honors Broader Impacts: The Art of Scientific Communication. 3 Credit Hours.

Honors Broader Impacts: The Art of Scientific Communication is an upper-level honors course designed to integrate students from different disciplines around a discussion of the interpretation and presentation of scientific results to the public. The course will begin with a motivation for public engagement in the sciences and how science and scientists are viewed by the public. This will include a discussion of the National Science Foundation requirements for the "Broader Impacts" of their submitted proposals. The course will continue with the presentation, evaluation, and discussion of various examples of scientific outreach including film, fine art, music, and museum exhibits, as well as direct communication outlets such as blogs, social media, and press releases. Over the course of the semester, the students will engage with each other in the discussion of what makes an effective science communication strategy and work together to develop materials that communicate scientific to a broad audience. This will ideally involve a pairing of CST graduate students with Honors undergraduates from a wide variety of disciplines.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

BIOL 4201. The Practice of Health Care: Competencies and Current Topics. 1 or 3 Credit Hour.

This course is designed for post-baccalaureate pre-health students in order to better prepare them to be compassionate, well-informed, and professional health-care providers in the current health-care system. The current health-care system is very complex, and the medical education system has to spend so much time teaching scientific and clinical information that it often does not have a substantial amount of time to devote to explicitly teaching the "unspoken curriculum" that all students are expected to learn. The "unspoken curriculum" includes topics such as teamwork, medical ethics, professionalism, and understanding medical literature. This course seeks to better prepare students to function well in the health-care system by exposing them to a wealth of relevant and interesting topics in the areas of professional development, medical ethics, recent research related to medical disorders, and the current state of medical practice.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Postbaccalaureate.

College Restrictions: Must be enrolled in one of the following Colleges: Science & Technology.

Repeatability: This course may not be repeated for additional credits.

BIOL 4218. Principles of Medical Genetics for Pre-Health Postbaccalaureates. 4 Credit Hours.

Understanding of genetics is central for many biological disciplines, including medicine. This course examines the basic principles and problems of classical, biochemical, and molecular genetics to enable the student to apply them in solving medical problems.

Repeatability: This course may not be repeated for additional credits.

BIOL 4233. Human Anatomy for Pre-Health Postbaccalaureates. 4 Credit Hours.

The fundamentals of human anatomical structure are examined. A primary goal will be the development of a comprehensive vocabulary, including the learning of Latin and Greek root words underlying medical terminology. Students will progress from a review of the history of anatomy; to the study of anatomy at the microscopic level of cells, organelles and tissues; and finally to the organ systems level. Muscular, skeletal, nervous, endocrine, cardiovascular, gastrointestinal and respiratory systems will be covered.

Repeatability: This course may not be repeated for additional credits.

BIOL 4234. Human Anatomy Lab for Pre-Health Postbaccalaureates. 1 Credit Hour.

This is a 1-credit lab to accompany the Human Anatomy Lecture 4233. It will emphasize the anatomical structures talked about in lecture. Students will dissect and make observations in order to identify major muscles along with their associated bones, nerves and arteries. In addition, after opening the thoracic and abdominal cavities students will identify the major organs of these cavities. Note: To register for this course, students must satisfy the prerequisite or obtain permission from the program director.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Postbaccalaureate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in BIOL 4233 (may be taken concurrently)

BIOL 4268. Fundamentals of Cell and Cancer Biology for Pre-Health Postbaccalaureates. 4 Credit Hours.

This course examines cellular structures and biochemical pathways including those that, while mutated, lead to cellular transformation and formation of cancer.

Repeatability: This course may not be repeated for additional credits.

BIOL 4275. Fundamentals of Medical Biochemistry for Pre-Health Postbaccalaureates. 4 Credit Hours.

Biochemistry is fundamental to understanding pathophysiology, pharmacology, and other medical sciences. This course delves into the principles of biomolecular structure and function, kinetics, bioenergetics, biosignaling, and metabolism to prepare the student for understanding the molecular basis of medicine.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Postbaccalaureate.

Repeatability: This course may not be repeated for additional credits.

BIOL 4291. Extradepartmental Research. 1 to 4 Credit Hour.

This course is typically offered in Fall, Spring, Summer I and Summer II.

Prerequisite: Senior standing with recommendation of a faculty sponsor. Students must obtain a sponsor on the Biology Department faculty to oversee their work and act as a liaison between the outside institution and the Biology Department. A student is eligible to apply for "Distinction in Biology" upon: 1) successful completion of 6 s.h. of a 4000-level Biology research course; 2) submission of a written report on the student's research to the faculty sponsor; and 3) a presentation on the student's research during the Biology Department's annual poster exhibition or another Temple University research symposium. Note: Not available for Biology major credit. This course is repeatable. Students wishing to complete additional credits of Biology 4291 beyond 6 s.h. may do so if they elect the CR/NC option.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

BIOL 4327. Biological Impacts of Global Climate Change. 3 Credit Hours.

This course is typically offered in Fall.

This course will use primary research articles to examine the biological impacts of climate change, often mentioned as the greatest challenge facing humanity today. The course will focus on the climate change impacts on coastal and marine ecosystems; water resources and freshwater ecosystems; food and agriculture; forests, grasslands and deserts; biodiversity and protected areas; and population, health and human well-being. In addition to the biology, we will consider the overlapping social, economic, and ethical concerns rising from the climate changes. Class time will be devoted to reflections and reactions to readings and news articles, case studies, student presentations and lectures.

Course Attributes: SE, SF, SP, SS

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, 'Y' in BIO3, or 'Y' in BIOW), (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, 'Y' in BIO4, or 'Y' in BIOW), and BIOL 2227.

BIOL 4338. Epigenetics. 3 Credit Hours.

This course is not offered every year.

The term "epigenetics" describes a heritable effect on chromosome or gene function that is not accompanied by a change in DNA sequence. Recent findings suggest an important role of epigenetics in both normal development and cancer. This course provides an overview of the field and examines selected phenomena in several eukaryotes, mechanisms regulating these effects, and their phenotypic consequences when normal regulation is lost. Topics include gene regulation through chromatin modification (acetylation, methylation), genomic imprinting, mechanisms of silencing (including small interfering RNAs), and the role of epigenetics in human diseases and cancer.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((BIOL 2207 and BIOL 2297), BIOL 2296, or 'Y' in BIO6) and (BIOL 3204, BIOL 3096, or 'Y' in BIO7)

BIOL 4341. Genome Editing. 3 Credit Hours.

Genome editing as such is not that new. Scientists have been "editing" genomes of bacteria, yeast and the mouse for some 30 years. Several recent technical advances, however, have pushed genome editing to the forefront of biological research. The first is discovery and development of nucleases, CRISPR/Cas9 in particular, which can be directed to cut DNA at just about any location. The second factor is a combination of stem cell technologies. They make it possible to produce stem cell out of many different tissues, which can then in turn be differentiated into various cell types, or carry out editing in the zygote. This will be a fast-paced seminar-like class. We will read and discuss primary research papers which describe advances relevant to the genome editing field, culminating in their application to edit the genomes of large mammals including the species *Homo sapiens*.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((BIOL 2207 and BIOL 2297) or BIOL 2296)

BIOL 4344. Research Techniques in Biochemistry. 4 Credit Hours.

This course is typically offered in Spring.

Laboratory instruction in techniques used to investigate biochemical problems. Techniques include spectrophotometry, various types of electrophoresis, separation of macromolecules, two-dimensional protein separation, affinity chromatography, isolation of plasmid DNA, Western Blot, immunoassay, enzyme kinetics, and radioisotope techniques. If time permits, students will be given a small research project.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 4401 or BIOL 4375)

BIOL 4364. Biochemistry of Embryogenesis. 3 Credit Hours.

This course is typically offered in Fall.

This course will compare and contrast key biochemical mechanisms of embryonic development in a variety of model organisms ranging from humans to plants. We will examine the roles of enzymes, peptides, small RNA molecules and chromatin structure during embryogenesis. Topics will include micro RNAs, modification of DNA structure, and effects of mutation on enzyme activity. These basic principles will then be applied to subjects such as cell communication, stem cells, and cloning. Course material will be drawn from the experimental literature.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((BIOL 2207 and BIOL 2297), BIOL 2296, or 'Y' in BIO6)

BIOL 4365. Evolutionary Developmental Biology: Evo-Devo. 3 Credit Hours.

This course is typically offered in Spring.

An overview of the relationship between organisms' development and phenotypic changes during evolution. Includes historical, theoretical and mechanistic themes of Evo-Devo, molecular and genetic basis of development and evolution.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((BIOL 2207 (may be taken concurrently) and BIOL 2297 (may be taken concurrently)), BIOL 2296 (may be taken concurrently), or BIOL 3101) and (BIOL 3204 or BIOL 3096)

BIOL 4366. Stem Cell Biology. 3 Credit Hours.

This course is typically offered in Fall.

The purpose of this course is two-fold. The first is to present the developmental biology of stem cells, with an overview of the various types of stem cells that exist and an emphasis on embryonic stem cells. The overview will include the important functional differences between embryonic, hematopoietic, and adult stem cells as well as the differences in their biomedical potentials. Techniques such as somatic cell nuclear transfer (SCNT) and other methods for the derivation of stem cell lines will be outlined so that differences that may seem subtle at first glance are clarified. The second purpose is to look into the larger debate on human embryonic stem cell research while continually drawing connections to the established fields of bioethics, politics, and philosophy. The course will ground the issues by looking at the history of the debate over the embryo, with careful attention paid to the language used in arguments. An exploration of important social, ethical, political, and economic issues and how they arose with respect to the stem cell debate will round out the remainder of the course.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((BIOL 2207 and BIOL 2297), BIOL 2296, or 'Y' in BIO6) and (BIOL 3204, BIOL 3096, or 'Y' in BIO7)

BIOL 4367. Cancer Diagnostics and Therapeutics. 3 Credit Hours.

The course will provide novel insights for early diagnosis of cancer, new approaches for cancer therapy, drug delivery methods, and hints of personalized medicine. It will also highlight new opportunities and challenges associated with novel approaches and platforms for both diagnostics and therapeutics.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 3204, BIOL 3096, (BIOL 2207 and BIOL 2297), or BIOL 2296)

BIOL 4370. Advanced Special Topics in Biochemistry. 3 Credit Hours.

This course is not offered every year.

Advanced lecture course. Subject matter varies from semester to semester.

This course is repeatable for credit.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (CHEM 4401 or BIOL 4375)

BIOL 4375. General Biochemistry I. 3 Credit Hours.

Properties of water (pH and buffers); chemistry of amino acids and proteins including non-covalent interactions; carbohydrates, nucleotides and nucleic acids; lipids and membranes; enzyme mechanisms and kinetics; control of enzyme activity; bioenergetics and oxidative metabolism; and chemistry of photosynthesis.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, 'Y' in BIO3, or 'Y' in BIOW), (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, 'Y' in BIO4, or 'Y' in BIOW), (CHEM 2202 or CHEM 2922), and (MATH 1041, MATH 1941, MATH 1038, MATH 1042 (may be taken concurrently), MATH 1044 (may be taken concurrently), MATH 1942 (may be taken concurrently), MATH 1951 (may be taken concurrently), any MATH course numbered 2043 to 3080 (may be taken concurrently), 'Y' in MA06, or 'Y' in MATW)

BIOL 4376. General Biochemistry II. 3 Credit Hours.

Emphasis on the biochemical reactions in various metabolic pathways. Biosynthesis and degradation of carbohydrates, lipids, proteins and amino acids. Regulation and integration of metabolic pathways. Bioenergetics and oxidative phosphorylation. Signal transduction. Transcription, translation and their control.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 4401 or BIOL 4375)

BIOL 4391. Accelerated Research in Biology. 1 to 4 Credit Hour.

This course is typically offered in Fall, Spring, Summer I and Summer II.

Prerequisites: Senior standing with recommendation of a faculty sponsor. Research under the supervision of a faculty member in the Biology Department. A student is eligible to apply for "Distinction in Biology" upon: 1) successful completion of 6 s.h. of a 4000-level Biology research course; 2) submission of a written report on the student's research to the faculty sponsor; and 3) a poster presentation on the student's research during the Biology Department's annual poster exhibition or another Temple University research symposium. Students completing a minimum of 6 s.h. of a 4000-level Biology research course over two semesters may petition the Biology Undergraduate Committee to have the two semesters count for one elective course. This course is repeatable. Students wishing to complete additional credits of Biology 4391 beyond 6 s.h. may do so if they elect the CR/NC option.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

BIOL 4396. Advanced Study in Biology. 3 Credit Hours.

This is a writing-intensive research course focused around the independent research of a senior undergraduate in one of the research labs in Biology, or another approved school or department (research mentor must be approved by course instructor or major advisor). Ideally, the student will have conducted independent research in the mentor's laboratory prior to taking this course, although that is not a requirement. During lecture sessions, students will receive instruction in the elements of a scientific paper, writing effectively in the style of the subject, visually representing their data, and the process of submitting and reviewing a scientific paper. Over the course of the semester, the student will propose a specific topic for the manuscript, write a manuscript in the format of a journal in the field of study, and present the research in class. The research mentor will review the manuscript a minimum of two times during the semester, and the student will revise the manuscript accordingly. At the end of the semester, the final manuscript will be submitted to the mentor, who will provide their evaluation to the course instructor and will be factored into the final grade.

Department Restrictions: Must be enrolled in one of the following Departments: CST: Biology.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

BIOL 4483. Accelerated Research in Biochemistry. 3 Credit Hours.

This course is typically offered in Fall, Summer I and Summer II.

This course is required for graduation with distinction in the major. Student presentation of research done in this course [and 4491 (0394)] or a comprehensive presentation of a topic selected jointly by student and advisor. Emphasis placed on analysis of experimental techniques, quantitative interpretation of the data, logical analysis of controls, and implication of the results. Admission to this course and the distinction track, as well as recommendation for graduation with distinction, must be approved by the Biochemistry Committee. Not available for Biology major credit.

Repeatability: This course may be repeated for additional credit.

BIOL 4491. Research in Biochemistry. 3 Credit Hours.

This course is typically offered in Fall, Spring, Summer I and Summer II.

Research under the supervision of one of the Biochemistry faculty. If repeated, a presentation of the student's research is required during the second semester. Upon successful completion of two semesters of Biology 4491 (0394), the student may petition for them to be counted as one of the Biochemistry electives. Not available for Biology major credit.

Repeatability: This course may be repeated for additional credit.

BIOL 4522. Introduction to Scientific and Regulatory Writing. 3 Credit Hours.

This course introduces students to the two primary types of medical writing done by/for pharmaceutical and biotech companies. Specifically, students will learn how to research and write abstracts, posters, clinical reports and other research manuscripts, patient education materials, and slide kits. In addition, students will be introduced to the basics of strategic planning and consulting, including the creation of publication plans and meeting planning from a marketing perspective. Students will also learn the fundamentals of regulatory writing. Topics will include overviews of U.S. and international regulatory agencies, product life cycles, the conduct of clinical trials and reporting clinical trial results, and activities and documentation involved with submissions for marketing approval of treatments.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in SCTC 2396 and ((BIOL 2207 and BIOL 2297), BIOL 2296, BIOL 3204, BIOL 3096, BIOL 3396, CHEM 3397, CHEM 3398, CHEM 4196, CIS 3296, CIS 4397, CIS 4398, EES 2096, EES 2097, ENVS 4198, MATH 3096, MATH 3098, MATH 4096, PHYS 2796, or PHYS 4796)

BIOL 4532. Introduction to Grant Writing. 3 Credit Hours.

This course is designed for students who plan to enter professional careers requiring knowledge of grant writing. The course will teach students the mechanics of proposal writing and the political and social aspects of "grantsmanship" as they develop their skills in identifying sources of grant funding, doing useful research to support their applications, and tailoring their proposals to specific audience interests. There will be several short writing assignments, an exam, and an independent project. Students may also be asked to engage in a collaborative grant project to help build their skills in collaboration.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in SCTC 2396 and ((BIOL 2207 and BIOL 2297), BIOL 2296, BIOL 3204, BIOL 3096, BIOL 3396, CHEM 3397, CHEM 3398, CHEM 4196, CIS 3296, CIS 4397, CIS 4398, EES 2096, EES 2097, ENVS 4198, MATH 3096, MATH 3098, MATH 4096, PHYS 2796, or PHYS 4796)

BIOL 4533. Communicating Science to a Broader Audience / Non-Scientists. 3 Credit Hours.

This writing intensive course is a hybrid class with online and in-class components, with instructor/s interacting with students by editing multiple drafts of a paper requiring the students to communicate a science topic to readers with either no science background or backgrounds in other STEM fields. The learning goal of this course emphasizes the communication of scientific theory and concepts to wide-ranging audiences, especially non-scientists. The class requires students to demonstrate the ability to break down complex science into accurate, yet understandable explanations, by writing an article in the style of the New York Times science section, or a science report in a newspaper such as the Philadelphia Inquirer.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in SCTC 2396 and ((BIOL 2207 and BIOL 2297), BIOL 2296, BIOL 3204, BIOL 3096, BIOL 3396, CHEM 3397, CHEM 3398, CHEM 4196, CIS 3296, CIS 4397, CIS 4398, EES 2096, EES 2097, ENVS 4198, MATH 3096, MATH 3098, MATH 4096, PHYS 2796, or PHYS 4796)

BIOL 4591. Research in Neuroscience. 1 to 4 Credit Hour.

This course is typically offered in Fall, Spring, Summer I and Summer II.

Prerequisites: Senior standing and a GPA of 3.2 or better with recommendation of a faculty sponsor and approval of the Neuroscience Honors Committee. Research under the supervision of a faculty member conducting neuroscience research. Students must be Neuroscience majors who have completed Biology 1111, 1112 or 2112, 2296, 3096, and 3352. A written presentation of the student's research is required during the second semester. A student is eligible to apply for "Distinction in Neuroscience" upon: 1) successful completion of 6 s.h. of Biology 4591; 2) submission of a written report on the student's research to the faculty sponsor and the Biology Honors Committee; and 3) a poster presentation on the student's research during the Biology Department's annual poster exhibition. Not available for Biology major credit. This course is repeatable. Students who complete additional credits of Biology 4591 beyond 6 s.h. must take the additional credits as CR/NC only.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- (except where noted) in (BIOL 1111, BIOL 1911, 'Y' in BIO3, or 'Y' in BLOW), (BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, 'Y' in BIO4, or 'Y' in BLOW), ((BIOL 2207 and BIOL 2297) or BIOL 2296), (BIOL 3204 or BIOL 3096), and BIOL 3352 (C or higher)

BIOL A000. Elective UL. 0 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

Botany (BOT)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

BOT 1111. General Botany. 4 Credit Hours.

Sexual, structural, and vegetative characteristics of bacteria, algae, fungi, nonvascular and vascular plants. An emphasis is placed on angiosperm (flowering plant) diversity, anatomy, morphology, phylogeny, and ecology. The course explores the importance of plants and the impact of people on our plant communities. NOTE: This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.

Course Attributes: SA

Repeatability: This course may not be repeated for additional credits.

BOT 1112. Plant Ecology. 3 Credit Hours.

The structure and function of plants are studied in relationship to their fit into the environment. The interaction of plants with each other and with their environment through study of natural and artificial systems, including wetlands, meadows, forests, deserts, disturbed sites, and managed landscapes.

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

BOT 2121. Plant Physiology. 4 Credit Hours.

An introduction to the major topics and concepts of plant physiology. Discusses the structure and functions of the different parts of a plant. Focuses on water and nutrition, biochemistry and metabolism, and growth and development of plants. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement.

Course Attributes: SB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in ((BOT 1111 and CHEM courses numbered 1021 to 1024) or BIOL courses numbered 1011 to 1012)

BOT 2156. Plant Genetics and Diversity. 3 Credit Hours.

Genetics of plants, including Mendelian and extranuclear genetics, quantitative genetics, and population genetics. The course also considers the basis for, and significance and preservation of plant genetic diversity. The course considers man's impact on plant genetic diversity, including plant extinction, conservation, breeding, and biotechnology.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in (BOT 1111 and CHEM courses numbered 1021 to 1024)

BOT 3122. Applied Plant Physiology. 3 Credit Hours.

Highlights the major environmental factors that affect plant growth and development and explores ecologically sound approaches to solving stress-related problems. Focuses on techniques for designing experiments to examine the impact of environmental stress on the growth and development of a plant, and on techniques for manipulating a microenvironment in the production of horticulture crops.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in BOT 2121.

BOT 3166. Plant Taxonomy. 3 Credit Hours.

Systematic botany, evolutionary relationships of angiosperm families. Identification, classification, and nomenclature based on analysis of plant structure, genetics, physiology, and ecology. Identification of local native flowering plants; preparation of preserved specimens.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in BOT 1111.

Boyer College of Music & Dance (BCMD)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

BCMD 0830. GenEd Limited Edition GD. 3 Credit Hours.

This is a General Education Limited Edition course that will satisfy the GenEd Race and Diversity requirement. Topics vary by semester. Check the Class Schedule for the full description of specific topics offered. Students cannot repeat this course for additional credits, regardless of the topic.

Course Attributes: GD

Repeatability: This course may not be repeated for additional credits.

BCMD 0930. Honors GenEd Limited Edition GD. 3 Credit Hours.

This is an Honors General Education Limited Edition course that will satisfy the GenEd Race and Diversity requirement. Topics vary by semester. Check the Class Schedule for the full description of specific topics offered. Students cannot repeat this course for additional credits, regardless of the topic.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GD, HO

Repeatability: This course may not be repeated for additional credits.

Business Administration (BA)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

BA 1001. Business Seminar I. 1 Credit Hour.

This course provides students with the foundation necessary for success in college. Students engage in interactive workshops to develop the academic, professional, and life skills required for Fox School of Business students. Topics include: study habits, industry alignment, time management tools, goal setting techniques, financial literacy, embracing/understanding diversity, and university resources. Students work closely with an Academic Advisor to develop an academic plan. NOTE: This course can NOT be taken by juniors or seniors, as the intended audience is new freshman and/or sophomores.

Class Restrictions: May not be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School, Sport Tourism Hospitality Mgt, University Studies.

Repeatability: This course may not be repeated for additional credits.

BA 1002. Business Seminar II. 1 Credit Hour.

Business Seminar II is a one-credit course that encourages first-year students to discover major interests through applied learning and other career-oriented experiences. The course exposes students to career paths in business and encourages major exploration through discussions with faculty, informational interviews, readings, and opportunities to practice skills needed to become more efficient students. The course will also reintroduce the rigors of higher education. Many topics covered in this course not only apply to your growth as a student, but also to your social and professional development.

Repeatability: This course may not be repeated for additional credits.

BA 1103. Legal and Ethical Reasoning in Business. 3 Credit Hours.

Legal and Ethical Reasoning in Business examines how legal and ethical principles guide the decisions of business managers in their capacities as employees, supervisors, professionals and individuals. It explores legal, economic and moral theories of the firm to help managers make legal and ethical decisions, recognizing that some such decisions may not lead to short-term profits. The course provides analysis of useful tools and frameworks for managers that facilitate decision-making consistent with the rules of law, the rules of professional responsibility, expectations of stakeholders, and the policies and values of their firms. In the process of course engagement, students will develop their analytical skills, their written and oral communication skills, and their ability to think critically about some of the most pressing legal and ethical issues in business and society today.

Repeatability: This course may not be repeated for additional credits.

BA 1901. Honors Research Methods in Business. 1 Credit Hour.

Students are introduced to a variety of research methods, including online and library research. They also learn the basics of statistical analysis and statistical software. Finally, students receive instruction in writing, with particular attention to how one presents research. This course is restricted to students in the Fox School Research Scholars Program. NOTE: This course is restricted to students in the Fox School Research Scholars Program.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

BA 1903. Honors Legal and Ethical Reasoning in Business. 3 Credit Hours.

Honors Legal and Ethical Reasoning in Business examines how legal and ethical principles guide the decisions of business managers in their capacities as employees, supervisors, professionals and individuals. It explores legal, economic and moral theories of the firm to help managers make legal and ethical decisions, recognizing that some such decisions may not lead to short-term profits. The course provides analysis of useful tools and frameworks for managers that facilitate decision-making consistent with the rules of law, the rules of professional responsibility, expectations of stakeholders, and the policies and values of their firms. In the process of course engagement, students will develop their analytical skills, their written and oral communication skills, and their ability to think critically about some of the most pressing legal and ethical issues in business and society today.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

BA 2002. Business Transfer Seminar. 1 Credit Hour.

The Business Transfer Seminar is a one-credit optional course that introduces transfer students to the Fox School of Business and Management and Temple University. Students will be given an opportunity to discover major interests, work on career planning and development and orientate themselves to their new campus. The course will encourage students to explore their individual strengths, engage with faculty, staff and fellow students, and gain new connections on and off campus. Many topics covered in this course not only apply to your growth as a student, but also to your social and professional development.

Repeatability: This course may not be repeated for additional credits.

BA 2101. Professional Development Strategies. 1 Credit Hour.

Prepare students to enter the internship and permanent job marketplace. Emphasis on career planning, interview preparation (including behavioral event interviewing), expected behaviors and legal issues. Presentation and writing skills will be included. NOTE: It is recommended that all FSBM students take this course as soon as they have completed 45 credit hours.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

BA 2104. Excel for Business Applications. 1 Credit Hour.

The purpose of this online course is to prepare you to use Excel as a tool for solving business problems. You may be familiar with Excel but this course focuses on tools and Excel features that will specifically prepare you for your business courses, job interviews and for your professional life. You will learn how to use Excel efficiently, how to create formulas, use functions, produce and format charts, create reports and Pivot Tables, and use what-if-analysis for managerial decision making.

Repeatability: This course may not be repeated for additional credits.

BA 2196. Business Communications. 3 Credit Hours.

Business Communications is a writing-intensive workplace-oriented course designed to help students develop and refine the oral, written, and analytical skills necessary to communicate effectively in professional settings. Students will learn to effectively edit their own writing, understand how businesses communicate to an audience, and enhance their presentation and persuasive skills. Teaching method is small group discussion and workshop. NOTE: This course counts toward the university requirement that students complete two writing-intensive courses in their major, and it also counts as a lower level Business Core Course. Students who take this course to fill either requirement, need a C- or better for the class to count towards graduation.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BA 1103, BA 1903, HRM 1101, or HRM 1901)

BA 2501. Turning Numbers into Knowledge: Visualizing Data. 3 Credit Hours.

Corporations generate oceans of data, and the rate of data production is increasing over time. Human's ability to process this information is constant. How can we deal with this information deluge? Answer: A good visualization can be worth many gigabytes of data. This course will not only teach you about good visualizations, but will also focus on using the right visuals to effectively communicate your message. After completing this course, you will be able to identify the context of the data, select appropriate data and visualization techniques to maximize efficacy, focus your audience's attention, extract information from the data, and make compelling recommendations - really, tell a meaningful story with data. You will practice visualization techniques in a hands-on environment with a variety of datasets and data types, allowing you to quickly make great looking charts and graphs that can be directly applied to real-world situations.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (STAT 2103, STAT 2903, STAT 2104, STAT 2102, STAT 2902, AS 2505 (may be taken concurrently), MATH 3031, or ISE 2101)

BA 2502. Business Analytics: Modern Data Science Techniques. 3 Credit Hours.

This course is designed to give you a new way to explore and solve problems that you encounter in the world using data. Numerous firms have demonstrated that the ability to reliably extract information from data is a potent and enduring source of competitive advantage, and these firms have realized that the ability to transform data into information is an asset that can be a primary source of competitive advantage. Competition is pushing firms to "mine" these insights faster, with greater reliability, and in ways that maximize the probability of implementation. In this course we will explore how modern analytics techniques can be used to improve decision-making, how to convey the insights gleaned from data to managers or to other decision makers, and the ethical pitfalls that one might run into while developing or using these models. The course will use a combination of lecture, real-world examples, cases, and "hands-on" projects to demonstrate techniques in context, to develop your analytic and model building acumen, and to enhance your communication skills. The course uses "off the shelf software" to focus attention on the relevance of the outputs, the importance of the insights, the communication of results, and the transferability of the knowledge rather than the specifics of a particular "tool".

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (STAT 2103, STAT 2903, STAT 2104, STAT 2102, STAT 2902, AS 2505 (may be taken concurrently), MATH 3031, or ISE 2101)

BA 2951. Honors Turning Numbers Into Knowledge: Visualizing Data. 3 Credit Hours.

Corporations generate oceans of data, and the rate of data production is increasing over time. Human's ability to process this information is constant. How can we deal with this information deluge? Answer: A good visualization can be worth many gigabytes of data. This course not only teaches you about good visualizations but also focuses on using the right visuals to effectively communicate your message. After completing this course, you can identify the context of the data, select appropriate data and visualization techniques to maximize efficacy, focus your audience's attention, extract information from the data, and make compelling recommendations - really, tell a meaningful story with data. You practice visualization techniques in a hands-on environment with a variety of datasets and data types, allowing you to quickly make great looking charts and graphs that can be directly applied to real-world situations.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (STAT 2103, STAT 2903, STAT 2104, STAT 2102, STAT 2902, STAT 2512 (may be taken concurrently), MATH 3031, or ISE 2101)

BA 2996. Honors Business Communications. 3 Credit Hours.

Business Communications is a writing-intensive workplace-oriented course designed to help students develop and refine the oral, written, and analytical skills necessary to communicate effectively in professional settings. Students will learn to effectively edit their own writing, understand how businesses communicate to an audience, and enhance their presentation and persuasive skills. Teaching method is small group discussion and workshop. NOTE: This course counts toward the university requirement that students complete two writing-intensive courses in their major, and it also counts as a lower level Business Core Course. Students who take this course to fill either requirement, need a C- or better for the class to count towards graduation.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BA 1103, BA 1903, HRM 1101, or HRM 1901)

BA 3102. Business Society and Ethics. 3 Credit Hours.

This course challenges students to consider the ethical obligations of corporations and their employees to a wide variety of societal stakeholders. Students are exposed to a broad range of ethical dilemmas that can arise in the business world and are offered the tools and taught the skills to respond to such dilemmas. Most significantly, the course encourages students to critically examine a preeminent societal institution of which they are a part, with the possibility that they can ultimately be forces for positive change.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Corporate Social Responsibility, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Ethics, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, ProRanger- Natl Park Svc Mgt, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

BA 3103. Integrative Business Applications. 3 Credit Hours.

This course integrates various functional business disciplines to help the student develop an understanding of business practices. Students will learn to view organizations as integrated systems based on the knowledge accumulated to date in the BBA Core and provide students with an opportunity to address problems faced by organizations from an integrated perspective. This course will bridge the gap between theoretical class work and business practice. NOTE: Students will use business simulation software to allow them to test alternative ways to operate a business in a competitive environment.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (FIN 3101, FIN 3901, FIN 3502, or AS 2503), (MIS 2101 or MIS 2901), (MSOM 3101 or MSOM 3901), and (RMI 2101 or RMI 2901)

BA 3531. Sustainability on the Ground. 3 Credit Hours.

Explores how sustainable business practices influence an organization's success by working individually on sustainable projects at a local company in the Philadelphia region. Topics covered include: consulting skills, communication, presentation skills, employee engagement, leadership development, project management and more based on the consulting opportunity provided by the company. This course is available every semester but students should discuss potential projects with the designated faculty member at least the semester before they plan to register. No exceptions will be made to the prerequisites. Note regarding prerequisites: LGLS 3511 is a fall only class. HRM 2511 is a spring only class.

Course Attributes: SF, SS

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in HRM 2511 and LGLS 3511.

BA 3580. Special Topics - Business Administration. 1 to 3 Credit Hour.

Special topics in current developments in the field of business administration.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

BA 3581. Co-operative Experience in Business. 3 Credit Hours.

The course is designed for Fox students who have a full time business co-operative which will take place over a semester, and which requires them to stop attending classes during that semester. NOTE: Arrangements are made through the Center for Student Professional Development. This course is for Fox School of Business undergraduate majors only.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

BA 3582. Independent Study. 1 to 3 Credit Hour.

Readings and/or papers in consultation with a faculty member.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

BA 3591. Directed Business Research. 1 to 4 Credit Hour.

Directed Business Research provides an individualized method of learning and an in-depth treatment of a topic of interest, while receiving input and supervision from a faculty expert. The course provides hands-on, practical experience working with a Fox School of Business research faculty on an ongoing research project. All students must apply and obtain special approval to be added to the course. This course is primarily designed for students in sophomore and junior years. Exceptional students from other classes may be considered on a case-by-case basis.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

BA 3902. Honors Business Society and Ethics. 3 Credit Hours.

This course challenges students to consider the ethical obligations of corporations and their employees to a wide variety of societal stakeholders. Students are exposed to a broad range of ethical dilemmas that can arise in the business world and are offered the tools and taught the skills to respond to such dilemmas. Most significantly, the course encourages students to critically examine a preeminent societal institution of which they are a part, with the possibility that they can ultimately be forces for positive change. NOTE: Honors section of Business Administration 3102 (0215).

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, SI

Repeatability: This course may not be repeated for additional credits.

BA 3903. Honors Integrative Business Applications. 3 Credit Hours.

This course integrates various functional business disciplines to help the student develop an understanding of business practices. Students will learn to view organizations as integrated systems based on the knowledge accumulated to date in the BBA Core and provide students with an opportunity to address problems faced by organizations from an integrated perspective. This course will bridge the gap between theoretical class work and business practice. NOTE: Honors section of Business Administration 3103. Students will use business simulation software to allow them to test alternative ways to operate a business in a competitive environment.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (FIN 3101, FIN 3901, FIN 3502, or AS 2503), (MIS 2101 or MIS 2901), (MSOM 3101 or MSOM 3901), and (RMI 2101 or RMI 2901)

BA 4101. Global Business Policies. 3 Credit Hours.

An integrative course that focuses on strategic planning, policy formulation, implementation, and corporate-wide decision making through the use of comprehensive case problems.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BA 3103 or BA 3903)

BA 4102. Strategic Management. 3 Credit Hours.

Strategic Management (BA 4102) is the last required core class in the Fox undergraduate curriculum, culminating the BBA program learning experience. This course introduces the student to the role of the "strategic manager," who is concerned with an organization's challenges and opportunities, and responsible for its overall long-term success. The primary goal of the course is to provide students with the critical thinking skills necessary to function as a strategic manager. The course uses a "tying-it-together" approach providing students with challenges of strategic analysis, formulation, and implementation within the context of the single-business / single market firm, as well as the multi-business / multi-market firm. While the point of view of the decision-maker is that of the top management team (who must be concerned with more than a single functional area), the skills and knowledge developed in this course are relevant to those who head business units, as well as the staff people and consultants who work with the top managers. Just as top managers must integrate and apply the knowledge and competencies from the functional areas across the organization, so too must students integrate and apply the knowledge accumulated from their functional major courses, such as marketing, human resource management, operations, accounting and finance. Whatever your position in an organization, you are likely to be more effective if you understand your organization's strategy and your place in it.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (FIN 3101, FIN 3901, or AS 2503), (BA 1103, BA 1903, LGLS 1101, or LGLS 1901), (MSOM 3101 or MSOM 3901), (BA 2196 or BA 2996), and (RMI 2101 or RMI 2901)

BA 4901. Honors Global Business Policies. 3 Credit Hours.

An integrative course that focuses on strategic planning, policy formulation, implementation, and corporate-wide decision making through the use of comprehensive case problems.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BA 3103 or BA 3903)

Business Education (BSED)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

BSED 3241. Methods of Teaching Microcomputer Applications. 3 Credit Hours.

Psychology of skill development and development of effective teaching techniques for teaching computer applications. Textbooks are evaluated, lessons presented, and student evaluations prepared. Simulated presentations videotaped.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in EDUC 2205 (may be taken concurrently)

Career and Technical Education (CTE)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

CTE 3101. Principles of Career and Technical Education. 3 Credit Hours.

For prospective career and technical education teachers and technical trainers. Provides an in-depth analysis of the context in which contemporary career and technical programs operate. Emphasis is placed on the philosophical concepts underlying career and technical education, an examination of issues and problems in present programs and how research on teaching practice drives curricular change. NOTE: General familiarity with internet searching and navigation necessary. Some course assignments will be posted on Blackboard. Students are to inquire with the program for technical equipment requirements.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Repeatability: This course may not be repeated for additional credits.

CTE 3102. Teaching Strategies in Career and Technical Education. 3 Credit Hours.

This course focuses on developing teaching competence. The following will be addressed: models of teaching for achieving instructional outcomes in career and technical areas; using performance standards to prepare and present content lessons; evaluation of instructional outcomes; integration of technology in instruction; serving students with special needs; creating an environment for student learning, differentiated instruction. NOTE: General familiarity with internet searching and navigation necessary. Some course assignments will be posted on Blackboard. Students are to inquire with the program for technical equipment requirements.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Repeatability: This course may not be repeated for additional credits.

CTE 3103. Curriculum in Career and Technical Education. 3 Credit Hours.

Develop strategies for designing, implementing, and evaluating curriculum in career and technical education. Acquire knowledge, skills, and methods to validate a curriculum. Develop the skill to analyze an occupation in terms of duty and tasks performed; develop the skill to prepare valid performance objectives; determine scope and sequence schedules; aligning content, learning experiences, assessment and performance standards. NOTE: General familiarity with internet searching and navigation necessary. Some course assignments will be posted on Blackboard. Students are to inquire with the program for technical equipment requirements.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Repeatability: This course may not be repeated for additional credits.

CTE 3241. Methods of Teaching Business Education, Marketing Education, and Computer Applications. 3 Credit Hours.

Instructional strategies in the teaching of Business, Computers, and Information Technology and Marketing are analyzed and demonstrated. Students are required to prepare lesson plans, teach demonstration lessons, develop a unit plan, participate in our profession, and complete the Intermediate Performance Assessment (IPA; if not completed before). The high expectations of this course will be met by all students to include English language learners and special education students. Lessons will integrate appropriate PA Standards for Business, Computers, and Information Technology or comparable standards, such as those for the National Business Education Association and the Temple College of Education Standards for Effective Teaching. Emphasis is placed on professionalism, and planning and skillful teaching that meet the needs of all students, including those with special needs, diverse, socio-cultural backgrounds, and English language learners. Demonstration lessons will be integrated with the course work to encourage developing teaching competency through a series of presentations appropriate to the student's certification interests.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may not be repeated for additional credits.

CTE 3372. Project-based Learning for Today's CTE. 3 Credit Hours.

The course is designed to help pre-educators and in-service educators plan and apply learning theory and principles of project-based learning to the development of Career and Technical Education and Business/Marketing related instruction in the classroom.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Repeatability: This course may not be repeated for additional credits.

CTE 3389. Supervised Work Experience. 1 to 6 Credit Hour.

This course provides certification candidates with education in the workplace experiences, including practical technical experience to supplement classroom instruction. An individualized training plan for the workplace is developed for each student. Staff visitations and joint supervision occur at the placement site.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Repeatability: This course may be repeated for additional credit.

CTE 4285. Industry Education Capstone and Field Experience for Work-Based Learning. 1 to 6 Credit Hour.

Evaluation of field work, including in-service education and/or technical experiences that can enhance a candidate's occupational specialty, certification program, and/or strategies for connecting school and real world experiences.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Repeatability: This course may be repeated for additional credit.

CTE 4300. Wkshp Vocational Ed. 1 to 6 Credit Hour.

Repeatability: This course may be repeated for additional credit.

CTE 4315. Credit by Examination. 1 to 24 Credit Hour.

Credit by examination is limited to students matriculated in the undergraduate Career and Technical Education (Industrial Education majors) degree program and who have met the following conditions: (a) completed 90 s.h. of approved course work, and (b) have received approval to have credit awarded toward their degree based on the successful completion of an Occupational Competency Assessment in a PDE Certification area.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Repeatability: This course may not be repeated for additional credits.

CTE 4324. Industry-Based Coordination Methods for Work-Based Learning. 3 Credit Hours.

The history, development, and operation of cooperative education programs are addressed in this course. Also covered are the development and promotion of a workplace-learning program, the development of workplace learning partnerships, workplace learning sites, safety considerations for students in the workplace, and connecting work-based and school-based learning. NOTE: This course is offered in a blended instructional format through a combination of online instruction and some face-to-face, whole class meetings. Students are to inquire with the program for technical equipment requirements.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Repeatability: This course may not be repeated for additional credits.

CTE 4331. Industry-Based Instructional Methods for Work-Based Learning. 3 Credit Hours.

This course covers the role of the teacher-coordinator in conducting and teaching procedures and activities necessary for providing successful supervised field experiences for students in the workplace. Also covered are methods of establishing contact with students, employers, teachers, parents, and community leaders, career and technical student organizations, and students with special needs, as well as developing and understanding labor laws and other legal requirements affecting student workers/interns. NOTE: This course is offered in a blended instructional format through a combination of online instruction and some face-to-face, whole class meetings. Students are to inquire with the program for technical equipment requirements.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Repeatability: This course may not be repeated for additional credits.

CTE 4416. Professionalism, Evaluation, and Assessment in Secondary Education. 3 Credit Hours.

This course is designed to build a knowledge base for educational assessment and evaluation, Career and Technical Education curriculum development, and professional development, providing the opportunity to apply this knowledge in an actual classroom/laboratory setting. This course will also consider teaching strategies for the success of all learners, including special population students.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Repeatability: This course may not be repeated for additional credits.

Center for the Performing and Cinematic Arts (CFA)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

CFA 1001. Art Scene: Inspired Connections. 3 Credit Hours.

Have you ever wondered how a piece of music is composed, a screenplay is written for a film, or how a work of art comes to be? This course will explore these very ideas, revealing how creative people make and perform in a variety of the rich arts disciplines that comprise the Center for the Arts, including architecture, art and design, dance, film, music, and theater. Each week of the semester will be devoted to a different area of the arts and will provide insight into the working process of that form of art, the nature of the creative challenges, and the type of training and practice required to be successful. The format of the class will vary to suit the weekly topic and will include interviews with student participation, lectures, discussions, live demonstrations, and performances. During the first meeting of each week a distinguished faculty member for the Center for the Arts will present a brief history and broad introduction to their discipline, followed by a dynamic experience during the second class meeting that brings to life the artistic process and particular details about how that artist brings their ideas and vision to life.

Repeatability: This course may not be repeated for additional credits.

Chemistry (CHEM)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

CHEM 0821. Chemistry of Wine. 3 Credit Hours.

This course is typically offered in Fall.

Wine has occupied a central role in human culture. In our exploration of the science of wine we will learn why wine was the beverage of choice through the ages, why a bottle of wine can range from \$2 to \$2,000, how wine is made, what makes a good/bad wine, how is white different from red, and how we know what is in a bottle of wine. The course begins with a large scale fermentation of red and white wine and will continue with team-based analyses of the two month process of turning grape juice into wine. Many aspects of the production and consumption of wine will be addressed in this course.

NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and the Science & Technology Second Level (SB) requirement for students under Core.

Course Attributes: GS

Repeatability: This course may not be repeated for additional credits.

CHEM 0838. Nature Has No Reverse. 3 Credit Hours.

This course is not offered every year.

Rapid advances in modern science often tend to conceal the "forest in the trees," but we all need enough familiarity with the "scientific method" to make informed judgments as citizens and voters. This course will take you on a journey through the history of science, with stops at the Second Law of Thermodynamics, the "revolution" of fire, the rational basis of life, energy as the universal currency and changes in the universe around us. We will end with that most disturbing of paradoxes: the certainty of uncertainty. Each week includes both lecture and hands-on demonstration/practicum. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and the Science & Technology Second Level (SB) requirement for students under Core.

Course Attributes: GS, SI

Repeatability: This course may not be repeated for additional credits.

CHEM 0877. The Chemistry of Global Environmental Issues. 3 Credit Hours.

Global warming. Climate change. Ozone Layer. Carbon Footprint. Ocean Acidification. Pollution. The Greenhouse Gas Effect. The ramifications of these issues, for the environment you live in are debated in such venues as the living (and dorm) room, the news, the halls of Congress, and the United Nations. The primary objective of this course is to pull back the veil on the scientific aspects of these topics while giving you the scientific background so that you can better understand and evaluate the potential impact of these significant environmental topics.

Course Attributes: GS, SE, SF

Repeatability: This course may not be repeated for additional credits.

CHEM 1005. Practice and Development of Spatial Visualization Skills. 1 Credit Hour.

The ability to mentally visualize in three dimensions is an important skill for scientists. In this course, students will move through ten different modules that will strengthen spatial reasoning and visualization skills. All assigned work will be completed during the scheduled class time. This course is restricted to students taking CHEM 1031, 1035, or 1951, and who have scored less than 70% on the PSVT:R.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 1031 (may be taken concurrently), CHEM 1035 (may be taken concurrently), or CHEM 1951 (may be taken concurrently))

CHEM 1006. Knowing Where to Start: Taking the Problem Out of Chemistry Problem Solving. 1 Credit Hour.

How do chemists understand a problem and figure out a plan to solve it? This course approaches problem solving as a way of thinking, helping students to succeed in introductory chemistry and beyond. The strategies explored in logic, math, and reading will be applied to challenges across human health and the environment.

Repeatability: This course may not be repeated for additional credits.

CHEM 1011. Chemistry: The Study of Matter I. 4 Credit Hours.

This course is typically offered in Fall and Spring.

Four hours of lecture and demonstration per week; intended to be the primary course for those who take chemistry only to satisfy their Core requirements. Important chemical phenomena and their explanations. Special emphasis on the use of chemical theories and development of mathematical skills needed for their use. NOTE: (1) Because fundamental science is presented, this sequence is also recommended for students who would like to enter a scientific field but fear their background is not adequate. (2) This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement.

Course Attributes: SA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 0701 to 0702, any MATH course numbered 0800 to 4999 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, STAT 1001 (may be taken concurrently), 'Y' in STT2, STAT 1102 (may be taken concurrently), STAT 1902 (may be taken concurrently), 'Y' in MC3A, 'Y' in MC6A, 'Y' in MATW, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

CHEM 1021. Introduction to Chemistry I. 3 Credit Hours.

This course is typically offered in Fall and Summer I.

The first semester of a course designed for the non-science major, introducing chemical principles in the context of everyday life. Fundamental concepts of chemistry including atomic theory, the mole concept, acids and bases, and physical properties of substances. NOTE: (1) Appropriate for some Allied Health students; check the requirements of your program. (2) This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.

Course Attributes: SA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (any MATH course numbered 0701 to 0702 (C or higher), any MATH course numbered 1021 to 4999 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MA01, STAT 1001 (may be taken concurrently), 'Y' in STT2, STAT 1102 (may be taken concurrently), STAT 1902 (may be taken concurrently), 'Y' in MC3A, 'Y' in MC6A, 'Y' in MATW, 'Y' in MC3S, 'Y' in CRMA18, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

CHEM 1022. Introduction to Chemistry II. 3 Credit Hours.

This course is typically offered in Spring and Summer II.

An introduction to organic and biochemistry. Emphasis on relationships between carbon compounds and the chemistry of living systems, the interaction of chemical science with current technology, and chemicals in the environment. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.

Course Attributes: SB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CHEM 1021.

CHEM 1023. Introduction to Chemistry Laboratory I. 1 Credit Hour.

This course is typically offered in Fall and Summer I.

Introduction to experimental inorganic chemistry and general chemical techniques. NOTE: This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.

Course Attributes: SA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (any MATH course numbered 0701 to 0702 (C or higher), any MATH course numbered 1021 to 4999 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MA01, STAT 1001 (may be taken concurrently), 'Y' in STT2, STAT 1102 (may be taken concurrently), STAT 1902 (may be taken concurrently), 'Y' in MC3A, 'Y' in MC6A, 'Y' in MATW, 'Y' in MC3S, 'Y' in CRMA18, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T) and CHEM 1021 (may be taken concurrently)

CHEM 1024. Introduction to Chemistry Laboratory II. 1 Credit Hour.

This course is typically offered in Spring and Summer II.

Introduction to experimental organic and biological chemistry. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.

Course Attributes: SB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CHEM 1023 and CHEM 1022 (may be taken concurrently)

CHEM 1027. Applications of Chemistry. 4 Credit Hours.

This course is typically offered in Fall, Spring, and Summer II.

This course is a transition semester of chemistry to be taken before Chemistry 1031 (C071) designed for students who have not had enough preparation in chemistry or mathematics to directly take Chemistry 1031 (C071). Mathematical concepts and chemical principles will be integrated into a series of common applications. In this class, students will learn proper handling of laboratory materials and perform experiments that are integrated with, as well as introduce and reinforce, the material from the lecture. This course is intended to prepare students for General Chemistry by emphasizing the mathematical basis of chemistry and laboratory measurements. A quantitative introduction to atomic and molecular structure, states of matter, basic thermodynamics, solutions, gas laws, kinetics, and equilibrium. NOTE: Students must register for 2 sections: one of which is a combination of lecture and lab for 4 credits and the other is a 0 credit recitation.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (MATH 1021 (may be taken concurrently), any MATH course numbered 1022 to 4999 (C- or higher; may be taken concurrently), 'Y' in MC5, 'Y' in MC6, STAT 1001, STAT 1102, STAT 1902, 'Y' in MC6A, 'Y' in MATW, 'Y' in CRMA04, 'Y' in CRST01, 'Y' in CRST02, or 'Y' in MC6T)

CHEM 1031. General Chemistry I. 3 Credit Hours.

The first semester of chemistry for science majors, pre-professional students, and others in science related fields. A quantitative introduction to atomic and molecular structure, states of matter, basic thermodynamics, and solutions. NOTE: This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.

Course Attributes: SA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (MATH 1021, any MATH course numbered 1022 to 4999 (C- or higher; may be taken concurrently), 'Y' in MC5, 'Y' in MC6, 'Y' in MA03, STAT 1001, STAT 1102, 'Y' in MC6A, 'Y' in MATW, 'Y' in CRMA04, 'Y' in CRST01, 'Y' in CRST02, or 'Y' in MC6T)

CHEM 1032. General Chemistry II. 3 Credit Hours.

The second semester of chemistry for science majors, pre-professional students, and others in science related fields. An introduction to thermodynamics, equilibrium, kinetics, electrochemistry, and descriptive chemistry. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.

Course Attributes: SB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 1031, CHEM 1041, or CHEM 1951)

CHEM 1033. General Chemistry Laboratory I. 1 Credit Hour.

An introduction to experimental chemistry, including the determination of molecular weights, calorimetry, and fundamental analytical techniques. NOTE: This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.

Course Attributes: SA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (MATH 1021 (C or higher), any MATH course numbered 1022 to 4999 (may be taken concurrently), 'Y' in MC5, 'Y' in MC6, 'Y' in MA03, STAT 1001 (C or higher), STAT 1102 (C or higher), 'Y' in MC6A, 'Y' in MATW, 'Y' in CRMA04, 'Y' in CRST01, 'Y' in CRST02, or 'Y' in MC6T) and (CHEM 1031 (may be taken concurrently), CHEM 1035 (may be taken concurrently), CHEM 1041 (may be taken concurrently), or CHEM 1951 (may be taken concurrently))

CHEM 1034. General Chemistry Laboratory II. 1 Credit Hour.

Experiments in equilibrium, kinetics, acid-base and oxidation reduction titrations, electrochemistry, and synthesis of metal complexes. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.

Course Attributes: SB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 1033, CHEM 1043, or CHEM 1953) and (CHEM 1032 (may be taken concurrently), CHEM 1042 (may be taken concurrently), or CHEM 1952 (may be taken concurrently))

CHEM 1035. Chemistry for Engineers. 3 Credit Hours.

This course is typically offered in Fall and Spring.

The course is specifically designed to provide Engineering students with a concise, but comprehensive treatment of chemical principles. An objective of the course is to present concepts in an engineering context. This will be accomplished in part by discussing how chemical principles provide a foundation for engineering and technology. Topics to be included will be states of matter, reaction stoichiometry, atomic and molecular structure, chemical equilibria, thermodynamics, and kinetics. The course will consist of three hours of lecture and one hour of recitation per week. CHEM 1033 is normally taken concurrently.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (MATH 1022, any MATH course numbered 1038 to 4999 (C- or higher; may be taken concurrently), 'Y' in MC6, 'Y' in MA04, 'Y' in MC6A, 'Y' in MATW, 'Y' in CRMA05, or 'Y' in MC6T)

CHEM 1051. General Chemistry I for Pre-Health Postbaccalaureates. 3 Credit Hours.

This is the first semester of general chemistry for post-baccalaureate students. It includes a quantitative introduction to atomic and molecular structure, states of matter, basic thermodynamics, and solutions. These topics will be covered with special consideration of their relevance to the health sciences.

Repeatability: This course may not be repeated for additional credits.

CHEM 1052. General Chemistry II for Pre-Health Postbaccalaureates. 3 Credit Hours.

This is the second semester of general chemistry for post-baccalaureate students. It includes an introduction to thermodynamics, equilibrium, kinetics, electrochemistry, and descriptive chemistry. These topics will be covered with special consideration of their relevance to the health sciences. Note: To register for this course, students must satisfy the prerequisite or obtain permission from the program director.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in CHEM 1051.

CHEM 1053. General Chemistry I Lab for Pre-Health Postbaccalaureates. 1 Credit Hour.

This course is typically offered in Summer I.

This is the laboratory to accompany the first semester of general chemistry for post-baccalaureate students. It includes a quantitative introduction to atomic and molecular structure, states of matter, basic thermodynamics, and solutions. These topics will be covered with special consideration of their relevance to the health sciences.

Repeatability: This course may not be repeated for additional credits.

CHEM 1054. General Chemistry II Lab for Pre-Health Postbaccalaureates. 1 Credit Hour.

This course is typically offered in Summer II.

This is the laboratory to accompany the second semester of general chemistry for post-baccalaureate students. It includes hands-on investigations of an introduction to thermodynamics, equilibrium, kinetics, electrochemistry, and descriptive chemistry. These topics will be covered with special consideration of their relevance to the health sciences. Note: To register for this course, students must satisfy the prerequisites or obtain permission from the program director.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in CHEM 1052 (may be taken concurrently) and CHEM 1053.

CHEM 1055. Introduction to Problem Solving and Logical Thinking for Pre-Health Postbaccalaureates. 1 Credit Hour.

The ability to solve problems and think logically is essential for success in health professions schools because health professionals must be able to put together patient symptoms, test results, and current research to determine the best course of action for the patient in question. As a result, entrance exams for health professions schools test the ability to think and solve problems logically. However, the techniques of good problem solving are rarely explicitly taught at any point in a student's education, and science majors rarely take logic courses. This course seeks to fill that gap in a way that is geared specifically toward what is needed for pre-health students to succeed in their classes and on standardized tests. This course teaches students good problem-solving techniques and the basics of deductive and inductive logic. The students will spend class time practicing and applying the techniques and principles they are taught, either individually or in pairs/groups. This design will enable them to develop their skills of problem solving and logical thinking so that they can apply them not only to their classes, but to entrance exams for professional school and the practice of their profession as well.

Repeatability: This course may not be repeated for additional credits.

CHEM 1951. Honors General Chemical Science I. 3 Credit Hours.

This course is typically offered in Fall.

When taken with Chemistry 1953 (H093), this course meets pre-professional requirements. Similar to Chemistry 1031 (C071) but with added emphasis on topics of current interest to the professional chemist. NOTE: This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, SA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (MATH 1041 (C or higher; may be taken concurrently), MATH 1941 (C or higher; may be taken concurrently), MATH 1038 (C or higher; may be taken concurrently), MATH 1042 (may be taken concurrently), MATH 1044 (may be taken concurrently), MATH 1942 (may be taken concurrently), MATH 1951 (may be taken concurrently), any MATH course numbered 2043 to 3080 (D or higher; may be taken concurrently), 'Y' in MA06, 'Y' in MATW, 'Y' in CRMA08, or 'Y' in CRMA21)

CHEM 1952. Honors General Chemical Science II. 3 Credit Hours.

This course is typically offered in Spring.

Similar to Chemistry 1032 (C072), but with added emphasis on topics of current interest to the professional chemist. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, SB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CHEM 1951 and (MATH 1042 (may be taken concurrently), MATH 1044 (may be taken concurrently), MATH 1942 (may be taken concurrently), MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), 'Y' in MA07, or 'Y' in MATW)

CHEM 1953. Honors Chemical Science Laboratory I. 1 Credit Hour.

This course is typically offered in Fall.

An introduction to the experimental techniques employed in the determination of the physical and chemical properties of matter. NOTE: This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, SA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (MATH 1041 (C or higher; may be taken concurrently), MATH 1941 (C or higher; may be taken concurrently), MATH 1038 (C or higher; may be taken concurrently), MATH 1042 (may be taken concurrently), MATH 1044 (may be taken concurrently), MATH 1942 (may be taken concurrently), MATH 1951 (may be taken concurrently), any MATH course numbered 2043 to 3080 (D or higher; may be taken concurrently), 'Y' in MA06, 'Y' in MATW, 'Y' in CRMA08, or 'Y' in CRMA21) and (CHEM 1031 (may be taken concurrently), CHEM 1041 (may be taken concurrently), or CHEM 1951 (may be taken concurrently))

CHEM 1954. Honors Chemical Science Laboratory II. 1 Credit Hour.

This course is typically offered in Spring.

Introduction to the experimental techniques employed in the determination of the physical and chemical properties of matter. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, SB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CHEM 1951, CHEM 1953, and CHEM 1952 (may be taken concurrently)

CHEM 2201. Organic Chemistry I. 3 Credit Hours.

Structure, synthesis, and reactivity of hydrocarbons and their simple derivatives. Principles of organic spectroscopy and stereochemistry. Introductory study of kinetics and reaction mechanisms.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 1032, CHEM 1042, or CHEM 1952)

CHEM 2202. Organic Chemistry II. 3 Credit Hours.

Detailed examination of the more common functional groups and their reaction chemistry. Emphasis on development of organochemical reasoning powers through planning of multi-step syntheses and solution of structural problems by the combination of chemical and spectroscopic methods. Applications of organic chemistry to biological systems.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 2201, CHEM 2211, or CHEM 2921)

CHEM 2203. Organic Chemistry Laboratory I. 1 Credit Hour.

An introduction to microscale laboratory techniques in organic chemistry. Emphasis on learning to manipulate equipment and on efficient separation and purification of organic compounds.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 1034, CHEM 1044, or CHEM 1954) and (CHEM 2201 (may be taken concurrently), CHEM 2211 (may be taken concurrently), or CHEM 2921 (may be taken concurrently))

CHEM 2204. Organic Chemistry Laboratory II. 1 Credit Hour.

A continuation of Chemistry 2203 (0123). Preparation, purification, and analysis, including multi-step sequences, of typical moderately complicated organic compounds.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 2203, CHEM 2213, or CHEM 2923) and (CHEM 2202 (may be taken concurrently), CHEM 2212 (may be taken concurrently), or CHEM 2922 (may be taken concurrently))

CHEM 2211. Organic Chemistry for Majors I. 3 Credit Hours.

This course is typically offered in Fall.

Structure, synthesis, and reactivity of hydrocarbons and their simple derivatives. Principles of organic spectroscopy and stereochemistry. Introductory study of kinetics and reaction mechanisms. Presentation focused on topics of interest to the professional chemist.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 1032, CHEM 1042, or CHEM 1952)

CHEM 2212. Organic Chemistry for Majors II. 3 Credit Hours.

This course is typically offered in Spring.

Detailed examination of the more common functional groups and their reaction chemistry. Emphasis on development of organochemical reasoning powers through planning of multi-step syntheses and solution of structural problems by the combination of chemical and spectroscopic methods. Applications of organic chemistry to the chemical profession.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 2201, CHEM 2211, or CHEM 2921)

CHEM 2213. Organic Majors Laboratory I. 1 Credit Hour.

This course is typically offered in Fall.

Introduction to organic chemical laboratory techniques, including spectroscopy and chromatography. Hands-on approach with individualized demonstration and instruction.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 1034, CHEM 1044, or CHEM 1954) and (CHEM 2201 (may be taken concurrently), CHEM 2211 (may be taken concurrently), or CHEM 2921 (may be taken concurrently))

CHEM 2214. Organic Majors Laboratory II. 1 Credit Hour.

This course is typically offered in Spring.

Advanced organic chemical laboratory techniques, including spectroscopy and chromatography. Hands-on approach with individualized demonstration and instruction.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 2203, CHEM 2213, or CHEM 2923) and (CHEM 2202 (may be taken concurrently), CHEM 2212 (may be taken concurrently), or CHEM 2922 (may be taken concurrently))

CHEM 2251. Organic Chemistry for Pre-Health Postbaccalaureates. 6 Credit Hours.

This course is typically offered in Fall.

This is a one-semester version of organic chemistry for post-baccalaureate students. It includes the chemistry of alkanes, alkenes, alkynes, alcohols, amines, alkyl halides, ethers, aromatic rings, aldehydes, ketones, carboxylic acids, esters, and amides. These topics will be covered with special consideration of their relevance to the health sciences. Note: To register for this course, students must satisfy the prerequisites or obtain permission from the program director.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in CHEM 1052 and CHEM 1054.

CHEM 2253. Organic Chemistry Lab for Pre-Health Postbaccalaureates. 1 Credit Hour.

This course is typically offered in Fall.

This is the laboratory component of a one-semester version of organic chemistry for post-baccalaureate students. It includes the chemistry of alkanes, alkenes, alkynes, alcohols, amines, alkyl halides, ethers, aromatic rings, aldehydes, ketones, carboxylic acids, esters, and amides. These topics will be covered with special consideration of their relevance to the health sciences. Note: To register for this course, students must satisfy the prerequisites or obtain permission from the program director.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in CHEM 2251 (may be taken concurrently) and CHEM 1054.

CHEM 2891. Introduction to Undergraduate Research. 1 Credit Hour.

This course is typically offered in Fall and Spring.

Study and research under supervision of a member of the Chemistry faculty. Open to sophomore chemistry and biochemistry majors, others with permission of the department. The student is expected to gain an introduction to research through participating in limited independent research (3-4 hours/week) and participating in group research activities. A group presentation is required, the content of which is to be determined in consultation with the Research Mentor. A final written report will be submitted to the faculty member, who will forward a copy to the Department's Undergraduate Research Coordinator. Students are responsible for arranging their program and submitting reports with lead-time sufficient that registration and grading can be accomplished normally. NOTE: For further information and details, contact the Undergraduate Research Coordinator. This course does not fulfill an advanced Chemistry course for the Chemistry B.A. or B.S. degree. This course is repeatable for credit.

Repeatability: This course may be repeated for additional credit.

CHEM 2921. Organic Chemistry for Honors I. 3 Credit Hours.

This course is typically offered in Fall.

Structure, synthesis, and reactivity of hydrocarbons and their simple derivatives. Principles of organic spectroscopy and stereochemistry. Introductory study of kinetics and reaction mechanisms. Presentation focused on topics of interest to the professional chemist. NOTE: This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, SA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 1032, CHEM 1042, or CHEM 1952)

CHEM 2922. Organic Chemistry for Honors II. 3 Credit Hours.

This course is typically offered in Spring.

Detailed examination of the more common functional groups and their reaction chemistry. Emphasis on development of organochemical reasoning powers through planning of multi-step syntheses and solution of structural problems by the combination of chemical and spectroscopic methods. Applications of organic chemistry to the chemical profession. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, SB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 2201, CHEM 2211, or CHEM 2921)

CHEM 2923. Organic Honors Laboratory I. 1 Credit Hour.

This course is typically offered in Fall.

Introduction to organic chemical laboratory techniques, including spectroscopy and chromatography. Hands-on approach with individualized demonstration and instruction. NOTE: This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, SA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 1034, CHEM 1044, or CHEM 1954) and (CHEM 2201 (may be taken concurrently), CHEM 2211 (may be taken concurrently), or CHEM 2921 (may be taken concurrently))

CHEM 2924. Organic Honors Laboratory II. 1 Credit Hour.

This course is typically offered in Spring.

Advanced organic chemical laboratory techniques, including spectroscopy and chromatography. Hands-on approach with individualized demonstration and instruction. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, SB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 2203, CHEM 2213, or CHEM 2923) and (CHEM 2202 (may be taken concurrently), CHEM 2212 (may be taken concurrently), or CHEM 2922 (may be taken concurrently))

CHEM 3001. Inorganic Chemistry. 3 Credit Hours.

Structure and bonding of inorganic compounds. Introduction to symmetry and group theory. Nomenclature. Descriptive chemistry of the main group elements. Introduction to transition metal chemistry and solid state materials. Mode: Three hours lecture and one hour recitation per week.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 2201, CHEM 2211, or CHEM 2921)

CHEM 3091. Research Methods. 3 Credit Hours.

This course is typically offered in Spring.

Research Methods is required for all of the TUteach with Teaching majors. It is one of several content courses specially designed to meet the needs of future teachers. Sections meet two hours per week for non-traditional, interactive lectures and two hours per week for lab. The course is cross-listed in Biology, Chemistry, Earth and Environmental Science, and Physics. The goals of the course are (1) to provide students with the tools that scientists use to solve scientific problems; (2) to give students the opportunity to use these tools in a laboratory setting; (3) to make students aware of how scientists communicate with each other through peer-reviewed scientific literature; and (4) to enable students to understand how scientists develop new knowledge and insights, the most important of which are eventually presented in textbooks and taught in conventional science classes. Students design and carry out four independent inquiries, which they write up and present in the manner that is common in the scientific community. The inquiries incorporate mathematics and the various science disciplines, thus the team of instructors teaching this course have expertise in different disciplines and are available to supervise all students as they work on their inquiries in the lab. The combination of Research Methods and the TUteach course "Perspectives on Science and Mathematics" (Philosophy 2196) provides prospective science and mathematics teachers with an in-depth understanding of how the scientific enterprise works. NOTE: Chemistry 3091 is only available for major credit in the Chemistry with Teaching BS program.

College Restrictions: Must be enrolled in one of the following Colleges: Science & Technology.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (SCTC 1289 or SCTC 1389)

CHEM 3103. Techniques of Chemical Measurement I. 3 Credit Hours.

This course is typically offered in Fall, Spring, and Summer I.

Introduction to the theory of instrumental analytical methods, with particular emphasis on equilibria and acid-base techniques. Application of statistics and error analysis to the design and execution of experiments, and writing and presenting scientific reports and papers. NOTE: Enrollment limited to students with declared majors in chemistry, biochemistry, or environmental science.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 1032 or CHEM 1952), (CHEM 1034 or CHEM 1954), and (MATH 1042, MATH 1044, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), 'Y' in MA07, 'Y' in MATW, 'Y' in CRMA09, 'Y' in CRMA10, or 'Y' in CRMA11)

CHEM 3105. Introduction to Chemical Research Techniques. 1 Credit Hour.

This course is typically offered in Fall, Spring, and Summer I.

Introduction to the application of instrumental analytical methods, with particular emphasis on equilibria and acid-base techniques. Written scientific reports will require a quantitative analysis of collected data, including statistics and error analyses. NOTE: Enrollment limited to students with declared concentration in chemistry or biochemistry.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 1032 or CHEM 1952), (CHEM 1034 or CHEM 1954), (MATH 1042, MATH 1044, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), 'Y' in MA07, 'Y' in MATW, 'Y' in CRMA09, 'Y' in CRMA10, or 'Y' in CRMA11), and CHEM 3103 (may be taken concurrently)

CHEM 3301. Physical Chemistry Lecture I. 3 Credit Hours.

This course is typically offered in Fall and Spring.

Chemistry 3301 (0231) provides the foundation essential for most higher-level work in chemistry. Topics covered include thermodynamics, phase equilibria, chemical equilibria, kinetic theory of gases, chemical kinetics, and equilibrium electrochemistry.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 1032, CHEM 1042, or CHEM 1952), (MATH 2043 (may be taken concurrently), any MATH course numbered 3043 to 3044 (may be taken concurrently), any MATH course numbered 3137 to 3142 (may be taken concurrently), or any MATH course numbered 4051 to 4063 (may be taken concurrently)), and (PHYS 1062 (may be taken concurrently), PHYS 2022 (may be taken concurrently), PHYS 2922 (may be taken concurrently), any PHYS course numbered 2101 to 2701 (may be taken concurrently), any PHYS course numbered 3101 to 3701 (may be taken concurrently), or any PHYS course numbered 4101 to 4796 (may be taken concurrently))

CHEM 3302. Physical Chemistry Lecture II. 3 Credit Hours.

This course is typically offered in Fall and Spring.

An introduction to quantum mechanics and spectroscopy. NOTE: Although it is recommended that physical chemistry courses be taken in sequence [i.e., 3301 (0231) followed by 3302 (0232)], this course may be taken prior to Chemistry 3301 (0231).

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 1032, CHEM 1042, or CHEM 1952), (MATH 2043 (may be taken concurrently), any MATH course numbered 3043 to 3044 (may be taken concurrently), any MATH course numbered 3137 to 3142 (may be taken concurrently), or any MATH course numbered 4051 to 4063 (may be taken concurrently)), and (PHYS 1062 (may be taken concurrently), PHYS 2022 (may be taken concurrently), PHYS 2922 (may be taken concurrently), any PHYS course numbered 2101 to 2701 (may be taken concurrently), any PHYS course numbered 3101 to 3701 (may be taken concurrently), or any PHYS course numbered 4101 to 4796 (may be taken concurrently))

CHEM 3303. Physical Chemistry Laboratory I. 2 Credit Hours.

This course is typically offered in Fall and Spring.

A laboratory-based exploration of the fundamental physical and chemical principles involved in thermodynamics, chemical equilibria, colligative properties, and electrochemistry. The material complements topics covered in CHEM 3301. Special emphasis is placed on physical measurements followed by computer-aided analysis of data and errors.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CHEM 3103, CHEM 3105, and CHEM 3301.

CHEM 3397. Physical Chemistry Laboratory I. 2 Credit Hours.

This course is typically offered in Fall and Spring.

A laboratory-based exploration of the fundamental physical and chemical principles involved in thermodynamics, chemical equilibria, colligative properties, and electrochemistry. The material complements topics covered in CHEM 3301. Special emphasis is placed on physical measurements followed by computer-aided analysis of data and errors. This writing-intensive course gives the student experience in generating technical reports as preparation for a professional career in Chemistry. NOTE: Capstone writing course.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 3103, CHEM 3105, and CHEM 3301)

CHEM 3398. Physical Chemistry Laboratory II. 2 Credit Hours.

This course is typically offered in Fall and Spring.

A laboratory-based exploration of the fundamental physical and chemical principles involved in quantum mechanics, spectroscopy, and chemical kinetics. The material complements topics covered in CHEM 3302. Special emphasis is placed on physical measurements followed by computer-aided analysis of data and errors. This writing-intensive course gives the student experience in generating technical reports as preparation for a professional career in Chemistry. NOTE: Capstone writing course.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 3103, CHEM 3105, and CHEM 3302)

CHEM 3401. Applications of Biochemistry. 3 Credit Hours.

This course provides a comprehensive introduction to biochemical concepts with an emphasis on application and relevance to health and medicine. Topics in the course will provide a strong background and foundation for students interested in pre-professional health programs. This course will satisfy the biochemistry requirement for the American Chemical Society certified degree in chemistry. Biochemistry majors must take CHEM 4401 instead of this course.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 2202, CHEM 2212, or CHEM 2922)

CHEM 3405. Physical Chemistry of Biomolecules. 3 Credit Hours.

CHEM 3405 is a lecture/recitation based survey course that covers those aspects of physical chemistry of use to biochemists in understanding the physical properties of biologically significant molecules and structures. Topics to be covered include thermodynamics, colligative properties of matter, electrolytes, enzyme kinetics, quantum theory, and spectroscopy. Note: Not for Chemistry majors.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1042 or MATH 1942), (PHYS 1062 (may be taken concurrently), PHYS 1962 (may be taken concurrently), PHYS 2022 (may be taken concurrently), or PHYS 2922 (may be taken concurrently)), and CHEM 4401 (may be taken concurrently)

CHEM 3881. Cooperative Research. 2 to 4 Credit Hours.

This course is typically offered in Fall, Spring, Summer I, and Summer II.

Independent study and research at Temple University outside of the Chemistry Department or at an off-campus laboratory facility under joint supervision of a member of the Temple Chemistry faculty and a Research Mentor at the laboratory facility. The class also meets one hour per week with the Undergraduate Research Coordinator to discuss report writing, searching the scientific literature, and proper research scholarship. Open to junior and senior chemistry and biochemistry majors, others with departmental approval. Credit may be offered for research during full-time off-campus employment. A final written report will be evaluated and endorsed by the research mentor and forwarded to the Department's Undergraduate Research Coordinator for final grade assignment. Students are responsible for arranging their programs and submitting reports with sufficient lead-time that registration and grading can be accomplished normally. NOTE: For further information and details, contact the Undergraduate Research Coordinator. CHEM 3881 can count as 1 of the 3 advanced laboratory courses required for the degree to be certified by the American Chemical Society. It will fulfill an Advanced Science elective for the Chemistry B.A. or B.S. degree. It will not fulfill an Advanced Chemistry elective for either Chemistry degree. Biochemistry majors may use CHEM 3881 as the first of two research courses towards satisfying one Biochemistry major elective.

Repeatability: This course may not be repeated for additional credits.

CHEM 3891. Undergraduate Research. 2 to 4 Credit Hours.

This course is typically offered in Fall, Spring, Summer I, and Summer II.

Independent study and research under the supervision of a member of the Chemistry faculty. The class also meets one hour per week with the Undergraduate Research Coordinator to discuss report writing, searching the scientific literature, and proper research scholarship. Open to junior and senior chemistry and biochemistry majors, others with permission of the department. A final written report will be evaluated by the faculty mentor and forwarded to the Department's Undergraduate Research Coordinator for final grade assignment. Students are responsible for arranging their program and submitting reports with sufficient lead-time that registration and grading can be accomplished normally. NOTE: For further information and details, contact the Undergraduate Research Coordinator. CHEM 3891 can count as 1 of the 3 advanced laboratory courses required for the degree to be certified by the American Chemical Society. It will fulfill an Advanced Science elective for the Chemistry B.A. or B.S. degree. It will not fulfill an Advanced Chemistry elective for the Chemistry B.A. or B.S. degree. Biochemistry majors may use CHEM 3891 as the first of two research courses towards satisfying one Biochemistry major elective.

Repeatability: This course may not be repeated for additional credits.

CHEM 4002. Advanced Inorganic Chemistry. 3 Credit Hours.

This course is not offered every year.

Group theory and its applications to chemical systems. Molecular orbital theory and spectroscopy. Descriptive chemistry of transition metal and organometallic compounds. Mode: Three hours lecture and one hour recitation per week.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 3001 or CHEM 4001) and (CHEM 3301 or CHEM 3302)

CHEM 4003. Inorganic Synthesis. 4 Credit Hours.

This course is typically offered in Fall and Spring.

Introduction to preparative techniques and spectroscopic techniques used in contemporary inorganic chemistry. NOTE: This course can count as one of the three advanced laboratory courses required for the degree to be certified by the American Chemical Society. Mode: One hour lecture and six hours laboratory per week.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 3001 or CHEM 4001) and (CHEM 3301 or CHEM 3302)

CHEM 4004. Crystallography and Diffraction. 4 Credit Hours.

This course is typically offered in Spring.

Students will learn the theory and practice of crystal structure determination by the method of single-crystal X-ray diffraction. Students will become independently competent in each stage of the crystal structure data collection, solution, and refinement processes, and will understand the theory behind each stage, as well as how to overcome common pitfalls. NOTE: This course can count as one of the three advanced laboratory courses required for the degree to be certified by the American Chemical Society. Mode: Three hours lecture and three hours laboratory per week.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 1031 or CHEM 1951) and (PHYS 1062, PHYS 1962, PHYS 2022, or PHYS 2922)

CHEM 4103. Instrumental Design. 4 Credit Hours.

This course is typically offered in Fall.

This course covers method development for the analysis of complex organic mixtures. The analytical techniques detailed are High Performance Liquid Chromatography (HPLC), Gas Liquid Chromatography (GLC), and other appropriate chromatographic methodologies. NOTE: This course can count as one of the three advanced laboratory courses required for the degree to be accredited by the American Chemical Society.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CHEM 3103, CHEM 3105, and CHEM 4196 (may be taken concurrently)

CHEM 4107. Drug Analysis. 4 Credit Hours.

This course is not offered every year.

Analytical techniques with specific applications to drug substances.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CHEM 3103, CHEM 3105, CHEM 3301, and CHEM 4196.

CHEM 4108. Investigative Chemistry. 4 Credit Hours.

This course is typically offered in Spring.

This course will challenge students to perform chemical analyses on a variety of samples that may be considered as evidence. Students will be instructed in methodology and method validation. An understanding of data statistics and representation of data through use of spreadsheets will be emphasized. This course will introduce students to modern chemical instrumentation and techniques as applied to forensic issues.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CHEM 3103, CHEM 3105, and CHEM 4196.

CHEM 4196. Techniques of Chemical Measurement II. 5 Credit Hours.

This course is typically offered in Fall and Spring.

This course provides an introduction to modern applications of chromatography and spectroscopy. Laboratory assignments involve quantitative and qualitative analyses of inorganic and organic molecules. Instrumentation design, operating principles, and theory will be presented as they apply to uv-vis, nmr, fluorescence, epr, aa, ae, gc, gc-ms, gpc, and hplc. NOTE: Capstone writing course.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CHEM 3103, CHEM 3105, (CHEM 3301 or CHEM 3302), and (CHEM 3301 (may be taken concurrently) or CHEM 3302 (may be taken concurrently))

CHEM 4201. Organic Structure and Mechanisms. 3 Credit Hours.

This course is typically offered in Fall.

A problem-oriented course in organic structure, stereochemistry, and reaction mechanisms. Introduction to efficient retrieval of information from the organochemical literature. Simple molecular orbital and HOMO/LUMO theory.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 2202, CHEM 2212, or CHEM 2922)

CHEM 4202. Organic Synthesis Methodology. 3 Credit Hours.

This course is typically offered in Spring.

Modern approaches to efficiently designed multi-step syntheses of important compounds. Retrosynthetic analysis, synthons, chiron, and protecting groups. Evaluation and appreciation of landmark achievements in the field.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 2202, CHEM 2212, or CHEM 2922)

CHEM 4207. Synthesis and Identification of Organic and Medicinal Compounds. 4 Credit Hours.

This course is typically offered in the Spring.

This course emphasizes the preparation of organic and medicinal compounds using modern chemical methods. Literature sources and spectroscopic methods are extensively used. Students learn the safe use of air sensitive reagents, the methods for purification, and the design of multistep syntheses. The environmental impact of method choice is addressed throughout the course. NOTE: This course can count toward the American Chemical Society certified BS degree.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 2202, CHEM 2212, or CHEM 2922) and (CHEM 2204, CHEM 2214, or CHEM 2924)

CHEM 4301. Advanced Physical Chemistry. 3 Credit Hours.

This course will cover advanced topics in Physical Chemistry. A main focus will be on statistical thermodynamics, which links the microscopic molecular properties of matter and its bulk thermodynamic properties. Other topics to be covered are chemical kinetics, reaction dynamics, and computational chemistry. Prior basic knowledge in Thermodynamics (CHEM 3301) and Quantum Mechanics (CHEM 3302) is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CHEM 3301 and CHEM 3302.

CHEM 4396. Physical Chemistry Laboratory. 4 Credit Hours.

This course is typically offered in Fall and Spring.

A laboratory study of the fundamental physical and chemical principles involved in molecular spectroscopy, thermodynamics, and chemical kinetics, with particular emphasis on the techniques of physical measurement and the presentation of coherent laboratory reports. NOTE: Capstone writing course.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CHEM 3103, CHEM 3105, (CHEM 3301 or CHEM 3302), and (CHEM 3301 (may be taken concurrently) or CHEM 3302 (may be taken concurrently))

CHEM 4401. Biochemistry I. 3 Credit Hours.

This course is typically offered in Fall and Spring.

Emphasis on structure/function relationships in proteins and nucleic acids. Kinetics and catalytic mechanisms of enzymes. Replication and genetic manipulation of DNA. NOTE: This course is required for the degree to be certified by the American Chemical Society.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 2202, CHEM 2212, or CHEM 2922) and CHEM 3103 (may be taken concurrently)

CHEM 4496. Research Techniques in Biochemistry. 4 Credit Hours.

This course will be offered in Fall and Spring.

Laboratory instruction in techniques used to investigate biochemical problems. Techniques include spectrophotometry, various types of electrophoresis, separation of macromolecules, two-dimensional protein separation, affinity chromatography, isolation of plasmid DNA, Western Blot, immunoassay, enzyme kinetics, and radioisotope techniques. Students will be given a small research project. This is a writing intensive course.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 4401 or BIOL 4375)

CHEM 4503. Introduction to Polymer Chemistry. 4 Credit Hours.

This course is typically offered in Fall.

Polymers are ubiquitous in many new (scaffolds for tissue engineering, hip replacements) and old (textiles, engineering resins, flocculants) applications, and are often used in composites with inorganic materials. In order to better understand the use and novel developments of polymers, this course will provide the fundamentals of synthesis, polymer structure/property relationships, and characterization methods. There is a laboratory component to the course that will cover molecular weight and phase transition methods.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 2202, CHEM 2212, or CHEM 2922) and CHEM 3301.

CHEM 4881. Cooperative Research. 1 to 3 Credit Hour.

This course is typically offered in Fall, Spring, Summer I, and Summer II.

Independent study and research at Temple University outside of the Chemistry Department or at an off-campus laboratory facility under joint supervision of a member of the Temple Chemistry faculty and a Research Mentor at the laboratory facility, to be taken after a minimum grade of C- in CHEM 3881 or CHEM 3891. Open to senior chemistry and biochemistry majors, others with departmental approval. Credit may be offered for research during full-time off-campus employment. A final written report will be evaluated and endorsed by the research mentor and forwarded to the Department's Undergraduate Research Coordinator for final grade assignment. Students are responsible for arranging their programs and submitting reports with lead-time sufficient that registration and grading can be accomplished normally. NOTE: For further information and details, contact the Undergraduate Research Coordinator. CHEM 4881 will not count as an advanced laboratory course required for the degree to be certified by the American Chemical Society and/or as an Advanced Science elective for the Chemistry B.A. or B.S. degree. CHEM 4881 will not fulfill an Advanced Chemistry elective for the Chemistry B.A. or B.S. degree. Biochemistry majors may use CHEM 4881 to satisfy one of the two major course electives.

Repeatability: This course may be repeated for additional credit.

CHEM 4891. Undergraduate Research. 1 to 3 Credit Hour.

This course is typically offered in Fall, Spring, Summer I, and Summer II.

Independent study and research under supervision of a member of the Chemistry faculty, to be taken after a minimum grade of C- in CHEM 3881 or CHEM 3891. Open to senior chemistry and biochemistry majors, others with the permission of the department. A final written report will be evaluated by the faculty mentor and forwarded to the Department's Undergraduate Research Coordinator for final grade assignment. Students are responsible for arranging their program and submitting reports with sufficient lead-time that registration and grading can be accomplished normally. NOTE: For further information and details, contact the Undergraduate Research Coordinator. CHEM 4891 will not count as an advanced laboratory course required for the degree to be certified by the American Chemical Society and/or as an Advanced Science elective for the Chemistry B.A. or B.S. degree. CHEM 4891 will not fulfill an Advanced Chemistry elective for the Chemistry B.A. or B.S. degree. Biochemistry majors may use CHEM 4891 to satisfy one of the two major course electives.

Repeatability: This course may be repeated for additional credit.

Chinese (CHI)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

CHI 0868. World Society in Literature & Film. 3 Credit Hours.

Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindi, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

CHI 1001. Chinese Elements I. 4 Credit Hours.

First semester level of Mandarin Chinese. Assumes no prior knowledge.

Repeatability: This course may not be repeated for additional credits.

CHI 1002. Chinese Elements II. 4 Credit Hours.

Second semester level of Mandarin Chinese.

Course Attributes: LC

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CHI 1001.

CHI 2001. Chinese Intermediate I. 3 Credit Hours.

Third semester of Mandarin Chinese.

Course Attributes: LC

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CHI 1002.

CHI 2002. Chinese Intermediate II. 3 Credit Hours.

Fourth semester of Mandarin Chinese.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CHI 2001.

CHI 2011. Pre-Modern Chinese Literature. 3 Credit Hours.

This course provides an interdisciplinary introduction to Chinese literature from its inception to the early 18th century. Some of the course's readings are drawn from works well known in the west like the "Book of Songs," "Zhuangzi," the poems of the Tang poets Wang Wei, Li Bai, Du Fu, and Bai Juyi, and the Song poet Su Shi, and short stories by the dramatist and novelist Li Yu. Other readings include works less well known in the west but long considered central to various literary and performance traditions by many Chinese. This course will present its readings with an emphasis on their cultural and historical contexts. Special attention will be paid to the place they have in various Chinese literary traditions and how these traditions have contributed to both Chinese ways of understanding their own cultural heritage and how they have influenced western understandings of that heritage. Note: This course is cross-listed with Asian Studies 2014. Students may only receive credit for one of these courses: ASST 2014 or CHI 2011.

Repeatability: This course may not be repeated for additional credits.

CHI 2013. Modern and Contemporary Chinese Literature in Translation. 3 Credit Hours.

This course focuses on 20th- and 21st-century literature from China. Among the major themes of the course are socio-political and cultural upheaval and transformation, fiction and nation, and gender, race and class relations. Students will read representative short stories, novels, poetry, and essays. Selected documentaries and feature films will supplement the literary texts. The course will help familiarize students with major writers and with the cultural and historical contexts in which they produced their works. NOTE: Students will earn credit only once for either CHI 2013 or ASST 2013.

Repeatability: This course may not be repeated for additional credits.

CHI 2015. The Chinese Language. 3 Credit Hours.

This course provides a systematic introduction to the sound system and major grammatical structures of Mandarin Chinese. Readings will deal with topics ranging from the sounds of Mandarin and how they are organized into syllables and larger units to how the grammar expresses phenomena like the temporal ordering of actions with respect to each other, an action's duration, or a speaker's attitude towards an event. The course will be conducted in English and all examples will be transcribed into the Latin alphabet using Pinyin and will be provided with detailed English translations.

Repeatability: This course may not be repeated for additional credits.

CHI 2022. Contemporary Chinese Urban Film and Fiction in Translation. 3 Credit Hours.

This course looks at a selection of Chinese cinematic and literary texts by contemporary filmmakers and writers from China, Taiwan, and Hong Kong. Through the study of film and fiction, we will examine how urban spaces and subjects have been delineated and imagined within the context of recent social and economic transformation and globalization. In particular, we will examine the different ways in which cinematic images and narrative structures celebrate the metropolis and convey the anxieties associated with it. We will explore a wide range of urban subjects as represented in film and fiction, and the ways in which they are shaped by and at the same time are shaping society and culture in China, Taiwan, and Hong Kong today. Note: This course is cross-listed with Asian Studies 2022. Students may only receive credit for one of these courses: ASST 2022 or CHI 2022.

Repeatability: This course may not be repeated for additional credits.

CHI 2112. Chinese Literature: From Classical to Contemporary. 3 Credit Hours.

Students taking this course will have the opportunity to learn about China's long literary history by reading, discussing, and analyzing selected novels, short stories, poems, and literary essays. The first half of the semester will focus on work produced from around 1000 B.C.E. through the middle of the 19th century, with the second half covering the modern and contemporary periods. Ancient and classical writers (such as Zhuang Zi, Bai Juyi and Su Dongpo) and modern and contemporary writers (such as Lao She and Mo Yan) will be introduced. Class discussions and assignments will help students become acquainted with current theoretical and methodological approaches in the fields of Chinese. NOTE: Students can earn credit only once for either CHI 2112 or ASST 2112.

Repeatability: This course may not be repeated for additional credits.

CHI 3000. Chinese Special Topics I. 3 Credit Hours.

Arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic.

Repeatability: This course may be repeated for additional credit.

CHI 3001. Chinese Advanced I. 3 Credit Hours.

Fifth semester of Mandarin Chinese.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CHI 2002.

CHI 3002. Chinese Advanced II. 3 Credit Hours.

Sixth semester of Mandarin Chinese.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CHI 3001.

CHI 3021. Modern China in Fiction and Film. 3 Credit Hours.

Covering topics such as identity, gender, urban culture, revolution, and dissent, this course will focus on literary and cinematic representations of modern Chinese society. Texts will include novels, novellas, short stories, dramatic films, and documentaries. Knowledge of Chinese is not required. The course will be conducted in English. All readings will be in English translation, and the films and documentaries will be subtitled.

Repeatability: This course may not be repeated for additional credits.

CHI 3031. Women in Chinese Literature. 3 Credit Hours.

This course focuses on women writers and women as characters in premodern, modern, and contemporary Chinese literature. Texts will include poetry, novels, short stories, and drama. Gender, representation, and women's roles in the history of Chinese literature are among the topics that will be covered. Knowledge of Chinese is not required. The class will be conducted in English, and all readings will be in English translation. Note: This course is cross-listed with Asian Studies 3031 and Gender, Sexuality, and Women's Studies 3031. Students may only receive credit once for these courses: ASST 3031, CHI 3031, or GSWS 3031.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

CHI 3900. Honors Special Topics. 3 Credit Hours.

Topics vary from semester to semester. Please check with the faculty advisor or course instructor for a description and topic.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

CHI 4001. Chinese Culture and Civilization. 3 Credit Hours.

Seventh semester of Mandarin Chinese. This course covers topics and themes that are important to an understanding of Chinese culture and civilization. In addition, students will further develop their Chinese language skills in reading, writing, listening, and speaking. The course will be conducted entirely in Chinese.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CHI 3002.

CHI 4182. Chinese Independent Study I. 3 Credit Hours.

Arranged each semester. Please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in CHI 3002.

CHI 4282. Chinese Independent Study II. 3 Credit Hours.

Arranged each semester. Please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in CHI 3002.

CHI 4296. Chinese Composition. 3 Credit Hours.

Eighth semester of Mandarin Chinese. A writing-intensive course. This course focuses on developing advanced skills in writing standard Chinese. Assignments and class discussions will focus on material drawn from contemporary Chinese essays, fiction, and journalism. The course will be conducted entirely in Chinese.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CHI 3002.

CHI 4297. Chinese Capstone Seminar. 3 Credit Hours.

This variable content course will focus closely on selected texts and themes in Chinese literature and/or film. Students will be expected to identify a research topic and formulate a thesis early in the semester, develop the project in stages (aided by collaborative class discussions and seminar presentations), and to submit a 15- to 20-page paper by the end of the semester.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CHI 3002.

City and Regional Planning (CTRP)

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CTRP 0807. People, Places, and Environment. 3 Credit Hours.

Have you ever thought about the relationship people have to their place - home, neighborhood, town, or city? How about to the environment? Have you ever thought about how people have shaped the places of our everyday lives - suburban housing developments, shopping malls, and small towns? And, have you ever thought about what will happen in the future to the Earth's natural resources - the air, water, and land - as we continue to build and expand? Explore these kinds of questions through readings, lectures, video presentations, and group discussions. Challenge your mind - and imagination - and open up new avenues of discovery. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for CTRP 0807 if they have successfully completed CTRP 1007, CRP 1007 or CRP C061.

Course Attributes: GU, SE, SF, SP

Repeatability: This course may not be repeated for additional credits.

CTRP 0821. Digital Mapping: From Mercator to Mashups. 4 Credit Hours.

Almost all of us interact with digital maps regularly for finding directions and the locations of services, like the nearest coffee shop. Yet for most, the inner workings of digital maps remain a mystery. This course provides an in-depth exploration of how digital maps work - what technologies support location tracking, where do the mapped data come from, and how digital maps are used to analyze geographic problems in urban and environmental planning and policy, health, and business. Along the way, you will develop quantitative literacy by learning how to acquire spatial data, make digital maps, and critically evaluate mapping applications. NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for CTRP 0821 if they have successfully completed CRP 0821, GUS 0821 or GUS 0921.

Course Attributes: GQ, SI

Repeatability: This course may not be repeated for additional credits.

CTRP 1001. Freshman Seminar/Discovery Series. 1 Credit Hour.

Introduces first-year students to the purpose of higher education and the skills needed to use information technology and academic resources successfully in college and the workplace. Focuses on topics useful to college students, including time management, teamwork, study skills, and academic and career planning.

Repeatability: This course may not be repeated for additional credits.

CTRP 1017. City Planning Principles and Practice. 3 Credit Hours.

Theory and practice of urban planning in the United States. Discussion of planning policy, methodology, and implementation in such areas as land use, housing, environment, economic development, and transportation. Particular emphasis is given to the ways in which values and ethics inform the planning process, as well as how societal changes are affecting our land use options. Note: Prior to fall 2017, the course title was "Introduction to Community and Regional Planning."

Repeatability: This course may not be repeated for additional credits.

CTRP 2114. Urban Form and Design. 3 Credit Hours.

Basic design principles, techniques, and practices of sustainable urban form and design. The topics for most readings, projects, and guest lectures are people oriented and examine the many elements that contribute to the aesthetic and human quality of communities of all sizes. Through poster presentations, field visits, and other assignments, students analyze the nature of public spaces, streets and boulevards, landscaping, water, materials, light, scale, mass, and time. Explores the roles of unity, harmony, symbolism, and cultural values. Course readings have both historical and current references. Students participate in real-world urban design projects, visual design analyses, and presentations in a studio setting.

Course Attributes: SI, SS

Repeatability: This course may not be repeated for additional credits.

CTRP 2166. Land Use Planning. 3 Credit Hours.

At the heart and soul of community and regional planning is land use. How we use land and the institutional and legal basis by which we establish and implement land use goals are key elements in how our communities and regions are shaped. This course examines the foundations of land use planning, which begins with an understanding of attitudinal, value, and ethical perspectives of how land resources are used. The range of land use implementation approaches - regulatory, fiscal, incentives, and public investment - are also evaluated. The course additionally discusses the importance of ecological planning and design as prospects for contemporary land use planning to create sustainable communities and regions. NOTE: This course is not open to students who have taken Geography and Urban Studies 4015 (0215).

Course Attributes: SE, SI, SP, SS

Repeatability: This course may not be repeated for additional credits.

CTRP 2213. Environmental Planning. 3 Credit Hours.

A comprehensive overview of physical and environmental systems, including land, air, and water, and how planning can be conducted to protect such systems. Topics include environmental assessments and impact statements, storm water and floodplain management, water conservation, protection of open spaces and water supplies, waste management, and air pollution control.

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

CTRP 2251. Sustainable Food Systems Planning. 3 Credit Hours.

Planners are paying attention to the notion of food system planning: farm land preservation and environmental stewardship; economic development including distribution, processing, employment and globalization; and food security, involving access to affordable, healthy foods. There are also issues of public health, food cultures, consumer spending patterns, and education. This course explores all of these concerns. Guest speakers and field trips provide a focus on regionally based food systems initiatives. Course readings and lectures address work that is underway elsewhere in North America. Students develop an appreciation for the ways in which a food systems perspective can enrich community planning efforts and create more sustainable and vital places in which to live and flourish.

Course Attributes: SE, SF, SP, SS

Repeatability: This course may not be repeated for additional credits.

CTRP 2524. Fundamentals of Geographic Information Systems (GIS). 3 Credit Hours.

Basic principles and techniques of GIS, a computer-based system that uses spatial (geographic) data to analyze and solve real-world issues. Lab exercises, exams, and projects emphasize spatial data collection, entry, storage, analysis, and output using ArcGIS, the most widely used desktop GIS software. Students are expected to create maps, following basic cartographic rules and techniques, and to understand basic spatial data analysis techniques, including spatial query, geo-processing, and surface analysis. NOTE: This course is not open to students who have taken Geography and Urban Studies 3062 (0262). This course is the prerequisite for Advanced GIS (CTRP 5525) for all students (both undergraduate and graduate).

Repeatability: This course may not be repeated for additional credits.

CTRP 3155. Ecological Planning and Development. 3 Credit Hours.

The fundamentals of the ecological planning method developed by landscape architect and regional planner, Ian McHarg, establish a basis to plan and develop both individual projects and entire communities that can be enduring (sustainable). Students examine both theory and practice in the relationship between ecological planning and actual development. Case studies, field trips, and guest presenters will highlight specific examples of the successful implementation of ecological planning by the private development sector.

Course Attributes: SE, SF, SP

Repeatability: This course may not be repeated for additional credits.

CTRP 3255. Sustainability in Suburban Communities. 3 Credit Hours.

The physical forms of suburban communities and the social and economic patterns that shape residents' lives make achieving sustainability in suburbia challenging and problematic. Distances between homes, businesses, and worksites are long, transportation choices are few, infrastructure needs are extensive and costly, and impacts on ecological systems can be severe. Many argue that higher-density, urban living holds our best promise for an environmentally sustainable future in the United States, but half of all Americans live in suburbia and finding sustainable solutions for them and their communities must be part of the solution. Lectures, readings, and discussions in this course address sustainability in suburban communities by covering the history of the American suburb and processes of suburbanization; architecture and housing; landscape and community design; transportation and infrastructure; built and natural environments and ecological systems; and planning, administration, and regionalism.

Course Attributes: SE, SF, SP, SS

Repeatability: This course may not be repeated for additional credits.

CTRP 3256. Sustainable Community Design and Development. 3 Credit Hours.

Introduces students to the concept of sustainable development and how it has been applied to the design and development of communities. Beginning with an examination of the historical evolution of the concept of sustainable development, students then review the discourse of theory and practice of sustainable development at local, regional, and global levels. Review of case studies to understand how to evaluate the level of sustainable development principles being incorporated into planning practice.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: SF, SP, SS

Repeatability: This course may not be repeated for additional credits.

CTRP 3555. Internet and Digital Technologies for Community Engagement. 3 Credit Hours.

Emerging technologies are directly influencing the planning and management of our urban areas in very profound and pervasive ways. Planning and related professionals increasingly are adopting new technologies to develop plans, communicate ideas and concepts, and engage citizens in the decision-making process. The course introduces many fundamental technology concepts including: e-Planning and e-Government; Cybercities; e-Commerce & Economic Development; Web 1.0, 2.0, 3.x, Web Conferencing Tools; Online Project Collaboration Methods; IT Project Management; Section 508 Accessibility; Planning in Virtual Worlds; Municipal Wireless Networks & Public Spaces; and Digital Divide. Through a series of labs and assignments, students gain hands-on experience with each of these technologies.

Repeatability: This course may not be repeated for additional credits.

CTRP 3655. Transportation Planning. 3 Credit Hours.

Presents an overview of the history of transportation in the United States and the fundamentals of present day transportation planning and policies. Explores the influences of urban form on: modal choice; accessibility and mobility of various population subsets (such as the economically- and physically-disadvantaged); regional and local travel demand; and the operational efficiency of transit, highways, bicycle, pedestrian and other modes of transportation. Covers the impact of transportation investments on land use and regional population growth, and on environmental, community, and economic sustainability. Introduces students to currently used transportation planning methodologies, legal requirements, and decision-making processes. By studying actual transportation projects, students develop a plan for an assigned project.

Course Attributes: SE, SI, SP, SS

Repeatability: This course may not be repeated for additional credits.

CTRP 3755. Introduction to Emergency Management Planning. 3 Credit Hours.

Provides a fundamental understanding of the emergency planning process, the phases of emergency management, and the roles and responsibilities of all parties involved. Students work in a classroom environment, interacting with others on various assignments, projects and presentations.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

CTRP 3860. Topics in Community & Regional Planning. 1 to 3 Credit Hour.

Variable offerings from semester to semester of selected topics not part of the regular listing of courses. The topic can be in an area of specialization of a faculty member or an examination of a current development in the field. NOTE: Students may obtain a description of the current version at the department office and in the schedule of classes. This course may be repeated for credit.

Course Attributes: SF

Repeatability: This course may be repeated for additional credit.

CTRP 3870. Special Topics. 1 to 3 Credit Hour.

Variable offerings from semester to semester of selected topics not part of the regular listing of courses. The topic can be in an area of specialization of a faculty member or an examination of a current development in the field. NOTE: Students may obtain a description of the current version at the department office and in the schedule of classes. This course may be repeated for credit.

Repeatability: This course may be repeated for additional credit.

CTRP 3882. Independent Study. 1 to 3 Credit Hour.

Explorative study or research not met in any established course. Initiated by the student, the project must be sponsored by a faculty member with an approved agreement outlining the content and requirements, including readings, meetings, and papers. NOTE: Students must have the agreement of a faculty sponsor and must submit a formal proposal to this faculty member and Department before registering for the course. A maximum of 3 s.h. of Community and Regional Planning directed reading/study or independent study may be used as elective credit toward the Community and Regional Planning major.

Repeatability: This course may be repeated for additional credit.

CTRP 3883. Directed Reading/Study. 1 to 3 Credit Hour.

Advanced reading/study tutorial arranged between the student and a faculty member. Requirements are jointly determined relative to the specific focus of the course and may include literature review; preparation of journals, bibliographies and/or paper(s); and participation in regularly scheduled discussions. The level of work required is equivalent to a traditional course. Writing skills are evaluated for the final grade. Students are expected to demonstrate personal initiative in framing and meeting course requirements. NOTE: A maximum of 3 s.h. of Community and Regional Planning directed reading/study or independent study may be used as elective credit toward the Community and Regional Planning major.

Repeatability: This course may be repeated for additional credit.

CTRP 3889. Planning Studio. 3 Credit Hours.

A culminating experience for undergraduates that demonstrates their abilities to resolve real-life problems. Working in small teams, students integrate and apply the previous years of educational experience to a community planning problem: analysis of the problem, data collection, communication of goals and objectives, formulation of a solution, and implementation. NOTE: Studio topics vary. This course may be repeated for credit.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Community and Regional Plannin.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Science.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of D- (except where noted) in (CRP 2513 or CDEV 2596), (CTRP 2524 or CRP 2524), and (CTRP 4896 (C- or higher) or CRP 4896 (C- or higher))

CTRP 4885. Internship and Professional Practice in Planning. 3 Credit Hours.

Student must be a Community and Regional Planning major who has completed: CTRP/CRP 1017, 1027, 2014, 2213, 2496, 2513, 2524; plus at least one Community and Regional Planning elective. Students may register for CTRP 4885 only once. Requires 180 hours of supervised internship experience with public agencies, non-profit institutions, and private entities. Must have a designated field supervisor. Emphasizes the acquisition and application of practical skills in planning.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Community and Regional Plannin.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Science.

Repeatability: This course may be repeated for additional credit.

CTRP 4896. Community and Regional Planning Senior Capstone Seminar. 3 Credit Hours.

Students complete a capstone project that simulates the type of work and project research likely to be undertaken in the first years of employment in a planning office. This involves developing and researching a planning topic. NOTE: Fulfills the capstone writing intensive requirement for the Community and Regional Planning major.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Community and Regional Plannin.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Science.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in (CTRP 2114 or CRP 2114), (CTRP 2213 or CRP 2213), (CDEV 2596 or CRP 2513), and (CTRP 2524 or CRP 2524)

Civil Engineering (CEE)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

CEE 0845. The Environment. 3 Credit Hours.

In today's world characterized by rapid and global environmental changes, it is crucial that citizens have an understanding of the key concepts in environmental science. This course provides students with an introduction to the science behind critical environmental debates and breaks down the requirements for creating and maintaining sustainable ecosystems. A major focus of the course is to develop critical thinking skills and apply them to assess relevant questions such as: How do we predict trends in the growth of populations or climate change? How do human activities impact the nitrogen and phosphorus cycles and how does this in turn affect the environment? How can we quantify and value biodiversity? Should we eat lower on the food chain or are genetically modified crops a sustainable solution? What were the key outcomes of the 2015 U.N. Climate Change Conference in Paris and how will various countries carry out their commitments to protect the environment? This course will enhance awareness of the impacts that our everyday decisions have on the environment and will provide students with strategies to become better environmental stewards. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot receive credit for this course if they have successfully completed CEE 0945, CEE 1051, ENVT 0845, ENVT 0945, or ENVT 1051.

Course Attributes: GS, SE, SF

Repeatability: This course may not be repeated for additional credits.

CEE 0945. Honors: The Environment. 3 Credit Hours.

In today's world characterized by rapid and global environmental changes, it is crucial that citizens have an understanding of the key concepts in environmental science. This course provides students with an introduction to the science behind critical environmental debates and breaks down the requirements for creating and maintaining sustainable ecosystems. A major focus of the course is to develop critical thinking skills and apply them to assess relevant questions such as: How do we predict trends in the growth of populations or climate change? How do human activities impact the nitrogen and phosphorus cycles and how does this in turn affect the environment? How can we quantify and value biodiversity? Should we eat lower on the food chain or are genetically modified crops a sustainable solution? What were the key outcomes of the 2015 U.N. Climate Change Conference in Paris and how will various countries carry out their commitments to protect the environment? This course will enhance awareness of the impacts that our everyday decisions have on the environment and will provide students with strategies to become better environmental stewards. (This is an Honors course.) NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot receive credit for this course if they have successfully completed CEE 0845, CEE 1051, ENVT 0845 or ENVT 0945.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GS, HO, SE, SF

Repeatability: This course may not be repeated for additional credits.

CEE 1001. Introduction to Civil Engineering. 3 Credit Hours.

This course provides an understanding of the study and practice associated with Civil Engineering. It stresses the importance of good communications and teamwork skills in a successful engineering career. Students will understand the basics of problem solving and design. Laboratory included.

Repeatability: This course may not be repeated for additional credits.

CEE 1051. Introduction to the Environment. 3 Credit Hours.

Basic environmental issues, systems and change; biogeochemical cycles; human population; ecosystems and their management and restoration; biological diversity, productivity and energy flow; biogeography; environmental health, pollution and toxicology; energy; and global warming. Hands on laboratory exercises are an integral part of the course. The lab exercises are conducted within the class schedule at each campus. NOTE: Students cannot receive credit for this course if they have successfully completed CEE 0845, CEE 0945, ENVT 0845, ENVT 0945 or ENVT 1051.

Course Attributes: SE, SF, SS

Repeatability: This course may not be repeated for additional credits.

CEE 1105. Surveying. 2 Credit Hours.

Calculating closure and area of a traverse; computing offset angles and chord distances to layout circular and spiral curves; determine elevations to layout vertical curves; computing volumes from terrain cross sections. Field problems using surveying instruments to layout a traverse and a circular curve. Students will work on teams, which will be responsible for performing field work, analytic calculations, and report presentation associated with loop leveling and closed-loop traverse surveys.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 1021 to 4999, 'Y' in MC5, 'Y' in MC6, 'Y' in MC6A, 'Y' in MATW, 'Y' in MC6T, or 'Y' in METW)

CEE 1115. Surveying Laboratory. 1 Credit Hour.

Students will work on teams, which will be responsible for performing field work, analytic calculations, and report presentation associated with loop leveling and closed-loop traverse surveys.

Repeatability: This course may not be repeated for additional credits.

CEE 2011. Civil Engineering Materials. 2 Credit Hours.

Basic laboratory and field tests conducted with aggregate, soil, concrete, steel, masonry, wood and other construction materials.

Repeatability: This course may not be repeated for additional credits.

CEE 2341. Construction Materials Laboratory. 2 Credit Hours.

Basic laboratory and field tests conducted with aggregate, soil, concrete, steel, masonry, wood and other construction materials. Students are required to submit lab reports on the test results of various materials.

Repeatability: This course may not be repeated for additional credits.

CEE 2711. Environmental Chemistry & Microbiology. 3 Credit Hours.

This course covers the structure of atoms; chemical bonds and reactions; water, solutions, and colloids; acids, bases, and pH; carbohydrates, lipids, proteins; nucleotides and nucleic acids; commonly occurring organic contaminants; and microorganisms and contamination remediation.

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 1031 or CHEM 1035) and CHEM 1033.

CEE 2712. Introduction to Environmental Engineering. 3 Credit Hours.

This course will provide an introduction to the sources, effects, and control of pollution in different environmental compartments. Topics include air and water quality (indicator parameters), mass transport, solid and hazardous waste classification, risk assessment, environmental regulations (air, water, solids). Water and wastewater treatment are introduced as well as water resources engineering (rainfall/runoff analysis).

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (CHEM 1031 or CHEM 1951) and (MATH 1042 (C or higher), MATH 1942 (C or higher), 'Y' in MATW, 'Y' in CRMA09, 'Y' in CRMA11, or 'Y' in METW)

CEE 2715. Principles of Sustainable Engineering. 3 Credit Hours.

Sustainable engineering principles include calculations of environmental emissions and resource consumption. Mass and energy balance calculations in context of pollution generation and prevention, resource recovery and life-cycle assessment. Economic aspects of sustainable engineering decision-making. Social impacts of technology system design decisions including ethical frameworks, government legislation and health risks. Students will gain an awareness of challenges to sustainable water and energy and inter-linkages between these. Energy-water design trade-offs will be investigated for various energy and water processing facilities, e.g. electric power or desalination plants.

Course Attributes: SE, SF, SS

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CEE 2712.

CEE 2811. Sustainable Projects in the Developing World I. 2 Credit Hours.

This course focuses on multiple aspects of developing and implementing projects in underserved areas of the world following guidelines established by Engineers Without Borders. This course will prepare students for international travel to work on projects currently being undertaken or considered by the EWB Temple University student chapter. The course topics include development of community partnerships, identification of community needs, budgeting, fundraising, communication, and sustainable project design. Topics covered each semester will be dependent on the current project status. The course is open to students across all disciplines with an interest in applying their education to projects in the developing world. This is the first of a two course sequence with CEE 2812.

Course Attributes: SF

Repeatability: This course may be repeated for additional credit.

CEE 2812. Sustainable Projects in the Developing World II. 1 Credit Hour.

This course focuses on multiple aspects of developing and implementing projects in underserved areas of the world following guidelines established by Engineers Without Borders. In this course students will develop a topic related to the service learning trip undertaken as part of CEE 2811 and write an in-depth technical report. Topics may include, but are not limited to, development of community partnerships, identification of community needs, and sustainable engineering design. This course is open to students across all disciplines who have successfully completed CEE 2811 and traveled on an EWB-Temple, or similar, service trip. This is the second of a two course sequence (with CEE 2811).

Course Attributes: SF

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in CEE 2811.

CEE 3048. Probability, Statistics & Stochastic Methods. 3 Credit Hours.

A practical course on uncertainty and risk analysis for engineers and scientists, including modern computer algebra software applications. Random variables and probability distributions. Simulations of random systems, analytical models and Monte Carlo simulations. Systems with jointly distributed random variables. Estimation theory in engineering. Fitting probability models to data. Regression analysis. Reliability of engineering systems. Design of engineering experiments. Experiments and tests for two or more random variables. ANOVA. Introduction to stochastic processes, random walk, Brownian motion, white noise, and colored noise processes. Stochastic differential equations, stochastic calculus, differential equations with random initial conditions, random forcing functions, random boundary conditions, random partial differential equations. New techniques for non-linear equations.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in (MATH 2041, MATH 2941, MATH 3041, MATH 3941, or 'Y' in METW)

CEE 3211. Transportation Engineering. 3 Credit Hours.

The principal modes of transportation including highway, rail, and air; analysis of elements of transport technology; transportation system development, planning, design, construction, and maintenance.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in CEE 1105.

CEE 3311. Construction Engineering. 3 Credit Hours.

Contracts, construction contract documents, and construction specifications; estimating construction costs, planning and estimating earthwork, concrete formwork design and estimating; planning and scheduling construction projects, critical path method; project cash flow, funding and cost control; construction equipment: types, ownership and operating costs. Computer applications.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in CEE 2011.

CEE 3331. Soil Mechanics. 3 Credit Hours.

Soil as a multiphase material, strength and deformation properties, earth pressure, bearing capacity, stability of slopes, soils laboratory. Written reports and oral presentations required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ENGR 2333.

CEE 3332. Soil Mechanics Laboratory. 1 Credit Hour.

Students will work on teams, which will be responsible for performing laboratory work, analytic calculations, and report preparation associated with soil classification according to USCS and AASHTO systems and with soil compaction according to ASTM specifications.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ENGR 2333.

CEE 3334. Structural Design of Pavements. 3 Credit Hours.

Basic characteristics of different pavement structures, various modes of failure and design of pavement structures, identification and analysis of stresses, strains and deflections in flexible and rigid pavements, computation of the traffic loading and volume for the structural design of pavements, engineering properties of pavement materials, pavement performance, distress, empirical and mechanistic-empirical approaches.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in CEE 3331.

CEE 3411. Structural Analysis. 3 Credit Hours.

Elastic analysis of statically indeterminate structures using force and deformation methods. Introduction to numerical methods and computer techniques. The analysis includes determination of stresses and deflections using stiffness method, force method, and moment-distribution methods.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ENGR 2333.

CEE 3412. Structural Analysis Laboratory. 1 Credit Hour.

Introduction to the basic theory and concepts of the Stiffness Method and the Finite Element Method. Students will gain experience in analyzing structural systems and structural mechanics by general-purpose finite element programs such as STAAD PRO and ANSYS.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ENGR 2333.

CEE 3421. Steel Design. 3 Credit Hours.

Loadings on structures. Design criteria and procedures for steel members subjected to axial forces, bending and shear. Buckling of columns. Plastic design and load and resistances factor theories. Computer-based design methods are included.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in CEE 3411.

CEE 3431. Concrete Design. 3 Credit Hours.

Load and strength factor design methods for plain and reinforced concrete elements of structural systems. Serviceability checks at service loads. Manual and computer-based design methods are included.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in CEE 3411.

CEE 3441. Steel & Concrete Design. 4 Credit Hours.

The course's design objective is to develop within the student an awareness of the fundamentals that are required to produce safe, functional, and economical steel and reinforced concrete structures, which are in conformance with national building codes and with industry codes, specifications and standards and to formulate applied load criteria and make reasonable assumptions regarding structural behavior. Then through an interactive process, the student will determine the most cost-effective solution.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in CEE 3411.

CEE 3611. Hydraulic Engineering. 3 Credit Hours.

The course deals with the design of hydraulic systems based on various flow regimes (laminar and turbulent). Students will learn to design pipe and network systems along with open channels. The design of various hydraulic structures such as, culverts and spillways, will be taught. Widely used software such as MWH Soft and HECRAS (US Army Corps of Engineers) will be taught and used in the class. Field studies will be conducted and students will get to experiment with various instruments used in water systems (e.g., pumps, flowmeters, diffuser, etc). NOTE: Prior to spring 2010, the course title was "Hydrology and Hydraulic Engineering."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ENGR 3553.

CEE 3711. Environmental Engineering. 3 Credit Hours.

Sources, effect, and control of environmental pollution. Topics include air and water pollution, solid and hazardous waste, noise, radiation and risk assessment. Effects across media, and applications to current concerns such as global warming and ozone depletion are emphasized. Course material and problem solving are reinforced through application of appropriate computer models.

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 1031 or CHEM 1035) and (MATH 1042, MATH 1942, 'Y' in MATW, or 'Y' in METW)

CEE 3712. Environmental Fluids and Contaminant Dynamics. 3 Credit Hours.

Dynamics of fluids in motion; laminar and turbulent flow, Bernoulli's equation, friction in conduits; open-channel flow. Introduction to the processes controlling the migration and fate of chemicals in all phases of the environment, including surface and subsurface water as well as the atmosphere. Boundary layers, turbulence, mixing, convection, stratification and plumes and their impacts on contaminant dynamics will be discussed.

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CEE 2712, ENGR 2334, (MATH 2043, MATH 2943, or 'Y' in METW), and (MATH 2041 (may be taken concurrently), MATH 2941 (may be taken concurrently), MATH 3041 (may be taken concurrently), MATH 3941 (may be taken concurrently), or 'Y' in METW)

CEE 3715. Microbiological Principles of Environmental Engineering. 3 Credit Hours.

Introduction to underlying microbiological principles dealing with fate and transport of contaminants in the natural and built environment; reactor configurations for water and air quality control; and contaminant partitioning and contemporary environmental issues. The diverse roles of microorganisms in natural and engineered environments will be discussed.

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CEE 2712.

CEE 3717. Chemical Principles of Environmental Engineering. 3 Credit Hours.

Introduction to chemical equilibrium, thermodynamics and kinetics in water, atmosphere, and soils and sediments. The objective of this course is to develop a basis for understanding the behavior of chemical processes in the natural and built environment.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CEE 2712.

CEE 3725. Water Quality and Analysis Lab. 1 Credit Hour.

Environmental lab methods to measure properties and characteristics of dissolved, particulate, and microbiological constituents in water, air, and soil systems.

Course Attributes: SE, SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CEE 3715 (may be taken concurrently) and CEE 3717 (may be taken concurrently)

CEE 3727. Environmental Hydrology and Stormwater Management. 3 Credit Hours.

The course covers the relationship between precipitation and runoff, unit hydrographs, flood routing, and water supply principles and applications. Impacts of improperly controlled runoff on urban streams and how the rate, volume and quality of urban stormwater runoff can be properly controlled through appropriate Best Management Practice (BMP) implementation.

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 2043, MATH 2943, or 'Y' in METW) and (CEE 3712 or ENGR 3553)

CEE 4040. Special Topics. 1 to 3 Credit Hour.

A course designed to present new and emerging areas of engineering. The course may also be used to present areas not normally taught in the College. Course requirements vary with the topic and instructor. Offered as needed or as appropriate.

Repeatability: This course may be repeated for additional credit.

CEE 4072. Update and Assessment. 3 Credit Hours.

The course objective is to facilitate the process of Civil Engineering, Senior-Level Students preparing for and taking the NCEES Fundamentals of Engineering (FE) Examination. Students will take in-class examinations on each review topic.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

CEE 4201. Transportation Systems Management. 3 Credit Hours.

This course covers cost-effective techniques for the rebuilding of deteriorated transportation systems, pavement management and traffic systems management; extensive use of advanced computer software packages.

Repeatability: This course may not be repeated for additional credits.

CEE 4211. Bridge Engineering. 3 Credit Hours.

Design criteria, loads, construction techniques, state codes, superstructure components design-modeling and analysis, method, rating, computer software, detailing, new bridge, replacement, widening, rehabilitation, state codes, technical proposal, structural planning, feasibility studies, preliminary and final design, and post design services.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in CEE 3441.

CEE 4221. Intelligent Transportation Systems. 3 Credit Hours.

To understand the multidimensional upgrades needed for highway and vehicles to develop intelligent transportation systems. The new system should be able to handle higher traffic safely in lesser time. Several case studies are an integral part of the course.

Repeatability: This course may not be repeated for additional credits.

CEE 4231. Airport Engineering. 3 Credit Hours.

This course deals with the various aspects of airport engineering, planning, design and development of 21st century airports. The course covers airport master and system planning, airside layout, landside access design, passenger and cargo facilities, terminal design, drainage and pavement design.

Repeatability: This course may not be repeated for additional credits.

CEE 4244. Introduction to Geosynthetics. 3 Credit Hours.

This course will enhance your critical understanding of Geosynthetic Materials used in civil engineering applications and develop the knowledge and skills required for designing and applying geosynthetic materials in civil engineering and environmental applications. Geosynthetics properties, testing of properties, design of geotextiles, geogrids, geonets, and geomembranes for applications in separation, pavement design, embankment and retaining wall reinforcement, soil stabilization, filtration, drainage and liquid barrier, construction guidelines and case histories. The module will also develop critical understanding of the processes and materials used for the manufacture of geosynthetic materials.

Course Attributes: SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CEE 3331.

CEE 4301. Construction Administration. 3 Credit Hours.

The engineering and construction industry; basis of construction contracting; organizational structure and its functions; management structure and its functions, office administration, employment practices and labor relations; organizational financing and accounting; safety practices, risk management, and industrial insurance.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CEE 3311.

CEE 4302. Engineering Project Management. 3 Credit Hours.

Overview of the basic principles underlying all methods of project management, including project estimating, planning and scheduling, budgeting, cost accounting and cost control, project documentation, tracking and resource leveling. Utilization of project management software packages for selected civil engineering projects. Different types of projects, organizing the project management functions, setting up the project team, starting up and managing engineering projects and ensuring the effective completion of the project on time, within budget and meeting specifications.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CEE 3311.

CEE 4303. Construction Financial Management. 3 Credit Hours.

Overview of the basic principles underlying all methods of project management and financial accounting methods, construction cost accounting systems, construction project costing approaches, project budgeting, financial reporting procedure. Computer applications as required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CEE 3311.

CEE 4312. Construction Equipment Management. 3 Credit Hours.

Concepts and theories of construction equipment operation and ownership costs and their relationship to production systems. Production planning and Productivity Analysis. Analysis of depreciation and fixed costs for equipment pricing on construction projects. Selection and use of construction equipment. Equipment economics and financing.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CEE 3311.

CEE 4321. Geotechnical Engineering. 3 Credit Hours.

Soil testing, site investigation, design of both shallow and deep foundations, bulkheads, soil-structure interaction and advanced topics in soil behavior and stability. Students are required to submit lab reports on the test results of various materials.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in CEE 3331.

CEE 4421. Structural Dynamics. 3 Credit Hours.

Students are introduced to concepts in structural dynamics and their applications in structural engineering. Methods to determine dynamic response of single degree of freedom systems with free and forced vibrations are studied first, followed by similar concepts in multi-degree of freedom systems. Numerical methods to determine response over time will also be investigated.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in CEE 3411, ENGR 2332, (MATH 2043, MATH 2943, or 'Y' in METW), and (MATH 2041, MATH 2941, MATH 3041, MATH 3941, or 'Y' in METW)

CEE 4431. Behavior and Design of Steel Structures. 3 Credit Hours.

Loadings on structures. Design criteria and procedures for steel members subjected to axial forces, bending and shear. Buckling of columns. Design of connections. Plastic design and load factor resistance theories. Computer-based design methods included.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in CEE 3441.

CEE 4432. Behavior and Design of Reinforced Concrete Structures. 3 Credit Hours.

Behavior, analysis, and design of advanced reinforced concrete structures and components including columns subjected to flexure in one or two directions, slender columns, floor systems including two-way slabs, and analysis, design application using modern software.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in CEE 3441.

CEE 4433. Behavior and Design of Masonry Structures. 3 Credit Hours.

Masonry materials, structural behavior of masonry assemblages, deformational characteristics of brick, block, and natural stone masonry. Performance of load-bearing wall systems, design of unreinforced and reinforced masonry members including beams, columns and pilasters, and walls; special design and construction topics; application of design to low and high-rise masonry buildings.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in CEE 3411.

CEE 4443. Finite Element Analysis. 3 Credit Hours.

Covers application of modern, computer-aided graphics techniques and the use of state-of-the-art, computer-aided design/drafting package(s) for finite element modeling. Includes 3-D modeling, solid modeling, shading, and rendering; and file transfer.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in (CEE 3411 and CEE 3412)

CEE 4445. Earthquake Engineering and Seismic Design. 3 Credit Hours.

Basic knowledge of and introduction to earthquake engineering, seismic design and analysis methods, and seismic design based on International Building Code (IBC), ASCE 7 - Minimum Design Loads for Buildings and Other Structures, introduction of material specific design requirement.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in CEE 4421.

CEE 4446. Senior Design Project I for Civil Engineering. 3 Credit Hours.

This is the first course of a two-semester senior design sequence intended for civil engineering majors. Students will develop and practice skills and techniques for managing and executing engineering design projects. This includes problem identification, planning of the project, formulation of design specifications, the development and evaluation of alternative conceptual designs, the development of detailed designs and specification of manufacturing processes, prototyping of manufacturing processes, and analysis and documentation of results. At completion, students will present their design process and final design in several formats: oral presentations, poster presentations, web pages, and reports.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Civil Engineering.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in CEE 3331, CEE 3332, ((CEE 3411 (D- or higher) and CEE 3412 (D- or higher)) or CEE 3711), ENGR 3553, and ENGR 3571.

CEE 4447. Senior Design Project I for Environmental Engineering. 3 Credit Hours.

This is the first course of a two-semester senior design sequence intended for environmental engineering majors. Students will develop and practice skills and techniques for managing and executing engineering design projects. This includes problem identification, planning of the project, formulation of design specifications, the development and evaluation of alternative conceptual designs, the development of detailed designs and specification of manufacturing processes, prototyping of manufacturing processes, and analysis and documentation of results. At completion, students will present their design process and final design in several formats: oral presentations, poster presentations, web pages, and reports.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Environmental Engineering.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CEE 3712, CEE 3715, CEE 3717, (CEE 3727 or CEE 4631), and CEE 4721.

CEE 4531. Life Cycle Assessment and Carbon Footprinting. 3 Credit Hours.

Life Cycle Analysis (LCA) examines the environmental impacts of products, processes and policies beyond their direct production. Cradle to grave analysis in this manner provides the full picture needed to understand the true impact. This course provides an overview of Life Cycle Assessment principles and practice in relation to environmental and energy concerns. Regulatory and economic decision support tools and software analysis packages will be included. The course is structured such that students will start an LCA from the beginning of the course and progress on it as topics are covered.

Course Attributes: SF, SP

Repeatability: This course may not be repeated for additional credits.

CEE 4622. Fate Pollutants in Subsurface Environments. 3 Credit Hours.

This course focuses on integrated chemical, physical, and microbiological principles of contaminant fate and transport processes necessary in the use of engineered approaches toward selecting and implementing subsurface cleanup options. It also covers abiotic processes, biotic processes, empirical models, and vulnerability mapping.

Course Attributes: SF

Repeatability: This course may not be repeated for additional credits.

CEE 4623. Contaminant Dynamics in Urban Streams. 3 Credit Hours.

Contaminant Dynamics in Urban Streams is designed to teach undergraduate students fundamental concepts of solute exchange at the air:water interface and the water:sediment interface. These systems are by definition boundary or edge systems and are therefore exceptionally important to aquatic ecosystem functioning. After briefly discussing the air:water interface in rivers and lakes, the course will focus on the water:sediment interface. It is here that steep gradients in chemical concentration can be found and significant nutrient cycling occurs. In addition, studies have shown that significant ecosystem productivity and respiration occurs within the bed sediments of flowing water. The course will discuss the concept of transient storage and hyporheic exchange; issues surrounding modeling of transient storage and hyporheic exchange; phosphorus and nitrogen biogeochemistry within the hyporheic zone; and biotic/abiotic nutrient cycling.

Course Attributes: SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 1031 or CHEM 1035) and (CEE 4631, CEE 4621, or CEE 3711)

CEE 4631. Environmental Hydrology. 3 Credit Hours.

A study of the physical laws affecting the occurrence, distribution, movement, storage, and contamination of water in watersheds. The physics of surface and subsurface circulation and storage of water and the transport of contaminants in watersheds, soils, aquifers, rivers, the ocean, and the atmosphere. The laws and equations which govern the recharge, flow, storage, and discharge of water in natural environments. The laws and equations governing the occurrence, absorption, propagation and fate of contaminants in natural environments. Hydrologic effects of global climate change. Engineering methods for the sustainable use of water resources. Engineering methods for the containment and treatment of surface and groundwater pollution, and the restoration of aquifers.

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- (except where noted) in (MATH 2041, MATH 2941, MATH 3041, MATH 3941, or 'Y' in METW) and (ENGR 3553 (C- or higher) or CEE 3712 (C- or higher))

CEE 4641. Urban Streams and Stormwater Management. 3 Credit Hours.

Stormwater management has become a significant issue in recent years. In the past, the typical thinking was 'get it out of my town' which resulted in downstream communities suffering the brunt of poor or inadequate management. In fact, only the rate of runoff was addressed, not the volume, nor the quality of that runoff. In urban areas, the volume of runoff increases significantly due to the additional impervious cover (e.g. pavement and rooftops) and urban stormwater runoff causes water quality degradation due to excess amounts of nutrients, metals, bacteria and sediment. This course will address the impacts of improperly controlled runoff on urban streams and how the rate, volume and quality of urban stormwater runoff can be properly controlled through appropriate Best Management Practice (BMP) implementation.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Civil Engineering, Electrical Engineering, Environmental Engineering, Mechanical Engineering.

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CEE 2712 or CEE 3711 (may be taken concurrently))

CEE 4711. Air Pollution Control System. 3 Credit Hours.

Principles of design and operation of the major categories of air pollution control equipment. Theory and principles are presented to reinforce extensive application and design components.

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in PHYS 1062 and (ENGR 3553 or CEE 3712)

CEE 4721. Water and Wastewater Systems Design. 3 Credit Hours.

Unit operations in water treatment, design objectives and parameters of water treatment; coagulation and flocculation; filtration plant design; physical unit operations; biological unit processes; design of facilities for biological treatment of waste water.

Course Attributes: SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- (except where noted) in (CEE 3711 or CEE 2712) and (ENGR 3553 (C- or higher) or CEE 3712 (C- or higher))

CEE 4722. Water/Wastewater Lab. 1 Credit Hour.

Quantitative laboratory studies of operations such as coagulation/flocculation, adsorption/ion exchange, filtration, disinfection, biological oxidation, advanced oxidation processes, and gas transfer. Laboratory safety and technical writing skills are emphasized. The course will include field trips to water and wastewater treatment plants as well as a solid waste management facility.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CEE 4721 (may be taken concurrently)

CEE 4725. Environmental Systems Design. 3 Credit Hours.

Systems-based design and integration of various unit operations at treatment plants dealing with potable water, industrial wastewater, municipal wastewater, high purity industrial water, groundwater, and soil remediation.

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CEE 3712 or ENGR 3553) and CEE 4721.

CEE 4731. Solid & Hazardous Waste Management. 3 Credit Hours.

This course covers the principles of integrated solid waste management. The planning and engineering principles needed to address the growing and increasingly intricate problem of controlling and processing the refuse (solid waste) created by urban societies. Federal regulations and management practices associated with hazardous waste are also covered. Situations dealing with real world settings are covered through worked examples and field trips to solid waste management facilities. NOTE: Prior to spring 2010, the course title was "Solid & Hazardous Waste Engineering."

Course Attributes: SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CHEM 1031.

CEE 4741. Professional Issues I. 1 Credit Hour.

This environmental engineering seminar series will focus on contemporary environmental topics, innovation, entrepreneurship, and life-long skills.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

CEE 4742. Professional Issues II. 1 Credit Hour.

This environmental engineering seminar series will focus on contemporary environmental topics, innovation, entrepreneurship, and life-long skills.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

CEE 4761. Environmental Chemistry. 3 Credit Hours.

This is an advanced course focusing on examination of processes that affect the behavior and fate of anthropogenic organic contaminants in aquatic environments. The lectures will begin with intermolecular interactions and thermodynamic principles governing the kinetics of some of the important chemical and physicochemical transformation reactions of organic contaminants. From this class, students will learn to predict chemical properties and to apply the knowledge of chemical properties and transformation reactions to assess the environmental fate of organic contaminants.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CHEM 2201.

CEE 4762. Environmental Organic Chemistry. 3 Credit Hours.

This is an advanced course focusing on examination of processes that affect the behavior and fate of anthropogenic organic contaminants in aquatic environments. The lectures will focus on intermolecular interactions and thermodynamic principles governing the kinetics of some of the important chemical and physicochemical transformation reactions of organic contaminants.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CHEM 2201.

CEE 4773. Sustainability Aspects of Water Supply and Wastewater Treatment. 3 Credit Hours.

Major environmental, economic and social trends are influencing the application of sustainability principles within the engineering profession. This course will examine the sustainability principles that will transform future engineering practice regarding drinking water supply and the treatment of wastewater. The term, wastewater, will be replaced by one more representative of the fact that 'wastewater' is in fact a largely untapped source of raw materials. It is in the areas of energy recovery, small molecule harvesting, and the water energy nexus where the next generation of environmental engineers will have a major impact on meeting societal needs regarding the provision of adequate drinking water as well as industrial requirements for this increasingly scarce resource. The course will introduce the underlying principles of sustainability directly relevant to meeting this need. Case studies will evaluate the above mentioned principles and the applicable areas of energy, chemical intermediates, and reclamation of previously used water, with a focus on dealing with emerging microconstituents in the water environment.

Course Attributes: SE, SF, SP, SS

Repeatability: This course may not be repeated for additional credits.

CEE 4775. Biological Principles of Environmental Engineering Systems. 3 Credit Hours.

Applications of biological processes in environmental engineering are historic and eminently modern, from traditional ones like activated sludge and anaerobic digestion to emerging applications like detoxification of hazardous chemical and bio-filtration of drinking water. This course is designed to identify the biological principles essential for the understanding and designing of biological processes used for environmental protection and improvement. Recent development of environmental bio-technologies such as ANAMMOX, membrane bioreactors, and algal bioreactors will be discussed in detail. This course emphasizes the comprehension of theoretical concepts and their application in a variety of situations. It covers the fundamental biological principles by their practical applications in engineered and natural environments.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CEE 2712.

CEE 4811. Advanced Soil Mechanics. 3 Credit Hours.

Advanced concepts related to behavior of soil as an engineering material. Topics include consolidation magnitude and time rate, evaluation of secondary compression, mitigation of consolidation of settlements, shear strength of soils and other geologic materials, principles of critical state soil mechanics, and normalization of undrained shear strength.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CEE 3331.

CEE 4821. Foundation Engineering. 3 Credit Hours.

Principles of foundation engineering and design. Topics include soil stress distributions, bearing capacity of shallow (footings, mats) and deep foundations (driven piles, drilled shafts), tolerable settlements, construction techniques, and field quality control.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CEE 3331.

CEE 4822. Earth Retaining Systems. 3 Credit Hours.

Principles related to design of earth retaining systems and stability of earth slopes. Topics include lateral earth pressure theory, temporary and permanent retaining structures, in-situ reinforcement, and braced excavations. Shear strength of cohesive and granular soils and slope stability analysis using limited equilibrium, design charts and numerical methods.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CEE 3331.

CEE 4823. Geotechnical Earthquake Engineering. 3 Credit Hours.

An introduction to seismology and earthquake hazards in geotechnical engineering. Topics include plate tectonics and earthquake faulting, strong ground motions, dynamic soil properties, and characterization of design ground motions based on deterministic and probabilistic seismic hazard analysis. Analysis of earthquake-induced ground failures, seismic design of earth retaining systems and slopes, and effects of soil-structure interaction.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CEE 3331.

CEE 4871. Fundamentals of Engineering in Civil Engineering. 1 Credit Hour.

Review of subject areas in preparation for the Fundamentals of Engineering examination in Civil Engineering.

Repeatability: This course may not be repeated for additional credits.

CEE 4882. Independent Study in Civil Engineering. 2 to 5 Credit Hours.

Student may complete a regular course during semester the course is not offered to meet prerequisite or graduation requirements. NOTE: An instructor is assigned to supervise the student.

Repeatability: This course may be repeated for additional credit.

CEE 4883. Directed Study in Civil Engineering. 1 to 4 Credit Hour.

An opportunity to study specialized topics not covered in currently available courses and providing significant progress towards the technical/professional objectives of the program. An instructor is assigned to define the scope and direct, supervise, and evaluate student progress.

Repeatability: This course may be repeated for additional credit.

CEE 4891. Independent Research in Civil Engineering. 2 to 5 Credit Hours.

A project assigned with the approval of the department chair and conducted under the supervision of a faculty sponsor.

Repeatability: This course may be repeated for additional credit.

College of Education (COED)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

COED 3385. Diamond Peer Teachers - Internship I. 1 Credit Hour.

The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Repeatability: This course may be repeated for additional credit.

COED 3386. Diamond Peer Teachers - Internship II. 1 Credit Hour.

The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Repeatability: This course may be repeated for additional credit.

College of Liberal Arts (CLA)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

CLA 0820. GenEd Limited Edition GB. 3 Credit Hours.

This is a General Education Limited Edition course that will satisfy the GenEd Human Behavior requirement. Topics vary by semester. Check the Class Schedule for the full description of specific topics offered. Students cannot repeat this course for additional credits, regardless of the topic.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

CLA 0830. GenEd Limited Edition GD. 3 Credit Hours.

This is a General Education Limited Edition course that will satisfy the GenEd Race and Diversity requirement. Topics vary by semester. Check the Class Schedule for the full description of specific topics offered. Students cannot repeat this course for additional credits, regardless of the topic.

Course Attributes: GD

Repeatability: This course may not be repeated for additional credits.

CLA 0880. GenEd Limited Edition GU. 3 Credit Hours.

This is a General Education Limited Edition course that will satisfy the GenEd U.S. Society requirement. Topics vary by semester. Check the Class Schedule for the full description of specific topics offered. Students cannot repeat this course for additional credits, regardless of the topic.

Course Attributes: GU

Repeatability: This course may not be repeated for additional credits.

CLA 0920. Honors GenEd Limited Edition GB. 3 Credit Hours.

This is an Honors General Education Limited Edition course that will satisfy the GenEd Human Behavior requirement. Topics vary by semester. Check the Class Schedule for the full description of specific topics offered. Students cannot repeat this course for additional credits, regardless of the topic.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GB, HO

Repeatability: This course may not be repeated for additional credits.

CLA 0930. Honors GenEd Limited Edition GD. 3 Credit Hours.

This is an Honors General Education Limited Edition course that will satisfy the GenEd Race and Diversity requirement. Topics vary by semester. Check the Class Schedule for the full description of specific topics offered. Students cannot repeat this course for additional credits, regardless of the topic.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GD, HO

Repeatability: This course may not be repeated for additional credits.

CLA 0980. Honors GenEd Limited Edition GU. 3 Credit Hours.

This is an Honors General Education Limited Edition course that will satisfy the GenEd U.S. Society requirement. Topics vary by semester. Check the Class Schedule for the full description of specific topics offered. Students cannot repeat this course for additional credits, regardless of the topic.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GU, HO

Repeatability: This course may not be repeated for additional credits.

CLA 1001. The CLA First Year Experience. 1 Credit Hour.

The CLA First Year Experience introduces students to the rich diversity of opportunities and resources available to them both university wide and especially in the College of Liberal Arts. The course is designed to help students in making the often-difficult transition to college life and college level coursework. The primary goal of the course is to give students the tools to make responsible decisions about their academic careers and better understand how to navigate the complex university system. This course covers a wide array of topics, including: time management, study skills, major/minor selection, internship opportunities, study abroad programs, faculty guidance and course planning/sequencing. It uses student-initiated goals as the context through which to view these topics and many other areas critical to success in the first year of college and beyond.

Repeatability: This course may not be repeated for additional credits.

CLA 1002. Professional Development for Liberal Arts Majors. 1 Credit Hour.

Given the rapidly changing nature of the world economy, a degree in the liberal arts has never been more valuable. This seminar will focus on how you as a student in the College of Liberal Arts can best leverage your unique skills to prepare for a career in a broad array of fields, including government, non-profit, corporate, human services, and education. You will participate in group discussions, exercises, and projects that will help you determine which sectors and occupations best match your interests and aptitudes. You will also learn what coursework and additional credentials might enhance the likelihood of obtaining the type of position you want. You will develop an application-ready resume and will be well prepared for networking and professional interviews. Upon successful completion of this course you will possess the ability to communicate effectively and professionally and to employ different strategies to search for internship and career opportunities. Because there is significant overlap in course content, students will receive credit for only one of these courses: CLA 1002, CJ 1002, ENG 1801, HIST 1012, NSCI 1002, POLS 1002, PSY 1002, SOC 1002.

College Restrictions: Must be enrolled in one of the following Colleges: Liberal Arts.

Repeatability: This course may not be repeated for additional credits.

CLA 1009. Discovering the Liberal Arts. 2 Credit Hours.

The courses in this series provide a sweeping overview of the liberal arts curriculum and connections with the world of work. Through an interdisciplinary approach, students are exposed to examples of the content as well as the tools of the disciplines while learning how a liberal arts education translates into a career in business, law, health care, education, government and more. Each time the courses are offered they focus on a particular theme such as popular culture, conflict resolution and globalization, and faculty from a variety of departments are invited to present their perspectives. NOTE: Participation in a Discovery Series course helps students acquire a better understanding of the liberal arts majors and associated careers, and the skills needed to plan an effective course of study.

Repeatability: This course may not be repeated for additional credits.

CLA 1010. Special Topics in Liberal Arts. 1 Credit Hour.

Specific topics vary each semester and will be listed in the schedule of classes. Contact instructor for more information. This course will count as a free elective towards graduation but does not fulfill distribution or major requirements for any major in the liberal arts.

Repeatability: This course may be repeated for additional credit.

CLA 1019. Discovering the American Legal System. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

CLA 1021. Social Media Marketing for Liberal Arts Majors. 1 Credit Hour.

This course provides an introductory-level overview of social media marketing strategies used by individuals and organizations to cultivate and maintain engaged virtual audiences, with a primary focus on personal branding. Students will learn how to leverage the power of popular social media platforms (including but not limited to LinkedIn, Instagram, and YouTube) to share their skills and knowledge while enhancing their career development. Students will also have opportunities to network with online marketing professionals through guest lectures. At the end of the course, students will walk away with an authentic yet polished online presence on multiple platforms that creates a positive first impression with potential employers and followers alike.

College Restrictions: Must be enrolled in one of the following Colleges: Liberal Arts.

Repeatability: This course may not be repeated for additional credits.

CLA 1234. Life Experience Portfolio. 1 to 6 Credit Hour.

Students in the Bachelor of Arts in Liberal Studies program may apply for up to six general elective credits for relevant life experience. There is a variety of work that may be considered for life experiences: professional work experience, published papers, articles, books, or creative works, as well as non-credited certificate programs completed prior to matriculation in the program.

Repeatability: This course may not be repeated for additional credits.

CLA 1701. The Washington Center Leadership Forum. 3 Credit Hours.

This course is restricted to participation in The Washington Center program. Students participate in a combination of academic seminars and intern in the Washington DC area. More details can be found at www.cla.temple.edu/ipa.

Repeatability: This course may not be repeated for additional credits.

CLA 1801. Career Seminar in the Liberal Arts. 3 Credit Hours.

Specially designed workshops will walk students through the various stages of career search strategies: informational interviewing, identifying appropriate positions, writing effective cover letters and resumes, obtaining references, and identifying employer expectations and interview preparation, all in a way that helps the student identify and promote the skills learned in their liberal arts major(s). This course examines several workplace settings including: working in the non-profit sector, corporate environment, research, education, and mental health facilities. Most sections of this course will include 3 or more of these modules, depending on student interest.

Repeatability: This course may not be repeated for additional credits.

CLA 1919. Honors Discovering the American Legal System. 2 Credit Hours.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

CLA 2010. Special Topics in Liberal Arts I. 1 Credit Hour.

Specific topics vary each semester. Contact department chair for information.

Repeatability: This course may be repeated for additional credit.

CLA 2020. Special Topics in Liberal Arts II. 2 Credit Hours.

Specific topics vary each semester. Contact department chair for information.

Repeatability: This course may be repeated for additional credit.

CLA 2030. Special Topics in Liberal Arts III. 3 Credit Hours.

Specific topics vary each semester. Contact department chair for information.

Repeatability: This course may be repeated for additional credit.

CLA 2096. Approaches to Liberal Studies. 3 Credit Hours.

This course is designed to serve as an introduction to interdisciplinary studies in the Bachelor of Arts in Liberal Studies program and will focus on a particular facet of American culture. Through course readings and occasional screenings this course will trace out the key concepts and debates within a liberal arts discipline. This course may take a disciplinary approach (How do sociologists think about a variety of social problems?) or might look at a theme from multiple disciplines (What are the shifting definitions of stardom?). This writing intensive course will reintroduce students to the critical thinking, writing, and research skills that are fundamental to upper level courses in the liberal arts and should be taken within the first year of the major. This course is open only to students in two programs: BA in Liberal Studies and BGS in General Studies.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

CLA 2685. Internship. 1 to 12 Credit Hour.

Consult with instructor.

Repeatability: This course may be repeated for additional credit.

CLA 2701. The Washington Center Seminar. 3 Credit Hours.

This course is restricted to participation in The Washington Center program. Students participate in a combination of academic seminars and intern in the Washington DC area. More details can be found at www.cla.temple.edu/ipa.

Repeatability: This course may not be repeated for additional credits.

CLA 2785. The Washington Center Internship. 3 to 9 Credit Hours.

This course is restricted to participation in The Washington Center program. Students participate in a combination of academic seminars and intern in the Washington DC area. More details can be found at www.cla.temple.edu/ipa.

Repeatability: This course may not be repeated for additional credits.

CLA 3075. Corporate Interdisciplinary Seminar. 3 Credit Hours.

Drawing on the literature from the disciplines of sociology, psychology, economics, history and others, this interdisciplinary seminar is the academic component accompanying an internship in the corporate sector for CLA juniors and seniors. It will appeal to those students interested in future employment in for-profit companies regardless of CLA major. These upper division students will learn to understand the importance and relevance in corporate settings of the skills developed through their liberal arts academic experience. NOTE: Junior or senior standing in CLA (preference given to seniors); 3.0 cumulative GPA; approval of instructor required.

Repeatability: This course may not be repeated for additional credits.

CLA 3085. Corporate Interdisciplinary Internship. 3 Credit Hours.

In this internship, Liberal Arts students will have the opportunity to work for ten hours a week in a for-profit industry such as financial services, healthcare, insurance, technology, human services, and communication. They will work and interact with a variety of departments including legal, human resources, marketing, public relations, technology, customer service, and community relations. NOTE: Junior or senior standing in CLA (preference given to seniors); 3.0 cumulative GPA; approval of instructor required.

Repeatability: This course may be repeated for additional credit.

CLA 3385. Diamond Peer Teachers - Internship I. 1 Credit Hour.

The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

Repeatability: This course may be repeated for additional credit.

CLA 3386. Diamond Peer Teachers - Internship II. 1 Credit Hour.

The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

Repeatability: This course may be repeated for additional credit.

CLA 3900. Honors Interdisciplinary Special Topics I. 3 Credit Hours.

Variable offerings on special topics that explore topics or issues from an interdisciplinary perspective. Check with the Honors Program office and/or web site (www.temple.edu/honors) for details on Special Topics courses. NOTE: Restricted to Honors students only.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

CLA 4900. Honors Interdisciplinary Special Topics II. 3 Credit Hours.

Variable offerings on special topics that explore topics or issues from an interdisciplinary perspective. Check with the Honors Program office and/or web site (www.temple.edu/honors) for details on Special Topics courses.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

CLA 4901. Honors Interdisciplinary Research Methods. 3 Credit Hours.

This course is designed for upper-level Honors students interested in developing an interdisciplinary research project. This course introduces the student to the techniques and disciplines used in interdisciplinary research in addition to how to design such research, how to communicate with specialists in other fields, and how to use existing sources of data to address an interdisciplinary problem or issue selected by the student. Students will be able to pursue research topics of their own design, and use this course to develop the topic of their Honors Thesis.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

CLA 4902. Honors Interdisciplinary Thesis. 3 Credit Hours.

Designed as a continuation of Liberal Arts 4901, this course provides the student support during the development of the research project, the writing, completion, and presentation of the Honors Thesis project in interdisciplinary studies.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

CLA 4910. Honors Humanities Special Topics. 3 Credit Hours.

Variable offerings on special topics that explore topics or issues in the humanities. Check with the Honors Program office and/or web site (www.temple.edu/honors) for details on Special Topics courses.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

CLA 4911. Honors Humanities Research Methods. 3 Credit Hours.

This course is designed for upper-level Honors students majoring in the humanities. The course focuses on the research methods common to disciplines in the humanities and provides experiences in developing a meaningful research question, understanding the basic tools available, and developing an individual research project. Students will be able to pursue research topics of their own design, and use this course to develop the topic of their Honors Thesis.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

CLA 4912. Honors Humanities Thesis. 3 Credit Hours.

Designed as a continuation of Liberal Arts 4911, this course provides the student support during the development of the research project, the writing, completion, and presentation of the Honors Thesis project in the humanities.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

CLA 4920. Honors Social Science Special Topics. 3 Credit Hours.

Variable offerings on special topics that explore topics or issues in the social sciences. Check with the Honors Program office and/or web site (www.temple.edu/honors) for details on Special Topics courses.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

CLA 4921. Honors Social Science Research Methods. 3 Credit Hours.

This course is designed for upper-level Honors students majoring in the social sciences. The course focuses on the research methods common to disciplines in the social sciences and provides experiences in developing a meaningful research question, understanding the basic tools available, and developing an individual research project. Students will be able to pursue research topics of their own design, and use this course to develop the topic of their Honors Thesis.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

CLA 4922. Honors Social Science Thesis. 3 Credit Hours.

Designed as a continuation of Liberal Arts 4921, this course provides the student support during the development of the research project, the writing, completion, and presentation of the Honors Thesis project in the social sciences.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

College of Public Health & School of Social Work (CHP)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

CHP 0840. GenEd Limited Edition GG. 3 Credit Hours.

This is a General Education Limited Edition course that will satisfy the GenEd Global/World Society requirement. Topics vary by semester. Check the Class Schedule for the full description of specific topics offered. Students cannot repeat this course for additional credits, regardless of the topic.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

CHP 0860. GenEd Limited Edition GS. 3 Credit Hours.

This is a General Education Limited Edition course that will satisfy the GenEd Science and Technology requirement. Topics vary by semester. Check the Class Schedule for the full description of specific topics offered. Students cannot repeat this course for additional credits, regardless of the topic.

Course Attributes: GS

Repeatability: This course may not be repeated for additional credits.

CHP 0940. Honors GenEd Limited Edition GG. 3 Credit Hours.

This is an Honors General Education Limited Edition course that will satisfy the GenEd Global/World Society requirement. Topics vary by semester. Check the Class Schedule for the full description of specific topics offered. Students cannot repeat this course for additional credits, regardless of the topic.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GG, HO

Repeatability: This course may not be repeated for additional credits.

CHP 0960. Honors GenEd Limited Edition GS. 3 Credit Hours.

This is an Honors General Education Limited Edition course that will satisfy the GenEd Science and Technology requirement. Topics vary by semester. Check the Class Schedule for the full description of specific topics offered. Students cannot repeat this course for additional credits, regardless of the topic.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GS, HO

Repeatability: This course may not be repeated for additional credits.

CHP 3385. Diamond Peer Teachers - Internship I. 1 Credit Hour.

The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

Repeatability: This course may be repeated for additional credit.

CHP 3386. Diamond Peer Teachers - Internship II. 1 Credit Hour.

The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

Repeatability: This course may be repeated for additional credit.

CHP A000. Elective. 0 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

College of Science and Technology (SCTC)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

SCTC 0712. Mathematical Concepts I. 0 Credit Hours.

The goal of this course is to give students a firm foundation in the topics of intermediate algebra as a basis for subsequent courses in mathematics and other disciplines. Included in this goal is the development and strengthening of one's skill in interpreting and solving application problems. Intermediate Algebra begins with a presentation of topics of Algebra including use of variables, exponents, order of operations. Further topics include solving linear equations and inequalities, understanding and graphing linear equations in two variables, finding the equation of a line, applying the laws of exponents, performing operations with polynomials, factoring polynomials, and solving polynomial equations. The skill of solving equations will be extended to formulating and solving equations of applied problems. Students will be offered the opportunity to use MyMath Test with instructor support as they work through the course material and will be offered the opportunity to re-take the Math Placement Test upon completion of the course. Note: The fee for this course may be found in the Detailed Class Information, which can be reached from the class schedule listing.

SCTC 0721. Mathematical Concepts II. 0 Credit Hours.

This course emphasizes techniques of problem solving using algebraic concepts. This course will prepare students for Pre-calculus by review of multiple algebraic concepts. This course covers polynomial, rational and algebraic expressions, solving linear equations and inequalities, algebra and graphs of quadratic expressions, and an introduction to the concept of a function. Approaches to problem solving will be emphasized. Students will be offered the opportunity to use MyMath Test with instructor support as they work through the course material and will be offered the opportunity to re-take the Math Placement Test upon completion of the course. Note: The fee for this course may be found in the Detailed Class Information, which can be reached from the class schedule listing.

SCTC 0727. Chemical Concepts. 0 Credit Hours.

In this course quantitative practices in chemistry will be emphasized. Topics include empirical and molecular formula, reaction quantities, stoichiometry, thermochemistry and gas properties. Core concepts and principles will be reviewed. A significant component of the course will focus on problem solving skills. A discussion of expectation and test taking practices in preparation for General Chemistry will be provided. Note: The fee for this course may be found in the Detailed Class Information, which can be reached from the class schedule listing.

SCTC 0860. GenEd Limited Edition GS. 3 Credit Hours.

This is a General Education Limited Edition course that will satisfy the GenEd Science and Technology requirement. Topics vary by semester. Check the Class Schedule for the full description of specific topics offered. Students cannot repeat this course for additional credits, regardless of the topic.

Course Attributes: GS

Repeatability: This course may not be repeated for additional credits.

SCTC 0960. Honors GenEd Limited Edition GS. 3 Credit Hours.

This is an Honors General Education Limited Edition course that will satisfy the GenEd Science and Technology requirement. Topics vary by semester. Check the Class Schedule for the full description of specific topics offered. Students cannot repeat this course for additional credits, regardless of the topic.

Course Attributes: GS, HO

Repeatability: This course may not be repeated for additional credits.

SCTC 1001. CST First Year Seminar. 1 Credit Hour.

This course is typically offered in Fall.

This course provides students with the foundation necessary for success in college. Students engage in interactive workshops to develop the academic, professional, and life skills required for Science and Technology students. Topics include: study habits, test-taking strategies, time management tools, goal setting techniques, financial literacy, communication in college, and university resources/navigation/utilization. Students work closely with the instructor to develop an academic plan. NOTE: Registration for this course is restricted to first year students enrolled in the College of Science & Technology.

Class Restrictions: Must be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Science & Technology.

Repeatability: This course may not be repeated for additional credits.

SCTC 1002. STEM Scholars Seminar. 1 Credit Hour.

This course provides students majoring in Biology, Biochemistry, and Chemistry with the foundation necessary to succeed in college. Student participants in the Emerging STEM Scholars program are required to attend these weekly seminars in both the fall and spring semesters over all four years, enabling them to develop the academic, professional, and life skills required for success in a science or science-related career. Topics will include: study habits, test-taking strategies, time management tools, and contact with academic and industrial scientists. The seminars will be led by advanced graduate student mentors in computational biology or chemistry. As needed, students will be directed to appropriate university provided resources. NOTE: Registration for this course is restricted to participants in the Emerging STEM Scholars program.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: STEM.

Repeatability: This course may be repeated for additional credit.

SCTC 1003. STEM Connections Seminar. 1 Credit Hour.

This one credit course will engage first-year students in explorations of inter- and trans-disciplinary themes in science and mathematics. Themes include (but are not limited to): Fragile Futures, Molecules to Medicine, Modern Materials, Dark Matter/Dark Energy, Modeled by Math, and Designed by Data. Faculty from CST departments will contribute a 30-45 minute presentation to a series of six seminars related to one of the selected themes. Students are to contribute broadly to a discussion of the theme. Students will complete activities and/or assignments related to the faculty presentations.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may be repeated for additional credit.

SCTC 1013. Elements of Data Science for the Physical and Life Sciences. 3 Credit Hours.

This course is typically offered in Fall and Spring.

This course provides a basic introduction to data science. Data is ubiquitous in our society, as it is processed in fields including science, medicine, economics, and business. We evaluate surveys, test performance, analyze large data sets and more. This course will help students to understand how data is generated, collected, and used. Both inferential and computational thinking will be applied to practical problems and common problems faced by all in the sciences. Students will learn basic computer programming and statistical inference by working, hands-on, with real world problems. This course is based on the Foundations of Data Science (Data 8) course designed by faculty at UC Berkeley and distributed widely to academic partners. Data projects will be selected from the basic sciences including biology, ecology, environmental science, genomics, chemistry and physics. This approach will allow students from the physical, life and mathematical sciences to engage in disciplinary knowledge in their majors as they learn and apply basic tools of data science. The applications will focus on experimental design, basic simulation and data analyses. Course topics will be explored using on-line resources in a collaborative learning classroom environment. To increase student engagement and success, the topics will be broken into smaller modules with focused exercises that allow scaffolding of the computer programming and basic statistics curricula. This course is a component of the recommended CST first-year student curriculum.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 0702 (may be taken concurrently), any MATH course numbered 0800 to 4999 (may be taken concurrently), 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC6A, 'Y' in MATW, 'Y' in MA01, STAT 1001 (may be taken concurrently), 'Y' in STT2, STAT 1102 (may be taken concurrently), STAT 1902 (may be taken concurrently), or 'Y' in MC6T)

SCTC 1021. Journey of the Algorithm. 1 to 4 Credit Hour.

Students will explore mathematics via discussions, manipulative methods, and other techniques. By completing tasks provided by the instructor, students will make authentic connections across the mathematical platform. The tasks will allow students to investigate mathematics from an integrated approach, bringing appropriate mathematical phenomena and algorithms into their solutions as needed. Science applications will be part of each curricular unit, and this content will support integration of mathematics into science lessons for students in the TUteach program.

Repeatability: This course may not be repeated for additional credits.

SCTC 1189. Step 1: Inquiry Approaches to Teaching. 1 Credit Hour.

This course is typically offered in Fall and Spring.

This is the first course in the TUteach pedagogy sequence. This course will provide students with an opportunity to explore teaching in science or mathematics as a career; early field experiences in teaching; and an introduction to the theory and practice necessary to prepare and deliver excellent instruction. To obtain first-hand experience with planning and implementing inquiry-based curriculum, students will teach science/mathematics lessons (designed in NSF-funded project) in elementary classrooms in a local school district. Students will attend 1.5 hours of class on campus each week, where they will learn to prepare and deliver excellent science/mathematics lessons. Students, working in teams, will present three lessons in a third, fourth, fifth or sixth grade classroom during the semester. These classrooms are selected both for the diversity of the student body and for the quality of the classroom teacher. Each team of students will have a district classroom teacher and a TUteach master teacher who will work with them to improve their teaching skills as the semester progresses. The district classroom teacher will remain in the classroom at all times and provide immediate feedback on the quality of the instruction. A tuition remission stipend will be paid to those students who successfully complete this course.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C (except where noted) in (MATH 1021, any MATH course numbered 1022 to 4999 (C- or higher; may be taken concurrently), 'Y' in MC5, 'Y' in MC6, 'Y' in MA03, 'Y' in MC6A, STAT 1001, STAT 1102, STAT 1902, 'Y' in MATW, 'Y' in CRMA04, 'Y' in CRST01, 'Y' in CRST02, or 'Y' in MC6T)

SCTC 1289. Step 2: Inquiry Based Lesson Design with Strategies for English Learners. 1 Credit Hour.

This course is typically offered in Fall & Spring.

This is the second course in the TUteach pedagogy sequence. This course offers students the opportunity to explore science or mathematics teaching as a career, first-hand experience planning inquiry-based curriculum, and an introduction to theory, research and practice in teaching English language learners in the middle grades. Students will explore the philosophies of bilingual and ESL education as well as different program models that address the education of linguistically diverse students. Students attend 1.5 hours of class on campus each week, where they learn to design and deliver inquiry-based lessons with an understanding of how to adapt standards-based lessons for English language learners. Students teach three lessons in middle grade classroom during the semester. Students will also develop cross-cultural competence through interactions with ELLs, teachers and school staff in the middle grades. After Step 2, students can decide whether they want to pursue teacher certification through the TUteach program.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in SCTC 1189.

SCTC 1301. Problem Solving in Science. 2 Credit Hours.

This course is typically offered in Fall and Summer II.

As a gateway into science majors, this introductory course will show students how to apply critical thinking and build problem solving skills in all science disciplines. We will look at a vast array of actual problems that you will be confronted with in courses in Biology, Chemistry, Computer Science, Geology, Mathematics and Physics. Problem solving processes and techniques that will be beneficial in solving complex and intricate problems that naturally arise in the sciences will be examined. Rote problems designed to give you practice at learning subject matter are straightforward. Actual science takes place, however, in conceptual, non-formulaic problems, which form the essence of the course.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 0701 to 0702, any MATH course numbered 0800 to 4999 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC3A, 'Y' in MC6A, STAT 1001, 'Y' in STT2, STAT 1102, STAT 1902, 'Y' in MATW, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

SCTC 1385. Community Engagement: Science and Mathematics Tutoring Mentoring and Service. 1 to 3 Credit Hour.

Students, sophomores and above, will apply in a real world setting, teaching, tutoring, mentoring and/or curriculum development skills. Students will work with the instructor to identify a set of background readings on: a) science and math background content, b) populations to be served, particular needs of these populations, and proven approaches to tutoring, mentoring, or developing curriculum for inquiry-based science or mathematics lessons for in-school or out-of-school activities to be offered, and c) the relationship of science to society for the particular placement. After this background research, students will develop a proposal, carry out the teaching/tutoring/mentoring/curriculum development they proposed, and reflect on the efficacy of their project.

Repeatability: This course may not be repeated for additional credits.

SCTC 1389. Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners. 2 Credit Hours.

This course is typically offered in Fall and Spring.

This is the first course in the TUTEACH pedagogy sequence. This course will provide students with an opportunity to explore teaching in science or mathematics as a career; early field experiences in teaching; and an introduction to the theory and practice necessary to prepare and deliver excellent instruction. Students will attend 3 hours of class on campus each week, where they will learn to prepare and deliver excellent inquiry-based science/mathematics lessons. Each team of students will have a district classroom teacher and a TUTEACH master teacher who will work with them to improve their teaching skills as the semester progresses. The district classroom teacher will remain in the classroom at all times and provide immediate feedback on the quality of the instruction. Students will become familiar with elementary and middle school environments as well as the instructional needs of English language learners (ELLs) by observing and discussing middle school culture and by teaching lessons to a middle school class that includes ELLs. They will become familiar with exemplary science curricula for the middle school setting. This course also offers students an introduction to theory, research, and practice in teaching English language learners in the middle grades. Lesson plans will be designed using a modified SIOP (Sheltered Instruction Observation Protocol) model, a model teachers use to differentiate instruction for ELLs. As a result, they will gain an understanding of how to adapt standards-based lessons for English language learners. Students will also develop cross-cultural competence through interactions with ELLs, teachers and school staff in the middle grades. This course helps students determine if they wish to choose a teaching career.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (MATH 1021, (MATH 1021 (may be taken concurrently) and SCTC 1021 (may be taken concurrently)), (MATH 0702 (may be taken concurrently) and SCTC 1021 (may be taken concurrently)), any MATH course numbered 1022 to 4999 (C- or higher; may be taken concurrently), 'Y' in MC5, 'Y' in MC6, 'Y' in MA03, 'Y' in MC6A, STAT 1001, STAT 1102, STAT 1902, 'Y' in MATW, 'Y' in CRMA04, (SCTC 1021 (may be taken concurrently) and 'Y' in CRMA04), (SCTC 1021 (may be taken concurrently) and 'Y' in CRMA01), 'Y' in CRST01, 'Y' in CRST02, (MATH 1021 (may be taken concurrently) and 'Y' in CRTC01), ('Y' in CRMA04 and 'Y' in CRTC01), (MATH 0702 (may be taken concurrently) and 'Y' in CRTC01), ('Y' in CRMA01 and 'Y' in CRTC01), or 'Y' in MC6T)

SCTC 1501. STEM Challenge: The World Around Us. 4 Credit Hours.

This course is typically offered in Fall and Spring.

This course provides an exploration of the world around us using an integrated and conceptual approach that includes the major themes: life science, physical science and environmental sciences. Topics of matter and motion, electricity and magnetism, sound and light, astronomy and earth science will be integrated to understand natural phenomena. In addition, students in the course will investigate the role of science through reading "Science in the News" and other current science-focused publications. The course is part of a two semester sequence intended to prepare students with a strong background in science to support disciplinary majors or to prepare elementary education majors with the necessary background to teach science.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (any MATH course numbered 0701 to 0702 (may be taken concurrently), any MATH course numbered 0800 to 4999 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC3A, 'Y' in MC6A, STAT 1102, STAT 1902, 'Y' in STT2, 'Y' in MATW, 'Y' in MC3S, 'Y' in CRMA18, 'Y' in CRMA19, 'Y' in CRST02, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

SCTC 1502. STEM Challenge: The World Within. 4 Credit Hours.

This course is typically offered in Fall and Spring.

This course provides an exploration of the world within using an integrated and conceptual approach that includes the major themes: life science, physical science. Topics including biomolecules and the cell, biochemical cycles, proteins and DNA, cellular processes, genetics, evolution, anatomy and plant biology and ecology will be integrated to understand natural phenomena associated with organisms in their habitats. In addition, students in the course will investigate the role of science through reading "Science in the News" and other current science-focused publications. The course is part of a two semester sequence intended to prepare students with a strong background in science to support disciplinary majors or to prepare elementary education majors with the necessary background to teach science.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (any MATH course numbered 0701 to 0702 (may be taken concurrently), any MATH course numbered 0800 to 4999 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC3A, 'Y' in MC6A, STAT 1102, STAT 1902, 'Y' in STT2, 'Y' in MATW, 'Y' in MC3S, 'Y' in CRMA18, 'Y' in CRMA19, 'Y' in CRST02, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

SCTC 2001. CST Transfer Seminar. 1 Credit Hour.

This course provides transfer students with the foundation necessary for success in the College of Science and Technology and provides guided exploration of the opportunities and resources at Temple University. Students engage in interactive workshops to develop the academic, professional, and life skills required for Science and Technology students. Topics may include: study habits, test-taking strategies, time management tools, goal setting techniques, financial literacy, communication in college, university resources/navigation/utilization, potential career paths, obtaining internships, research opportunities, getting involved on campus, and graduate school preparation. Students work closely with the instructor to develop an academic plan.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

SCTC 2002. CST Professional Development Seminar. 1 Credit Hour.

CST's Professional Development Seminar will introduce students to central concepts, resources, and skills to prepare for the career exploration and job search/application process, as well as develop leadership skills. Topics include: learning one's strengths, career exploration, resume writing, networking, cover letter writing, interview preparation, and the science of building high-performing teams and organizations. Students will complete individual and collaborative in-class assignments and exercises to develop their professional skills.

College Restrictions: Must be enrolled in one of the following Colleges: Science & Technology.

Repeatability: This course may not be repeated for additional credits.

SCTC 2082. Sophomore Directed Study. 1 to 4 Credit Hour.

This course is typically offered in Fall, Spring, Summer I and Summer II.

Intensive study in a cross-disciplinary area. This course does not count for a major elective credit in a CST major. Prerequisites are completion of one year of an introductory science sequence in a CST department.

Repeatability: This course may not be repeated for additional credits.

SCTC 2100. Special Topics in Science and Technology. 1 to 6 Credit Hour.

This course is typically offered in Fall and Spring.

This course will challenge students to examine topics in the sciences (Earth Science, Environmental Science, Chemistry, Biology, Physics, Computer and Information Science, Mathematics) and appreciate that the sciences are inter- and cross-disciplinary. Students may also be required to use a variety of problem solving skills to address specific issues related to the topic selected. Selected topics include current discoveries or analysis of seminal works in various scientific fields.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, BIOL 2112, BIOL 2912, CHEM 1031, CHEM 1951, CIS 1068, CIS 1968, EES 2001, PHYS 1061, PHYS 2021, PHYS 2921, or 'Y' in BIOW) and (MATH 1022 (may be taken concurrently), any MATH course numbered 1038 to 4999 (may be taken concurrently), 'Y' in MC6, 'Y' in MC6A, 'Y' in MATW, or 'Y' in MC6T)

SCTC 2101. Medical Imaging Physics - Seeing Through Ourselves. 3 Credit Hours.

From practically the very day x-rays were discovered in 1895, the use of physics-based methods to see inside the body without surgery has helped greatly reduce suffering from disease and injury. Accuracy and certainty of diagnosis have continuously improved, and the effectiveness of treatment can easily be monitored. This course will provide descriptions of the basic physical science behind conventional and modern medical imaging methods. Topics include endoscopy, laser light scattering, ultrasound, conventional and tomographic x-ray imaging, PET and other nuclear medicine methods, and MRI.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 1022, CHEM 1032, or CHEM 1952) and (PHYS 1021, PHYS 1061, PHYS 2021, PHYS 2921, or CIS 2168)

SCTC 2102. SERC: Science of Energy Resource Consumption. 3 Credit Hours.

This course is typically offered in Fall.

This course delves into our scientific understanding of the Earth, its resources, and the methods of resource extraction necessary to meet societal demand. We will consider the increasingly complex and large-scale methods of energy extraction. In addition, we will investigate clashes between societal demands for these resources, interest groups on the demand and supply side, and the public perceptions of the science. Students will obtain skills in earth sciences applied to energy and resources, but also skills in communicating uncertainty and scientific results to the general public.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, BIOL 2112, BIOL 2912, CHEM 1031, CHEM 1951, CIS 1068, CIS 1968, EES 2001, PHYS 1061, PHYS 2021, PHYS 2921, or 'Y' in BIOW) and (MATH 1022 (may be taken concurrently), any MATH course numbered 1038 to 4999 (may be taken concurrently), 'Y' in MC6, 'Y' in MC6A, 'Y' in MATW, or 'Y' in MC6T)

SCTC 2105. Best Selling Science and Mathematics. 3 Credit Hours.

Students in this course will read and analyze two best selling books written along science and mathematics themes. The books selected will vary by semester to cover topics from the various disciplines of science. Advanced reading topics will be selected from the literature as it relates to the assigned reading from the best selling books. Major writing assignments and integrated classroom activities will emphasize the development of conceptual knowledge in math and science. Statistics and data science applications to book topics will be infused throughout the course.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MATH 1022 and (any CHEM course numbered 1021 to 4999, any BIOL course numbered 1011 to 4999, CIS 1051, CIS 1057, any CIS course numbered 1068 to 4999, any EES course numbered 2001 to 4999, or any PHYS course numbered 1021 to 4999)

SCTC 2106. Learning Science with New Media. 3 Credit Hours.

Over the last 10 years there has been a renaissance in the way people communicate about and learn science. These new ways involve newer tools, techniques, and the power of social media to inform and collaborate. Examples of these groundbreaking learning tools include, but are not limited to, Khan Academy, SciShow, Veritasium, ASAPScience, Zooniverse and others. The online science learning tools are followed by hundreds of thousands to millions of people around the world interested in learning science. The purpose of this course is twofold: 1) for students to learn how to develop and use these new tools so that they can communicate science to a broader audience and 2) to join a team of researchers on a project aligned to their area of study and contribute to the data collection of that research through citizen science. The course is divided into 2 parts that align with these purposes. In Part One of the course (developing and using tools to create science communication media), students will engage a specific audience (student, teacher, parent or the general public) and learn to write a script that matches that level of audience engagement. In Part Two of the course, students will join a science research team and learn how this team is communicating their work and data. The students in this course will utilize one of a myriad of citizen science curated online tools such as SciStarter, Zooniverse, Smithsonian, National Geographic, and Foldit among others.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MATH 1022 and (any CHEM course numbered 1021 to 4999, any BIOL course numbered 1011 to 4999, CIS 1051, CIS 1057, any CIS course numbered 1068 to 4999, any EES course numbered 2001 to 4999, or any PHYS course numbered 1021 to 4999)

SCTC 2201. Peer Leader Development Seminar. 1 Credit Hour.

This 1-credit course is designed to prepare students for their future role as Peer Leaders in a section of the College of Science and Technology's required first year seminar or transfer seminar. Students will explore various topics such as leadership development, information processing theory, diversity awareness, active learning strategies, lesson plan design, presentation acumen and knowledge of university resources in order to prepare them to integrate this knowledge into a Peer Leader role. This course will prepare students for this position by providing them with proper skill development to be applied during their time as a Peer Leader. Registration for this course is restricted to students who wish to pursue a Peer Leader position in a CST first year or transfer seminar in the following semester.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

College Restrictions: Must be enrolled in one of the following Colleges: Science & Technology.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of CR in (SCTC 1001 or SCTC 2001)

SCTC 2385. Internship in Informal Science Education. 1 to 6 Credit Hour.

This course is typically offered in Fall, Spring, Summer I, and Summer II.

Students registering for the course will be working as instructional assistants in a variety of informal education venues. The student will be responsible for delivering science content to middle and high school students in after school programs or summer programs. The students registered for this course will be responsible for lesson planning, implementation and assessment.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- (except where noted) in (MATH 1041 (C or higher), MATH 1038 (C or higher), MATH 1031 (C or higher), 'Y' in MATW, 'Y' in CRMA06, or 'Y' in CRMA08), (SCTC 1385 (C or higher) or SCTC 1389 (C or higher)), and (CHEM 1032, CHEM 1042, CHEM 1052, BIOL 1111, BIOL 1911, BIOL 2112, BIOL 2912, (BIOL 1011 and BIOL 1012), EES 2011, EES 2021, EES 2065, PHYS 1022, PHYS 1062, PHYS 2022, PHYS 2922, or 'Y' in BIOW)

SCTC 2389. Step 3: STEM Classroom Teaching. 2 Credit Hours.

This course provides additional classroom observation and practice for intending science and mathematics teachers by focusing on instruction that requires high level STEM content and understanding of different classroom behaviors, pedagogies, and multi-modal assessments. TUteach students are encouraged to take this course to enhance their classroom experience portfolio. CST majors may take this course as an elective with approval of the instructor.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 2112, CHEM 1032, EES 2011, EES 2096, PHYS 1062, PHYS 2022, or 'Y' in BIOW) and (MATH 1041, MATH 1031, or 'Y' in MATW)

SCTC 2396. Writing for Science and Technology. 3 Credit Hours.

This course will teach students how to become more effective writers by developing their technical writing skills through practical examples and exercises. The disciplinary content for the writing assignments will be based on the content from the student's major area: biology, chemistry, earth and environmental science, or physics. Specifically, students will learn the process of developing professional scientific documents, including abstract preparation, literature research practice, use of scientific databases, and creation of white papers leading to final proposals. The ability to formulate a research proposal is a critical skill for students entering research careers or working in scientific industries. All documents and assignments will be reviewed by faculty in the science disciplines.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1041, MATH 1031, MATH 1941, or 'Y' in MATW) and (BIOL 1111, BIOL 1911, BIOL 1012, BIOL 1112, BIOL 1912, BIOL 2112, BIOL 2912, CHEM 1032, CHEM 1952, EES 2011, PHYS 1022, PHYS 1062, PHYS 1962, PHYS 2022, PHYS 2922, or 'Y' in BIOW)

SCTC 3001. History of Science. 3 Credit Hours.

This course is not offered every year.

The first two objectives of this course are to give the students a working knowledge of the broad developments in science since the ancient world and to give them familiarity with the concept of the Scientific Method necessary for understanding areas of science not covered in the course. The ultimate objective is to provide students with the skill to evaluate claims and classify them as scientific or un-scientific. Students will take an inquiry-based approach through readings and discussions and will address both the scientific history and its role in controversial social and moral issues such as pollution, child labor in the Industrial Revolution, weapons in wartime, attitudes toward women, and science and religion. The course will survey the genesis of the Scientific Revolution and go on to examine the work of scientists in the 16th century through today.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

SCTC 3082. Junior Individual Research. 1 to 4 Credit Hour.

This course is typically offered in Fall and Spring.

This course is intended for students doing multidisciplinary research under the direction of a CST faculty member that is not in the student's home department. This course does not count for major elective credit in any CST major. Prerequisites are successful completion of at least two upper-level (2000+) courses in their CST major.

Repeatability: This course may be repeated for additional credit.

SCTC 3185. Laboratory Experiences in STEM for Pre-Service and In-Service Teachers. 1 to 3 Credit Hour.

This course is typically offered in Fall, Spring, Summer I and Summer II.

This course will offer students intending teaching careers and those in-field an opportunity to perform several small research projects that would be adaptable to implementation in classrooms as extended activities. The students in the course will be expected to complete laboratory projects that integrate Pennsylvania and Next Generation Science Standards. The students in the course are expected to develop a mini-proposal/work plan, create a project safety plan, complete project objectives and submit a final report for each short project that not only describes the STEM work in journal format, but provides a detailed description of how the project might be implemented in a school setting and how the goals and objectives of the project meet educational science standards.

Cohort Restriction: TUteach students and in-service teachers holding Level I certification in one or more STEM disciplines.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in EDUC 2179 and (SCES 2189 (may be taken concurrently) or MAES 2189 (may be taken concurrently))

SCTC 3201. Research On and Assessment of STEM Teaching Practices. 3 Credit Hours.

This course is typically offered in Fall and Spring.

Students will learn about innovative and emerging trends and resources that support effective learning in science, technology, engineering, and mathematics education. One aspect of the course will focus on recent research findings and how they can be applied within instruction throughout a K-16 environment. Another aspect of the course will focus on existing learning tools and the development of original STEM content. Tools that allow this content to be distributed to a regional or global audience will also be explored. These distribution tools also allow for additional support, user feedback, and user/developer collaboration. Analysis of data from ongoing STEM research projects will also be explored. Cohort Restriction: TUteach students and in-service teachers holding Level I certification in one or more STEM disciplines.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- (except where noted) in (MATH 1041 (C or higher; may be taken concurrently), MATH 1038 (C or higher; may be taken concurrently), MATH 1031 (C or higher; may be taken concurrently), 'Y' in MATW, 'Y' in CRMA06, or 'Y' in CRMA08), (MAES 2189 (may be taken concurrently), SCES 2189 (may be taken concurrently), or SCTC 3485 (may be taken concurrently)), and (CHEM 1032, CHEM 1042, CHEM 1052, BIOL 1111, BIOL 1911, BIOL 2112, BIOL 2912, (BIOL 1011 and BIOL 1012), EES 2011, EES 2021, EES 2065, PHYS 1022, PHYS 1062, PHYS 2022, PHYS 2922, or 'Y' in BLOW)

SCTC 3312. Coding STEM Lessons. 1 to 3 Credit Hour.

This course requires that students create STEM lessons and projects that integrate science and/or mathematics and coding. The purpose of integrating science and/or mathematics and coding is to introduce coding to a broad audience that includes intending teachers and learners from all disciplines and reinforce STEM content through the coding algorithm. For each credit hour, students will create and present 4 STEM-coded lessons. 1 credit will be required for all TUteach majors. Students can repeat the course up to a total of 3 credit hours.

Repeatability: This course may be repeated for a total of 3 credit.

Pre-requisites: Minimum grade of C- in (BIOL 1111, BIOL 1911, CHEM 1032, CHEM 1952, EES 2001, PHYS 1062, PHYS 1962, or 'Y' in BLOW) and (MATH 1021, 'Y' in MC5, 'Y' in MC6, 'Y' in MC6A, 'Y' in MA03, 'Y' in MATW, or 'Y' in MC6T)

SCTC 3385. Diamond Peer Teachers - Internship I. 1 Credit Hour.

This course is typically offered in Fall and Spring.

The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

Repeatability: This course may be repeated for additional credit.

SCTC 3386. Diamond Peer Teachers - Internship II. 1 Credit Hour.

This course is typically offered in Fall and Spring.

The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

Repeatability: This course may be repeated for additional credit.

SCTC 3485. Science and Mathematics in the Classroom. 3 Credit Hours.

This course is typically offered in Fall, Spring, Summer I and Summer II.

This course moves from a focus on thinking and learning to a focus on teaching, learning and classroom management. Topics include principles of delivering effective instruction, integration of formative assessment in lesson planning, developing classroom management practices, unit lesson planning. Students will also examine issues of gender, class, race, and culture in mathematics and science education and policies related to mathematics and science education. Additionally, students will examine different classroom settings reviewing video from urban, suburban and rural classrooms. Students will intern for one week in a local school and present a full STEM unit. The course will be an early term Spring or a SSI offering. The course will use hybrid pedagogy. The reading and study unit will be taught through a series of online modules. The practice will be on-site at TU and local high schools, HSES, U-School, Elverson.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (EDUC 2179 (may be taken concurrently) or 'Y' in CRED02) and SCTC 1389 (may be taken concurrently)

SCTC 4001. Responsible Conduct of Research. 2 Credit Hours.

This course is not offered every year.

The course is designed to expose undergraduate students to the research environment in terms of a research code of conduct and ethical standards. The course is open to senior undergraduate students of all majors with special authorization required. The course has no specific prerequisites and it does not count as a biology major elective. The course will fulfill the requirement for training in responsible conduct of research for students funded by the National Institutes of Health.

Repeatability: This course may not be repeated for additional credits.

SCTC 4321. Entrepreneurship in Science and Technology. 3 Credit Hours.

This course is not offered every year.

The theme of this course is identifying opportunity and application. It will demonstrate that in every area of interest, or course of study, there is an entrepreneurial potential. Students will be given the basic knowledge to pursue their ideas and to understand the steps required to finance, promote, staff, and manage a business. The goal, however, is not establishing an enterprise but rather developing the skills to relate interests and opportunities; and to apply knowledge of a particular field to its commercial possibilities. The course will use case studies from diverse fields and discuss specific entrepreneurial ventures. There will also be guest speakers from industry to discuss their entrepreneurial endeavors.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

SCTC 4385. STEM Teaching and Assessment in Practice. 7 Credit Hours.

This course is typically offered in Fall, Spring, Summer I and Summer II.

This course is designed to provide a secondary student teaching experience for TUteach majors that meets PDE requirements for student teaching and will encompass the full context of pedagogy and assessment specific to STEM disciplines. Use of electronic resources and application of teaching methods to students of different backgrounds and abilities will be emphasized. Approaches to and methods of teaching STEM to ELL students will be part of all lessons. Each of these lessons will be documented with video. Prerequisites: Research Methods (BIO/CHEM/EES/PHYS 3091), Competitive Praxis score, Praxis II score within 1 semester of passing, Permission of instructor. Completion of major requirements and education course sequence. Students taking this class cannot register for any other academic course without approval of their advisor with the single exception of MATH 4096.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: TUteach.

Repeatability: This course may not be repeated for additional credits.

SCTC 4396. Paradigms of Scientific Knowledge: Knowledge Discovery from Scientific Data. 3 Credit Hours.

In this course students will integrate study of descriptive research methods and corresponding statistical concepts that are applied to medicine and clinical research. Topics include ethical considerations, research techniques, graphing, variability, linear regression and correlation. Students will learn how data is used in science policy development. Basic statistical approaches, research protocols and ethics will be discussed. The class will be conducted as slide lecture and discussion; readings will be drawn from texts and scientific journals.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1042, MATH 1942, MATH 1031, MATH 1044, or 'Y' in MATW) and ((CHEM 1032 and CHEM 1034) or (CHEM 1952 and CHEM 1954))

SCTC 4401. Cyber STEM Lessons. 3 Credit Hours.

This course provides instructors with research-based best practices for transferring teaching materials from a traditional classroom to a virtual one. Students will examine, interact with, and evaluate the application of a wide-range of technology-based innovations to achieve and assess learning goals and actively engage K-12 students in the online environment.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in SCTC 1389 and (EDUC 2179, SCES 2189, or MAES 2189)

SCTC 4485. Integrating STEM Practice in Diverse Teaching Environments. 3 Credit Hours.

This course is typically offered in Fall, Spring, Summer I and Summer II.

This course will combine lecture instruction with significant field work. Students in the class will develop evidence-based lessons based on best practices literature. They will apply the best practice of scientists and engineers in multiple teaching venues and in classrooms with students of diverse backgrounds and abilities. Students will develop, implement and assess lessons that are discipline specific but integrated with other curricular themes. These lessons will incorporate technology, use of electronic/virtual lessons, real world problem solving and the design process. Students will develop these lessons with faculty mentors from their discipline in collaboration with master teachers in the TUteach program. Four unique lessons will be created. Students will practice the lesson and create a video of each lesson prior to delivery. These lessons will be reviewed prior to implementation in the school setting. Feedback will allow for modification of the lesson. Students will serve as peer reviewers for these lessons as well.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (SCES 2189 (may be taken concurrently), SCTC 2385 (may be taken concurrently), or SCTC 3385 (may be taken concurrently))

Communication and Social Influence (CSI)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

CSI 0801. Contemporary American Social Movements. 3 Credit Hours.

This course introduces students to the study of contemporary American social movements from a communication perspective. Our primary focus is on the symbolic strategies social movements use to attract members, address counter-movements, and engage dominant social institutions. The course progresses through three sections: a discussion of the characteristics and types of social movements, an examination of the persuasive tactics used by social movements, and an analysis of the persuasive materials/tactics used by social movements. These materials and tactics include documentaries, speeches, videos, social media posts as well as protests, campaigns, and violent acts. The course also teaches students how to understand social movements using perspectives from political science, sociology, and economics/business. NOTE: Students cannot receive credit for this course if they have successfully completed STRC 0801, STRC 0901 or CSI 0901.

Course Attributes: GU, SI

Repeatability: This course may not be repeated for additional credits.

CSI 0836. Interpersonal Communication: Critical Competencies for Professional and Personal Success. 3 Credit Hours.

The primary goal of this course is to help you enhance your interpersonal communication competence so you have successful interpersonal communication with your family, friends and work colleagues. In the first phase of the course you will assess your own communication skills. You will develop and set personal goals and an action plan by which to create the change you wish to see. In the course you will learn the basic components of interpersonal communication situations (communicators, content, and contexts) and you will investigate how interpersonal communication needs and effectiveness change throughout life (in early childhood, adolescence, young adulthood, middle age, and old age). The course includes frequent small group discussions which will allow you to integrate course and research information for personal skill development. The course will provide a reflective and supportive environment in which to expand your communication skills and knowledge. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

CSI 0901. Honors Contemporary American Social Movements. 3 Credit Hours.

This honors course provides an advanced introduction to the study of contemporary American social movements from a communication perspective. Our primary focus is on the symbolic strategies social movements use to attract members, address counter-movements, and engage dominant social institutions. The course progresses through three sections: a discussion of the characteristics and types of social movements, an examination of the persuasive tactics used by social movements, and an analysis of the persuasive materials/tactics used by social movements. These materials and tactics include documentaries, speeches, videos, social media posts, as well as protests, campaigns, and violent acts. The course also teaches students how to understand social movements using perspectives from political science, sociology, and economics/business. NOTE: Students cannot receive credit for this course if they have successfully completed STRC 0801, STRC 0901, or CSI 0801.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GU, HO, SI

Repeatability: This course may not be repeated for additional credits.

CSI 1111. Introduction to Public Speaking. 3 Credit Hours.

Students will prepare, present, and evaluate speeches on significant topics of public concern. The course focuses on the three skills necessary for successful professional public speaking: selecting the appropriate content, organization, and using an effective style of delivery. Students also study more advanced principles of public speaking including critical thinking, the discovery and evaluation of arguments and evidence, audience analysis and adaptation, peer evaluation, speech composition, and persuasion. The course prepares students for making professional presentations in our increasingly diverse workplace. NOTE: Students cannot receive credit for this course if they have successfully completed STRC 1111, STRC 1911 or CSI 1911.

Repeatability: This course may not be repeated for additional credits.

CSI 1112. Introduction to Communication and Social Influence. 3 Credit Hours.

This course provides an overview of the theory, research, and practice of communication and social influence. Students will be introduced to risk, political, and conflict communication techniques and cutting-edge research and how it all applies and/or relates to current events and contemporary culture. Career paths and opportunities for Communication and Social Influence majors are also explored. NOTE: Students cannot receive credit for this course if they have successfully completed STRC 2111.

Repeatability: This course may not be repeated for additional credits.

CSI 1113. Persuasion. 3 Credit Hours.

Persuasion viewed from the perspectives of the persuader and persuadee. The course is designed to make students more effective in both roles, and also to raise troubling ethical questions. It covers politics, product advertising, education, and much more. NOTE: Students cannot receive credit for this course if they have successfully completed STRC 2112.

Repeatability: This course may not be repeated for additional credits.

CSI 1201. Communication and Civic Engagement. 3 Credit Hours.

The course will generate discussion and debate concerning how we should approach the purpose and function of communication in relation to civic engagement at the national, regional, and local levels across the globe. The role of the citizenry, their communication agency, and what should be our normative expectations for citizens will be a centerpiece of our dialogue. Particular focus will be given to a wide range of communicative (mass, mediated interpersonal, interpersonal) activities.

Repeatability: This course may not be repeated for additional credits.

CSI 1401. Conflict and Communication Behavior. 3 Credit Hours.

This course is designed to introduce theories and concepts pertaining to conflict management with an emphasis on the role of communication in creating, reflecting, and remediating conflict. In addition, emphasis will be given to increasing awareness of productive and disruptive conflict patterns and how conflict behaviors may be affecting interpersonal and organizational relationships.

Repeatability: This course may not be repeated for additional credits.

CSI 1601. Communication and Behavior Change. 3 Credit Hours.

Students of this course will develop a strong understanding of the role that communication plays in behavior prediction and change models. Theories such as the Health Belief Model, Social Cognitive Theory, and the Integrated Model of Behavior Change will be discussed in relation to contemporary health, political, science, and other pro-social campaigns. The class will also cover effective use of fear appeals, conformity, compliance gaining and other theories of social influence, and the diffusion of new behaviors through social networks.

Repeatability: This course may not be repeated for additional credits.

CSI 1911. Honors Introduction to Public Speaking. 3 Credit Hours.

In this honors section of public speaking, students will research, prepare, present, and evaluate speeches on significant topics of public concern. The course focuses on the three skills necessary for successful professional public speaking: selecting the appropriate content, organization, and using an effective style of delivery. Students prepare for more advanced principles of public speaking including critical thinking, the discovery and evaluation of arguments and evidence, audience analysis and adaptation, peer evaluation, speech composition, and persuasion. The course prepares students for making professional presentations in our increasingly diverse workplace. NOTE: Students cannot receive credit for this course if they have successfully completed STRC 1111, STRC 1911, or CSI 1111.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

CSI 2101. Communicating Civic Engagement through Sports. 3 Credit Hours.

The sports arena has long been a place where socio-political issues are debated in the marketplace of ideas. This course will offer a historical account of the link between sports and civic engagement. In addition, focus will be given to present-day sports figures, teams, and organizations and the ways they have chosen to engage (or remain outside of) socio-political debates taking place at the local, regional, national, and international levels.

Repeatability: This course may not be repeated for additional credits.

CSI 2111. Argumentation and Advocacy. 3 Credit Hours.

Students learn the basic principles of making arguments. Includes format for analyzing arguments, organizing ideas, providing evidence for claims, and preparing briefs. Students prepare speeches and debates on current public policy issues. NOTE: Students cannot receive credit for this course if they have successfully completed STRC 2221.

Repeatability: This course may not be repeated for additional credits.

CSI 2112. Social Influence Inquiry. 3 Credit Hours.

The study of communication and social influence crosses epistemological boundaries, from the humanities to the social sciences. This course provides a foundation of different ways to define and seek out knowledge that, through communication, influences our attitudes, beliefs, and behaviors. Most importantly, it will educate students on how to ask a good question and to think critically about the knowledge they are generating about various communication processes.

Repeatability: This course may not be repeated for additional credits.

CSI 2201. The Meaningful Enjoyment of Civic Life. 3 Credit Hours.

People derive a variety of pleasure from various forms of civic engagement and communication plays a key role in these processes. This course will survey the landscape of social scientific and humanistic approaches to the hedonic and eudaimonic (meaningful enjoyment) motivations associated with communicating about civic activities. Focus will be given to a wide range of entertainment messages types (e.g., satire, irony, sarcasm) provided in different settings (e.g. drama, comedy) that all deal with various types of civic engagement and their effects. The course adopts a global perspective and will focus on a variety of communication processes taking place in Europe, Oceania, and the Middle East to allow for proper comparisons to be made with the United States.

Repeatability: This course may not be repeated for additional credits.

CSI 2296. Resistance, Protests, and Social Movements. 3 Credit Hours.

This class focuses on the communicative dimensions of social movement activity with a focus on the persuasive strategies employed by participants to achieve change and justice. At the heart of change in society are social protest movements; it is here that ideas are shaped, voiced, and possibly believed, followed, and refuted. This course aims to explore the many facets that surround protest and resistance - both from the participants and their opposition. More specifically, we will define the social movement, explain its development, and look at the specific strategies that movements generally employ. By the end of the course, you should be familiar with several specific social movements and have a better understanding of the communicative construction of social protest. NOTE: Students cannot receive credit for this course if they have successfully completed STRC 2296 or STRC 2996.

Course Attributes: SF, WI

Repeatability: This course may not be repeated for additional credits.

CSI 2401. Intercultural and Cross Cultural Conflict. 3 Credit Hours.

This course provides a communication perspective on the nature of intercultural conflict theory, research and practice. In the increasingly global society, communication and social influence requires cultural sensitivity and an awareness of how cultural difference triggers conflict and requires sophisticated conflict intervention. This course reviews theories of culture and conflict and proposes models of conflict intervention that have proven successful in addressing that conflict.

Repeatability: This course may not be repeated for additional credits.

CSI 2403. Civil Disobedience. 3 Credit Hours.

This course introduces students to theories and practices of civil disobedience as a form of political persuasion. The course examines the tactics, strategies, moral debates, philosophical foundations, and persuasive appeals of disruption, intervention, and noncompliance.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

CSI 2602. Rhetoric of Hate and Violence. 3 Credit Hours.

This course examines the way rhetors communicate hate and violence through speech, physical acts, media depictions, and art. Students will examine the ways that hate and violence work to persuade, coerce, or force behavioral and cognitive change among individuals, groups, governments, and nations.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

CSI 2696. Risk Communication. 3 Credit Hours.

In this course, students will gain a deep understanding of the current research and practice of communicating health, scientific, and environmental risk. We will discuss public understanding of issues that pose risks, such as climate change, global infectious diseases, and engineering the human genome. Different perspectives on risk communication across a variety of disciplines will be explored to provide students an understanding of how people make sense of and use information about risk. Techniques for communicating risk across multiple channels (e.g. mass media, interpersonal, mobile and social) will be covered.

Course Attributes: SI, WI

Repeatability: This course may not be repeated for additional credits.

CSI 3085. Study Away Internship. 1 to 3 Credit Hour.

Students will work at a professional location earning valuable experience that relates to future professional opportunities. Students will keep a diary of their experiences and build a portfolio project that will aid their professional development.

Repeatability: This course may be repeated for additional credit.

CSI 3100. Special Topics in Communication and Social Influence. 3 Credit Hours.

Subject matter not covered by regular departmental course offering. Topics announced in advance.

Repeatability: This course may be repeated for additional credit.

CSI 3182. Independent Study. 3 Credit Hours.

Students will undertake an independent study of an area of Communication and Social Influence not otherwise offered. The study and results of that study will be completed under the supervision of a faculty member. Arranged each semester.

Repeatability: This course may be repeated for additional credit.

CSI 3185. Internship. 1 to 3 Credit Hour.

Students will work at a professional location earning valuable experience that relates to future professional opportunities. Students will keep a diary of their experiences and build a portfolio project that will aid their professional development.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

CSI 3186. Study Away Internship. 3 Credit Hours.

Students will work at a professional location earning valuable experience that relates to future professional opportunities. Students will keep a diary of their experiences and build a portfolio project that will aid their professional development.

Repeatability: This course may be repeated for additional credit.

CSI 3187. Practicum. 1 to 3 Credit Hour.

Students will earn valuable experience that relates to future professional opportunities. Students will keep a diary of their experiences and build a portfolio project that will aid their professional development.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

CSI 3189. Field Experience. 3 Credit Hours.

Field Experience will acquaint students with actual professional practices in their disciplines. Serves as the first opportunity for the student to gain experience in the communication career path.

Repeatability: This course may be repeated for additional credit.

CSI 3191. Directed Research. 1 to 3 Credit Hour.

Students will engage in the practice of knowledge generation with a full-time faculty member.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

CSI 3201. Rhetoric and Civic Culture. 3 Credit Hours.

This course focuses on the nature, strategies, and implications of human discourse within a variety of political and cultural settings. It studies the communicative practices by which public culture is created, sustained, modified, and challenged. Topics include persuasion in electoral campaigns, the political nature of social advocacy, the implications and consequences of media everyday-use, and the relationship between cultural practices and public/ideological communication. NOTE: Students cannot receive credit for this course if they have successfully completed STRC 3323.

Repeatability: This course may not be repeated for additional credits.

CSI 3296. Speechwriting. 3 Credit Hours.

Students prepare speeches for their own presentation and ghost write speeches for others. Emphasis on audience analysis, speech construction, style, persuasion and manuscript preparation. Includes study of practices of prominent speechwriters and their speeches, as well as great speeches in American history.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

CSI 3401. Social Activism and Community Organizing. 3 Credit Hours.

This is a "how-to" course for becoming a social activist and community organizer with a focus on creating and running grassroots campaigns for social justice. Students will learn how to assess social/political problems, how to organize communities into a political force, how to develop mobilization tactics, how to build coalitions with like-minded people, how to lobby elected officials, how to design street actions, and how to implement communication strategies. Over the course of the semester, students will develop their "activist toolbox" for creating real-world change on issues that are most pertinent to their personal passions. Given the location of Temple University, the course places particular emphasis on urban contexts and concerns.

Course Attributes: SI, SS

Repeatability: This course may not be repeated for additional credits.

CSI 3402. Conflict and Influence: Identity, Emotion and Power. 3 Credit Hours.

This course is designed to introduce students to theories and concepts pertaining to conflict management with an emphasis on the role of identity, power and emotion in conflict and social influence. All conflict is driven by identity, emotion and power; the focus of this course is how these drivers create and reflect conflict and how interpersonal and social conflict management must attend to these drivers to secure constructive resolution.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

CSI 3601. Misperceptions and Misinformation. 3 Credit Hours.

Many people strongly hold beliefs about science, health, and/or politics that are often unsupported or completely false. This course will explore the psychological and social factors that make people vulnerable to deceptive communication, misinformation, and conspiracy theories and why it is often very hard to correct misinformed beliefs. This course will cover theories of cognitive biases, conformity, identity protection, motivated reasoning, cultural cognition and many more. NOTE: Students cannot receive credit for this course if they have successfully completed STRC 3336 or STRC 2222.

Repeatability: This course may not be repeated for additional credits.

CSI 3602. Communicating Science in Today's World. 3 Credit Hours.

This course will provide an overview of the communication theory, research, and practice of science communication. Students will be introduced to the philosophical and historical implications of the scientific method. In doing so, this course addresses the popularization of science, the politicization of science, and the use and misuse of scientific evidence. The class will be structured into three main areas. The first section of the class will focus on the evolution/revolution that informs scientific knowledge, inquiry, and methods. The second section will cover the communicative processes and functions of scientific knowledge such as norms and values, information presentation, audience cognition and reception biases. The third section will apply communication processes and functions to current case studies on labor, hazard and risk, COVID-19, genetically modified organism (GMO), human gene editing, and gender and sexuality.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

CSI 3701. Intercultural Communication. 3 Credit Hours.

This course considers how culture influences communication processes by examining theories of intercultural communication and looking at many of the different processes that make up cultural differences. NOTE: Students cannot receive credit for this course if they have successfully completed STRC 3801.

Repeatability: This course may not be repeated for additional credits.

CSI 3702. Communication, Culture and Identity. 3 Credit Hours.

This course explores how identities, individual and collective, are constructed, maintained, and transformed. From rhetorical and sociological perspectives, this class highlights the fundamental role of intersectionality (i.e., the connections between gender, sexual orientation, class, race, ethnicity, and bodily difference when shaping who is who and what is what) in the construction of personal and social identities. In this class, students will learn not only theoretical issues such as similarity and difference, selfhood and mind, self-image and public-image, but also will be able to analyze the influences and consequences of a mediated discourse of identity. NOTE: Students cannot receive credit for this course if they have successfully completed STRC 3236.

Repeatability: This course may not be repeated for additional credits.

CSI 3703. Intercultural Communication in the Workplace. 3 Credit Hours.

This course brings together research and practice from three areas of study: intercultural communication, organizational communication, and negotiation. Research in these areas has grown extensively over the past decade across disciplines that include communication, management, political science, and psychology. In this course, we will look at how culture influences communication within organizations and in the contexts of negotiating and managing conflicts.

Repeatability: This course may not be repeated for additional credits.

CSI 3801. Social Science Research Methods of Social Influence. 3 Credit Hours.

This course addresses research of social influence from a social science perspective. This course provides students with a working knowledge of how to ask a research question and how to choose a method to address a research question, provides an overview of a broad range of qualitative and quantitative methods, engages students in the challenges of conducting research in the digital era, and offers a cursory glance at data analysis. The course covers key ethical issues involved in the study of individuals and publics. NOTE: Students cannot receive credit for this course if they have successfully completed STRC 3663.

Repeatability: This course may not be repeated for additional credits.

CSI 3896. Rhetorical Criticism. 3 Credit Hours.

This course surveys contemporaneous approaches to rhetorical criticism. In this class, students will study different critical methods: neo-classical, dramatic, narrative, metaphoric, social movement, genre, ideographic, gender, and post-modern. Using contemporary critical practice, students will learn how to analyze linguistic cultural artifacts (e.g., speeches, poems, magazine ads, TV shows, films, and videos) and critique their influences and consequences on everyday living. NOTE: Students cannot receive credit for this course if they have successfully completed STRC 3396.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

CSI 4111. Senior Seminar. 3 Credit Hours.

Senior seminar is an upper-level capstone experience in which students will be asked to integrate their knowledge and skills from the range of courses they completed during their major's coursework. The focus is on synthesis, cohesion, and integration of knowledge for all CSI majors. The capstone will include upper-level argumentation skills training, a heavy emphasis on formal writing, and the completion of a social influence campaign.

Repeatability: This course may not be repeated for additional credits.

CSI 4201. Communication, Attitudes, and Opinion. 3 Credit Hours.

This course investigates the public use of reason and communication as it relates to attitude and opinion formation and collective will to influence social, political, and economic outcomes. Topics include investigations of the traditional and digital public sphere, the role of mass, social, and emergent media in attitude and opinion formation, communicative acts that influence attitude and opinion formation, and how collective will affects civic engagement. From a normative perspective, the course will cover the history, theories, methods, and practice of attitude and opinion formation using a communication and social influence lens.

Repeatability: This course may not be repeated for additional credits.

CSI 4212. Communication and Media in New York City: Communities. 3 Credit Hours.

The basis of this course focuses on the development and appreciation of the communicative function of New York City. Students will learn about printed, electronic, and mediated communication through ongoing experiential assignments. Students will also consider personal narratives and non-discursive communication. Students will be expected to investigate several rhetorical themes and trends within New York City related to communication, including both humanistic and mediated traditions. This course should be taken with CSI 4213 and will occur on site in Manhattan. Students should consult with the KCMC Study Away office for additional information.

Co-requisites: CSI 4213.

Repeatability: This course may be repeated for additional credit.

CSI 4213. Communication and Media in New York City: Institutions. 3 Credit Hours.

This class will be an extension of the information students learned in CSI 4212, Communication and Media in New York City: Communities. While the former class focused on the creation of communicative identity within public and mediated spaces, this course will be an investigation into a series of public and media institutions. Each of these organizations has had and will continue to have a communicative impact on the culture and ethos of New York City. This course will allow students an opportunity to bolster their knowledge of research in New York City. This course should be taken with CSI 4212 and will occur on site in Manhattan. Students should consult with the KCMC Study Away office for additional information.

Co-requisites: CSI 4212.

Repeatability: This course may be repeated for additional credit.

CSI 4289. Communication and Media New York City Applied Experience: Field Experience/Corporate Works/Projects. 1 to 4 Credit Hour.

In order to investigate communication within the public life of New York City, students will be expected to undertake a series of individualized projects throughout the semester. These experiences will allow students to more deeply explore a singular facet of media or communication within New York City. The experience component of the course is based upon a learning contract and must draw from communicative principles noted through CSI 4212 and CSI 4213. Students will have to provide a brief explanation of their project in conjunction with the program director.

Co-requisites: CSI 4212, CSI 4213.

Repeatability: This course may be repeated for additional credit.

CSI 4402. Multiparty Conflict Processes: Dialogue, Facilitation and Multiparty Mediation. 3 Credit Hours.

Intergroup and intragroup conflicts require more complex conflict management processes. This course examines primary multiparty conflict processes of dialogue, facilitation, and multiparty mediation with a focus on analysis of these processes in environmental and public policy disputes.

Repeatability: This course may not be repeated for additional credits.

CSI 4571. International Studies in Media and Communication. 1 to 6 Credit Hour.

This course is an immersive study of media and communication institutions, practices, norms, societal, governmental, and legal structures in a culture outside of the U.S. that is conducted during a Klein GO! program. Klein faculty lead students, while living abroad, in media consumption, in comparative analysis and evaluation of media and non-mediated communication, in interaction with local media and communication leaders in the program location. The specific aspects of media and communication to be covered will vary from city to city, and semester to semester, depending on the events of the day. Available only to student participating in a Klein GO! Program.

Repeatability: This course may be repeated for additional credit.

CSI 4601. Narrative Persuasion. 3 Credit Hours.

Storytelling has historically been used to convey culturally, politically, and socially relevant information. Narratively structured messages offer persuasion and social influence communicators a unique way to deliver information to diverse audiences. From Hollywood films to online advocacy videos, narratives are used as vehicles for developing persuasive messages through mass, entertainment, social, and emergent media. This course offers students an opportunity to study how narratively structured messages are developed, as well as when and why they are persuasive. Topics will cover various theories and uses of narrative persuasion and media engagement, ranging from entertainment education to political docudramas. The theories and concepts will be used to analyze examples of health, science, and social campaigns that have used this strategy in comparison with more traditional persuasive campaigns.

Repeatability: This course may not be repeated for additional credits.

CSI 4628. Empowerment of the LGBTQ+ Community through the NYC Pride March: Exploration of a Social Movement. 3 Credit Hours.

Students will learn about the importance of Pride as a social movement, the history, mediated depiction, and impact of Pride within NYC and across the world, and discuss the function of Pride as a social movement. Coinciding with this year's event, students will be eligible to take part in the Pride March, being trained and helping to administer and oversee operations of the March, as well as take part in additional Pride events. Guest speakers from Heritage of Pride, the organization that runs NYC Pride, as well as other Pride associates will be arranged.

Repeatability: This course may not be repeated for additional credits.

Communication Sciences and Disorders (CSCD)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

CSCD 0815. Language in Society. 3 Credit Hours.

How did language come about? How many languages are there in the world? How do people co-exist in countries where there are two or more languages? How do babies develop language? Should all immigrants take a language test when applying for citizenship? Should English become an official language of the United States? In this course we will address these and many other questions, taking linguistic facts as a point of departure and considering their implications for our society. Through discussions and hands-on projects, students will learn how to collect, analyze, and interpret language data and how to make informed decisions about language and education policies as voters and community members. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0815/0915, Asian Studies 0815, Chinese 0815, EDUC 0815/0915, English 0815, Italian 0815, PSY 0815, Russian 0815, or Spanish 0815.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

CSCD 0816. The World of Sign Languages. 3 Credit Hours.

"But isn't sign language universal??" Nope! Sign languages are as different from - and similar to - each other as spoken languages are. Likewise, the lives of d/Deaf and hard-of-hearing (DHH) people around the world can look very different from one another, but often also share key similarities. How much of this is due to deafness itself, and how much is due to the ways that different societies respond to deafness? What do DHH people in different countries view as the most significant issues they face? Whose priorities are reflected in the policies and practices that shape what DHH people's lives look like? What kinds of changes would have the greatest beneficial impact? We'll examine these questions on a global scale through a framework that emphasizes the core principle of disability justice: nothing about us without us.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

CSCD 0841. The Attentive Mind. 3 Credit Hours.

In today's society, we are bombarded daily with more information than our brains can possibly process. It is widely accepted that attention plays a critical role in our ability to manage this information overload. In this course, we will review recent advances in understanding how attention works - how it determines the content of our conscious awareness and impacts our learning, problem-solving, interpersonal interaction, and social behavior. We will review common influences known to impede attention and examine how attention is compromised in certain clinical disorders. Given that Attention-Deficit/Hyperactivity Disorder (ADHD) is a widely known yet often misunderstood entity, we will review in some detail the fascinating historical origins and evolution of the diagnosis and examine the key controversies that have surrounded its conceptualization, identification, biological basis, and treatment. As there is no scientific consensus for some of the topics to be covered, the course will encourage critical thinking with the aim of separating fact and myth. We will then discuss techniques for improving attention as well as approaches to avoid.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

CSCD 1001. American Sign Language I. 3 Credit Hours.

The linguistic structure of American Sign Language is taught in this course. Students learn about American deaf culture and the history of the deaf in the United States. This course assumes no prior knowledge of American Sign Language or deaf culture. NOTE: Check school/college policy regarding the use of this course to fulfill the degree's foreign language requirements, if applicable.

Repeatability: This course may not be repeated for additional credits.

CSCD 1002. American Sign Language II. 3 Credit Hours.

This is the second semester of a two semester sequence in American Sign Language. This class teaches students to reach an advanced beginner level of proficiency in providing and understanding American Sign Language. The course also discusses deaf culture in a global framework. Students must have successfully completed American Sign Language I (CSCD 1001) to enroll in this course. NOTE: Check school/college policy regarding the use of this course to fulfill the degree's foreign language requirements, if applicable.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CSCD 1001 or 'Y' in CRCS04)

CSCD 1003. American Sign Language III. 3 Credit Hours.

This intermediate level ASL course focuses on interactive experiences with language structures, functions, and vocabulary necessary for building narrative and conversational skills that enable efficient communication in ASL and Deaf Cultural contexts. The course also aims to expand students' range of cultural and personal topics of discussion, and to use the target language meaningfully and creatively.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CSCD 1002 or CSCD 1902)

CSCD 1004. American Sign Language IV. 3 Credit Hours.

This is the fourth in a sequence of ASL courses, which focuses on expanded interactive experiences with language structures, functions, and vocabulary necessary for efficient communication in ASL and Deaf Cultural contexts. Particular attention is given to enhanced fluency in the use of ASL classifiers, non-manuals, role shift, and spatial mapping within both conversational and more formal situations. Attention is also given to expanding the range of cultural and personal topics of discussion in meaningful and creative ways.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CSCD 1003.

CSCD 1107. Introduction to Communication Disorders. 3 Credit Hours.

This undergraduate course provides a basic introduction to the profession of speech-language pathology and audiology, and a broad survey of the myriad of communication disorders within the field. An overview of the biology, physics and typical developmental milestones of speech and language will provide the background necessary for understanding and discussion of communication disorders and deviations. Assessment and treatment of communication disorders will be considered within the context of linguistic and cultural diversity, evidence-based practice and case studies.

Repeatability: This course may not be repeated for additional credits.

CSCD 1108. Introduction to Linguistics. 3 Credit Hours.

A survey of methods and results in the study of natural language syntax, phonology, semantics, historical change, and dialect variation. English is the primary language of investigation, but facts from other languages are introduced as appropriate. NOTE: Only one of the following two courses may be credited toward the baccalaureate degree: CSCD 1108 (0108); English 2821 (0111).

Repeatability: This course may not be repeated for additional credits.

CSCD 1222. Indigenous Languages: Introduction to Language Diversity, Discrimination, and Endangerment. 3 Credit Hours.

UNESCO projects that 50-90% of the approximately 7,000 languages spoken around the world will become extinct in less than 100 years. This course explores theoretical issues such as nativeness, linguistic diversity and discrimination, and language endangerment and revitalization by considering such questions as: What causes extinction of a language? Should all endangered languages be protected? What can be done to save indigenous languages from becoming extinct? How will the loss of indigenous languages affect its speakers and the world? What is the impact of mass media in portraying and perpetuating stereotypes related to languages and their speakers?

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

CSCD 1296. Studies in Psycholinguistics. 3 Credit Hours.

This course leads students through the domains of psycholinguistic research and study with particular emphasis on how subconscious knowledge of linguistic systems is put into use in the comprehension and production of language. Topics such as language acquisition, literacy, and multilingualism are also addressed as they fit into the larger topic of language in the mind. This course is writing intensive and its assignments are designed for students to practice and revise writing in the language sciences. Specifically, students are instructed on, and practice themselves, methods of scientific thinking, critical examination of primary literature, and written argumentation. Students will acquire information literacy skills and be familiarized with the American Psychological Association (APA) writing style and relevant professional terminology.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Spch Lang Hearing Science.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CSCD 1108 or 'Y' in CRCS01)

CSCD 1901. Honors American Sign Language 1. 3 Credit Hours.

This is an introductory course in American Sign Language that emphasizes beginning receptive and expressive skills. The linguistic structure of American Sign Language (ASL) is emphasized as students gain practical skills. The honors course also emphasizes the ways in which ASL differs from other signed languages used around the world and explores Deaf culture and history. This course assumes no prior knowledge of American Sign Language or Deaf culture. NOTE: Check school/college policy regarding the use of this course to fulfill the degree's foreign language requirements, if applicable.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

CSCD 1902. Honors American Sign Language 2. 3 Credit Hours.

This is the second semester of a two-semester Honors sequence in American Sign Language. Students in this class achieve an advanced beginner level of expressive and receptive skills in American Sign Language. This course emphasizes genetic and social factors that lead to and follow from a high incidence of deafness within selected communities. Students must have successfully completed Honors American Sign Language 1 (CSCD 1901) to enroll in this course. NOTE: Check school/college policy regarding the use of this course to fulfill the degree's foreign language requirements, if applicable.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CSCD 1901 or 'Y' in CRCS06)

CSCD 2011. American Deaf Culture. 3 Credit Hours.

This course addresses the difference between the medical view of deafness as a disability, focusing on hearing loss, and the cultural view, focusing on the language and culture of the Deaf. The course explores the relation between language and culture, the history of the Deaf in America, Deaf art, literature and folklore in addition to issues surrounding deaf education, bilingualism, and how cochlear implants are viewed by the Deaf community. Students need not have any experience with American Sign Language to take this course.

Repeatability: This course may not be repeated for additional credits.

CSCD 2022. Medical American Sign Language. 1 Credit Hour.

This elective course is designed to teach students, who have already learned basic American Sign Language (ASL), how to communicate with Deaf individuals regarding commonly-occurring health conditions. The course reinforces basic rules of grammar, fingerspelling, and cultural behaviors of the Deaf community, and goes on to focus on ASL vocabulary and phrases needed in a variety of medical situations. We will take information written about specific health conditions, identify the important elements and organize the information into symptoms, causes, and treatments.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CSCD 1001, CSCD 1901, 'Y' in CRCS04, or 'Y' in CRCS06)

CSCD 2049. Language and the Brain. 3 Credit Hours.

This course introduces students to the major issues and results in neurolinguistics, the study of the representation of language in the brain. Major topics include localization of language function in the brain, the use of linguistic knowledge in producing and comprehending words and sentences, and the effects of brain damage on language behavior.

Repeatability: This course may not be repeated for additional credits.

CSCD 2108. Phonetics. 3 Credit Hours.

This course is a comprehensive introduction to phonetics, the branch of linguistics concerned with the mechanics of pronunciation and the notation used to record it. Learning outcomes of the course include: (1) acquisition of a body of knowledge relating to phonetic taxonomy, (2) mastery of techniques of data description and analysis in phonetics (the study of speech production and perception), and to a certain extent (3) honing of analytical reasoning skills. Upon successful completion of this course, the student will be equipped with phonetic transcription tools for use in professional settings, as well as for more advanced coursework in phonetic analysis in a clinical research setting, and for future coursework in theoretical phonology.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CSCD 1108 or 'Y' in CRCS01)

CSCD 2202. Sociolinguistics. 3 Credit Hours.

Sociolinguistics connects languages with the societies and social situations in which they are used. We study regional and social dialects and the judgments listeners make when they hear language and its variations. This course includes the study of African American Vernacular English as well as other dialects and variants of English. We also study pidgins and creoles and the social situations in which they evolve and their relation to so-called "full-fledged" languages.

Repeatability: This course may not be repeated for additional credits.

CSCD 2203. Anatomy and Physiology of the Speech and Hearing Mechanism. 3 Credit Hours.

In order to understand how speech is produced and perceived, it is critical to have knowledge of the anatomy (structure) and understanding of the physiology (function) of the speech and hearing mechanism. This course provides students with the information. The course content is vital as a foundation for the study of speech science, hearing science, and human neuroscience. Together, these courses are vital to the understanding of typical and atypical (delayed/disordered) speech, language, and hearing.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Spch Lang Hearing Science.

Repeatability: This course may not be repeated for additional credits.

CSCD 2204. The Linguistic Structure of Sign Language. 3 Credit Hours.

This 3-credit course examines the grammatical of American Sign Language (ASL) and other sign languages of the world in light of linguistic theory and research. The course will focus on iconicity, arbitrariness, and basic parameters of sign description, as well as ASL phonology, morphology, syntax, semantics and pragmatics. This course will also examine the historical development of ASL and its "genetic" relationship to other languages; its artistic use; the many sociolinguistic factors influencing its dialect variation by region, ethnicity, and social factors unique to the deaf experience, as well as the effects of bimodal bilingualism and other forms of contact with spoken, written and signed English.

Repeatability: This course may not be repeated for additional credits.

CSCD 2301. Development of Speech and Language. 3 Credit Hours.

This is an introductory course on normal language development from birth through adolescence. Child speech and language acquisition in this course is investigated and related to broader issues in cognitive science, development, and the theory of knowledge. Theories of language acquisition and cognitive and social foundations for language and communication will be explored. Biological, neurological, sensory, psychological, developmental, and cultural influences on language development will be discussed. We will also consider other topics in less detail: the nature and extent of individual and cross-linguistic differences in the course of acquisition (including bilingual/second language acquisition), the nature of deficits and delays in language acquisition, the development of reading, and changes in linguistic competence and performance at times of life following the primary acquisition period for language.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Spch Lang Hearing Science.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CSCD 1108 or 'Y' in CRCS01)

CSCD 2303. Foundations in Hearing Science. 3 Credit Hours.

This course provides an overview of the scientific foundations and current understanding of the sense of hearing. Following a review of the physics of sound, sound measurement and basic psychoacoustics, students review and extend their knowledge of the anatomy, physiology and function of the peripheral and central auditory system. Through this exploration, students acquire an understanding of how the auditory system decodes variations in sound parameters in the process of mediating sensory/perceptual experience and a variety of auditory perceptual phenomena. Students learn how damage or maldevelopment of various components of the auditory system may lead to a variety of impairments in hearing, localizing and recognizing sounds.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Spch Lang Hearing Science.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in CSCD 2203.

CSCD 3203. Audiology. 3 Credit Hours.

An introductory course in the field of audiology, including assessment of disorders of the auditory system, acoustic measurements, testing environment and testing protocol, electrophysical measurements, test interpretation, and professional development. The Audiology course is an intermediate level study of hearing, the assessment of hearing impairment, and hearing disorders. Knowledge of basic concepts in the physics of sound and anatomy and physiology of the auditory system is assumed (CSCD 2403 Foundations in Hearing Science is prerequisite).

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Spch Lang Hearing Science.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in CSCD 2303.

CSCD 3222. Introduction to Aphasia. 1 Credit Hour.

Approximately one million Americans have aphasia, which is a language and communication impairment that sometimes results from strokes. This course will explore multiple facets of aphasia, including treatment approaches for this population. Students will learn about the etiology, characteristics, and types of aphasia as well as evidence-based strategies that can be used to facilitate communication with this population. Permission of instructor is required to register.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Non-Degree Undergrad.

Co-requisites: CSCD 3287.

Repeatability: This course may not be repeated for additional credits.

CSCD 3225. Syntax of Natural and Machine Languages. 3 Credit Hours.

In this course, we will explore sentence structure (syntax) while comparing and contrasting the language of humans and the language of machines. Both types of language systems have the goal of communication and make use of structure. However, differences are also significant as aspects of natural language are not programmable in currently available machine languages. In this course, you will be exposed to and will utilize the syntactic, semantic, morphological, and sometimes, phonological tests that argue for the modules that comprise contemporary syntactic theory and that underlie the development of programming languages.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CSCD 1108 or 'Y' in CRCS01)

CSCD 3232. Introduction to Aphasia and Evidence-Based Communicative Interventions. 3 Credit Hours.

Approximately one million Americans have aphasia, which is a language and communication impairment that sometimes results from strokes. This course will provide the opportunity to learn about aphasia, including treatment approaches for this population. Students will learn about the etiology, characteristics, and types of aphasia as well as evidence-based strategies that can be used to facilitate communication with this population. Students will complete a field project in which they will work with people who have aphasia. Students will be assigned to specific field projects based on availability, schedules, and preferences. All field projects will be carried out on Temple's campus at sites such as The Philadelphia Aphasia Community at Temple (PACT) and Temple's Speech-Language-Hearing Center (TUSLHC). Registration is by permission only; registration is restricted to students with an overall GPA of 3.0 and above.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

CSCD 3235. Human Neuroscience. 4 Credit Hours.

Introduction to the anatomy, organization, and function of the human nervous system, with an emphasis on the disorders that result from damage to the brain.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Cognitive Neuroscience, Linguistics, Spch Lang Hearing Science.

Repeatability: This course may not be repeated for additional credits.

CSCD 3236. Cultural and Linguistic Diversity: Focus on Autism. 3 Credit Hours.

Autism occurs across all cultural and linguistic groups, but services to diverse populations are notably limited. This course will provide the opportunity to learn about autism, including treatment approaches for this population, and about service to the under-served immigrant community in Philadelphia. We will begin the semester by covering information about cultural and linguistic competence and the services provided by a range of professionals. We will also discuss the types of strategies that can be used to facilitate communication. Students will complete field projects in which they will work with families where a child has been diagnosed with autism. These projects will occur in community settings and at Temple University.

Repeatability: This course may not be repeated for additional credits.

CSCD 3287. Aphasia Field Project. 2 Credit Hours.

Approximately one million Americans have aphasia, which is a language and communication impairment that sometimes results from strokes. This course is designed to be taken at the same time as "Introduction to Aphasia." Students will complete a field project in which they will work with people who have aphasia. Students will be assigned to specific field projects based on availability, schedules, and preferences. All field projects will be carried out on Temple's campus at sites such as The Philadelphia Aphasia Community at Temple (PACT) and Temple's Speech-Language-Hearing Center (TUSLHC). Registration is by permission only.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Co-requisites: CSCD 3222.

Repeatability: This course may not be repeated for additional credits.

CSCD 3304. Clinical Phonetics. 3 Credit Hours.

This course engages students in the scientific study of speech sounds with a focus on clinical application. The course will involve transcription of different types of speech, including adult and child speech, and typical and disordered speech. The emphasis will be on English (including its dialectal variants), but other languages will also be discussed at various points. The course will include both lecture format and lab format. Lectures will cover important knowledge relevant to clinical phonetics. Class activities will be devoted to transcription practice and further illustration of concepts discussed in lecture.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CSCD 2209 or 'Y' in CRCS03)

CSCD 3305. Teaching and Learning: The Preceptor Experience. 2 Credit Hours.

This course offers students the opportunity to learn about both teaching and learning in a hands-on environment. Each student is assigned to work as a preceptor for an undergraduate class in which the student has previously earned an 'A.' Preceptors will provide review sessions and tutoring support (during preceptor office hours) to students enrolled in the class. In addition, preceptors will attend all meetings of the class for which they are precepting, as well as weekly 1-hour lectures focusing on learning styles, pedagogical methods (such as collaborative learning), and ways of modifying information presented to different individuals. These skills are critical to working with people with communication disorders.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Communication Science.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: minimum GPA of 3.5 in: courses numbered 0700 to 4999.

CSCD 3382. Independent Study in Communication Sciences. 1 to 3 Credit Hour.

Creative projects, including research and design, which are supervised on an individual basis and which fall outside the scope of formal courses.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Linguistics, Spch Lang Hearing Science.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

CSCD 3403. Foundations in Speech Science. 3 Credit Hours.

This course provides students with an in-depth knowledge of speech acoustics and speech analysis, focusing on typical speakers, with an introduction to those with delays and disorders. In addition to the study of segmental aspects of speech, the course also addresses sources of variability including coarticulation, speaking rate, stress, syllable organization, etc. Further understanding of the content is enhanced by the inclusion of lab work in which students record, analyze, and explain acoustic characteristics of speech.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Spch Lang Hearing Science.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in CSCD 2108, CSCD 2203, and CSCD 2303.

CSCD 3421. Multilingualism. 3 Credit Hours.

This course explores multilingualism through discussion of topics such as K-12 education, cognitive development, and code-switching. A variety of language pairings are incorporated into the course, including both spoken and signed languages. Students have the opportunity to complete a more comprehensive set of asynchronous modules on multilingualism or select a research-based learning experience. Core course content is the same for all students. Those selecting a research-based learning experience will complete a lab-based practical experience or research project providing students with the opportunity to experience real research ongoing in the Department of Communication Sciences and Disorders. Those choosing the comprehensive asynchronous modules on multilingualism will investigate the readings and topics in greater details through response papers and investigations of related literature. Students do not need to be multilingual to take this course. Research-based experiences require instructor approval.

Repeatability: This course may not be repeated for additional credits.

CSCD 3503. Foundations in Human Neuroscience. 3 Credit Hours.

This course will provide a broad overview of human neuroscience beginning with an overview of historical aspects proceeding through the neuron doctrine and ultimately covering the anatomy and physiology of the human brain. Students will learn about neurological disorders and neural measurement techniques. It is strongly recommended that you also complete a biology course before taking this course.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Spch Lang Hearing Science.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in CSCD 3403.

CSCD 3730. Topics in Linguistics. 3 Credit Hours.

CSCD 3730 is a 3-credit undergraduate elective that will challenge students to think critically and analytically about pressing issues and questions in Linguistics. Topics will change from semester to semester, enabling students to take the course up to 3 times in order to explore the range of offerings. This course will be of special interest to students in Speech-Language-Hearing, Linguistics, Foreign Languages, English, and Anthropology. The course is also open to those in other disciplines.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (CSCD 1108, ENG 2821, 'Y' in CRCS01, or 'Y' in CREN01)

CSCD 3900. Honors Special Topics in Communication Sciences and Disorders. 3 Credit Hours.

This Honors Elective course in CSCD will challenge students to think critically and analytically about pressing issues and questions in Communication Sciences and Disorders. The topics will change from semester to semester, enabling students to take the course up to 3 times in order to explore different topics.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

CSCD 4221. Speech and Language Disorders: Children. 3 Credit Hours.

This class focuses on pediatric speech and language disorders that are treated by Speech Language Pathologists. This class will attempt to provide both breadth and depth of exposure to the field of speech language pathology. To that end, the course will cover speech and language disorders in children. However, the specific disorders covered may vary from semester to semester. Within each disorder, we will discuss the clinical presentation, diagnosis, and treatment of the disorder with a focus on evidence-based practices. Aspects of interprofessional education will be addressed.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Spch Lang Hearing Science.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CSCD 1107 or 'Y' in CRCS05), CSCD 2108, and CSCD 2301.

CSCD 4222. Speech and Language Disorders: Adults. 3 Credit Hours.

This class focuses on speech and language disorders in adults. Within each disorder, we will discuss the clinical presentation, diagnosis, and treatment of the disorder with a focus on evidence-based practices. Aspects of inter-professional education will be addressed.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Spch Lang Hearing Science.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CSCD 1107 or 'Y' in CRCS05), CSCD 2108, and CSCD 2301.

CSCD 4302. Aural Rehabilitation. 3 Credit Hours.

This course reviews basic communication sciences and their role in the development of (re)habilitative strategies for use with both adults and children with hearing impairment. Students will have an introduction to theories and procedures used to provide aural and audiological rehabilitation. This course will provide an overview of the rehabilitation available for both adults and children with hearing impairment and the impact of new technologies on therapy and teaching. Current research and theory in aural rehabilitation and counseling will be presented.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Spch Lang Hearing Science.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in CSCD 2303 and CSCD 3203.

CSCD 4496. Diagnosis and Treatment in Speech-Language Pathology. 3 Credit Hours.

CSCD 4496 is the capstone course for communication sciences and disorders majors. This is a writing intensive course designed to provide information about the principles underlying the diagnostic and therapeutic processes in the area of communication disorders and to help the student develop writing skills needed for clinical documentation and report writing. Throughout the semester, students will participate in guided observations of clients in a professional setting with an ASHA-certified Speech-Language Pathologist (i.e., CCC-SLP).

Field of Study Restrictions: Must be enrolled in one of the following Majors: Spch Lang Hearing Science.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in CSCD 1296, CSCD 2108, and CSCD 2301.

CSCD 4730. Topics in Communication Sciences and Disorders. 1 to 3 Credit Hour.

Special topics in Communication Sciences and Disorders will change from semester to semester. Topics and instructors for a specific semester will be announced by the department and posted on the CSCD Department's web site and undergraduate listserv. This course is variable credit ranging from 1 to 3 credits.

Repeatability: This course may be repeated for additional credit.

CSCD 4979. Honors in Communication Sciences. 3 Credit Hours.

Students are expected to write and support a major paper under the supervision of a designated honors advisor. The work must be of honors quality and accepted by the honors advisor and a second reader. Students who complete this course satisfactorily, perform 20 hours of volunteer work in consultation with the departmental honors advisor, and meet the other requirements described in the Bulletin about CSCD programs will graduate with distinction in Communication Sciences and Disorders. NOTE: Registration in CSCD 4979 requires a GPA is 3.50 or better both within the major and overall, and having no grade below B in the major. Eligible seniors should consult the Undergraduate Program Director, Dr. Krakow, for details.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Linguistics, Spch Lang Hearing Science.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Communication Studies (CMST)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

CMST 1111. Communication and Public Life. 3 Credit Hours.

This course will introduce students to the interrelationships between communication and public life, including the engagements that take place in social institutions, politics, the professions and the arts. It will look at the basic literature on the concept of civil society. Finally, it will introduce students to the issues to be discussed in the four tracks that make up Communication Studies: Policy, Regulation and Advocacy; Contemporary Media Environments; Global Civil Society; and Arts in the Public Sphere.

Repeatability: This course may not be repeated for additional credits.

CMST 2111. Communications Seminar. 3 Credit Hours.

This course will introduce a case study analysis of a contemporary public issue in communication. Students will examine the selected issue from the range of disciplinary approaches and methodologies introduced in the Communication Studies foundation courses: Communication Studies 1111 (Communication and Public Life) and MSP 1021 (Media and Society). They will discuss how disciplinary approaches and methodologies can condition conclusions, and consider the options available to them in interdisciplinary study. In the process, students will also focus on professional and academic preparation skills that will equip them to approach their futures.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MSP 1021, BTMM 1021, or 'Y' in CRMS01) and (CMST 1111 or 'Y' in CRCM01)

CMST 3185. Communication Studies Internship. 1 to 4 Credit Hour.

Students will arrange for an internship in an appropriate area of Communication Studies. Students must fill out all paperwork in the Communication Studies Manual, particularly areas related to internship supervisor's documentation. Additionally, students must meet with the Communication Studies director during pre-registration meetings. Students will complete a total of 15 short paper responses, 2 evaluations, and 1 final review paper. Students must have an overall GPA of 3.0 and director's permission to take part in an internship.

Department Restrictions: Must be enrolled in one of the following Departments: KCMC: College of Media & Comm.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in CMST 2111 (may be taken concurrently)

Communications and Theater (COMM)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

COMM 3081. Communications Special Projects. 1 to 4 Credit Hour.

Individualized project proposed by the student and approved by a faculty advisor which will contribute to and enhance the student's general education and add to specific interest of the student in the field of communications. NOTE: Permission of faculty advisor required.

Repeatability: This course may be repeated for additional credit.

COMM 3082. Communications Independent Study. 1 to 4 Credit Hour.

Student proposed independent study/research in an area of interest to the student which will enhance their general education and a specific area of the field of communications. NOTE: Permission of Instructor/Faculty Advisor required.

Repeatability: This course may be repeated for additional credit.

COMM 3085. Communications Major Internship. 1 to 4 Credit Hour.

Student will research internship opportunities, set up interviews, secure position, and work a minimum of five hours per week and a maximum of twenty-five hours in a professional environment. Experiences will be shared with classmates and documented with written submission to the faculty advisor. Students should visit the Internship Manual through the Communication Studies Program web page at <https://smc.temple.edu/commstudies/student-resources/internships/> for additional information and requirements. NOTE: This course is for majors only. Director permission required. Please see Internship Manual for prerequisites and information.

Repeatability: This course may be repeated for additional credit.

COMM 3980. Honors Special Topic: An Introduction to Communication in Public Life. 3 Credit Hours.

Variable topics course which can be used for partial fulfillment of the requirements for completion of the University Honors Program. Topics cover aspects of communication studies, including applications of theory, performance, advocacy, media, and analysis. NOTE: For University Honors Program students only.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

COMM 3990. Honors Special Topics. 3 Credit Hours.

Subject matter varies each semester. Please consult the Course Schedule for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

COMM 4111. Communications Major Senior Seminar. 3 Credit Hours.

A capstone experience concerning the various components of the field and discipline of communications. This seminar will synthesize the academic preparation posited by the Communications Program, focusing on aspects of theoretical and applied contributions. Particular focus is on both fortifying academic skills and preparation for post graduation goals. NOTE: This course is for senior communications majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Communications.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Community Arts (CART)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

CART 3011. Introductory Seminar in Community Arts. 3 Credit Hours.

Community Arts brings artists together with people of a community of location, spirit, or tradition, to create art that is based in the life of that community. This course introduces students to the history and theory of Community Arts and current projects in Philadelphia and nationally, through field trips, guest speakers, readings and research. Students will engage in arts projects to orient to and re-discover their own communities of origin in relation to Community Arts and examine issues of race, class, and aesthetics. The course prepares students to become involved in the field internships that are being offered through Tyler/Temple's Arts in Community Program and is a prerequisite for other Arts in Community courses. NOTE: Course previously called "Interdisciplinary Seminar in Community Arts."

Repeatability: This course may not be repeated for additional credits.

CART 3089. Research and Project Planning Seminar in Community Arts. 3 Credit Hours.

In this course, students will apply methods of community data collection to research on a specific community, including personal and oral history interviews, background cultural research, detailed observation of community visual environments and performative conventions, and relationship building. Site visits to community sites and meetings with community leaders provide context for this research. These processes are then directed toward sequential project planning, including a research paper and individual and group creative responses in various media. Utilizing a collective research methodology, students then collaborate to identify emerging themes and key issues toward the conceptual design of a community arts project.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ARTE 3011, CART 3011, CART 3911, ARTE 3911, or VS 1058)

CART 3911. Honors Introductory Seminar in Community Arts. 3 Credit Hours.

Community Arts brings artists together with people of a community of location, spirit, or tradition, to create art that is based in the life of that community. The goals of this course are for students to learn about the history and theory of Community Arts, to gain skills in Community Arts studio and research processes, to learn to think critically about the issues of race, class, and aesthetics inherent in Community Arts practice, to gain exposure to established Community Arts projects in Philadelphia through field trips and guest speakers, and to orient to and re-discover one's own community of origin in relation to Community Arts. NOTE: This is an honors course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

CART 3989. Honors Research and Project Planning in Community Arts. 3 Credit Hours.

In this course, students will apply methods of community data collection to research on a specific community, including personal and oral history interviews, background cultural research, detailed observation of community visual environments and performative conventions, and relationship building. Site visits to community sites and meetings with community leaders provide context for this research. These processes are then directed toward sequential project planning, including a research paper and individual and group creative responses in various media. Utilizing a collective research methodology, students then collaborate to identify emerging themes and key issues toward the conceptual design of a community arts project. NOTE: This is an honors course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (ARTE 3911 or CART 3911)

CART 4012. Community Arts. 3 Credit Hours.

In this course students will create, develop and implement a community-based arts project in media including visual arts and performance within a particular Philadelphia community. Students will gain skills in community arts processes including project design, local research, teaching, and design/performance/installation of arts projects. The course is grounded in community arts theory, growing out of the fields of public art and performance studies.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ARTE 3089, CART 3089, CART 3989, or ARTE 3989) and (ARTE 3011, CART 3011, CART 3911, ARTE 3911, or VS 1058)

CART 4082. Independent Study. 1 to 3 Credit Hour.

Self-directed study and research initiated by a student with an independent study contract developed in conjunction with, and supervised by, a faculty member in community arts.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may be repeated for additional credit.

CART 4089. Evaluation and Documentation in Community Arts. 3 Credit Hours.

In this course students will learn and apply methods for evaluation and ongoing work in the aftermath phase of Community Arts projects, including assessment of artistic process and product and community impact, approaches to continuing community involvement, and transitioning of project ownership to the community. The course offers students a variety of media for documenting and assisting community members to document Community Arts projects in the form of scholarly articles, video and audio documentary, community feedback and personal essays/journals that contribute knowledge to the field of Community Arts.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ARTE 4012 or CART 4012)

Community Development (CDEV)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

CDEV 1113. Introduction to Community Development. 3 Credit Hours.

Community development refers to the broad set of skills and institutions that local communities utilize in an effort to improve the quality of life for all residents. The course examines the history of housing, economic trends, and social policies that have affected low-income communities across the US, and the various ways through organizing and capacity building that community development professionals and activists have sought to improve these conditions. Topics include the provision of affordable housing, community economic development and finance, public education and workforce development, local food systems, and environmental sustainability.

Course Attributes: SE, SI, SP, SS

Repeatability: This course may not be repeated for additional credits.

CDEV 2013. Community Redevelopment and Revitalization. 3 Credit Hours.

This required course within the core curriculum of the community development major is designed to give students a background on the history of urban redevelopment programs, and their impact on individuals and communities. Spanning the period from the early 20th century through the first years of the 21st, students will learn about early progressive era reforms, programs of the New Deal, Urban Renewal, Model Cities, and the Great Society. It will also cover the development of community development corporations, and their role in revitalizing cities across the United States. Market-based and neoliberal programs that began in the 1980s will also be discussed, as will the current policy landscape for redevelopment of urban communities. Particular focus will be paid to this history in the City of Philadelphia.

Repeatability: This course may not be repeated for additional credits.

CDEV 2155. Housing and Community Development. 3 Credit Hours.

A comprehensive study of housing and community development within the context of its environment, both natural and built. Explores the implications on housing of topography, public policy, demographics, transportation, adjacent uses, local culture, building practices, zoning, climate, and historical patterns. A broad range of housing types and densities are examined along with housing as both shelter and social symbol. This course has both historical and current references and introduces the role of the community development professional or planner as a community designer and advocate.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

CDEV 2255. Environmental Justice in Communities. 3 Credit Hours.

This course explores the histories, policies, and innovations associated with environmental justice movements in the United States and throughout the world. It will explore public policy responses to social movement against environmental injustices and environmental racism; discuss the role of science in the public debate; and connect environmental justice to community development theories, policies, and practices. Service learning for a Philadelphia-area organization on an environmental justice project is a key component to this course.

Course Attributes: SF, SS

Repeatability: This course may not be repeated for additional credits.

CDEV 2354. Cooperatives. 3 Credit Hours.

Cooperatives serve a unique role in the modern economy. Having first emerged during the Industrial Revolution, cooperatives were an alternative way for individuals to work together on food production, ownership of businesses, and labor. Today, cooperatives represent a significant portion of the economy around the world, and are a vital component of place-based grassroots community development. This course examines the history and development of cooperatives in the United States and around the world, as well as exploring the innovations that cooperatives continue to bring to communities. Philadelphia is a recognized center of cooperatives in the United States, many of which will be engaged as part of this course. Specific attention will be paid to the Rad Dish Co-Op Cafe, Temple University's student-run co-op.

Course Attributes: SF, SP, SS

Repeatability: This course may not be repeated for additional credits.

CDEV 2454. Grant Writing for Non-Profits. 3 Credit Hours.

The course will help to develop the skills necessary for students to have the knowledge to be able to develop, write and submit a solid grant proposal. Students will obtain hands-on practice to learn to write successful grants. The course will start with an introduction to grants and their place in the development and funding of non-profit organizations. Students will learn the roles of both government and private grant funding for non-profits. Students will learn sound planning skills, write a grant proposal and get feedback on their proposals. Using interactive learning and assigned tasks, we will focus on planning, research, evaluation techniques, budgeting, and how to effectively communicate issues and needs in a clear and concise manner. There will be some exposure to grant-writing software, as applicable.

Repeatability: This course may not be repeated for additional credits.

CDEV 2596. Community Planning Analysis. 3 Credit Hours.

Community development and planning practitioners use tools to gather, analyze, and present information. This course provides an introduction to a broad range of analytical methods and techniques used in the field to understand communities. Students learn to obtain data, select and use the most appropriate analytical methods (with an emphasis on computer applications, such as Microsoft Excel), and present results effectively. Topics to be covered include primary and secondary data collection, basic methods of descriptive statistics, demographic models, population projections and forecasts, economic analysis, housing indicators, surveys, interviews, questionnaires, community asset mapping and zoning. Classes consist of a mix of lectures, small group exercises, and hands-on computer labs. Students, over the course of the semester, develop a portfolio of analytical tools for an assigned community. Consistent with the University's Writing Intensive Program, each weekly assignment will be returned with comments for revision and compilation into a single portfolio. This 'thick description' of a community demonstrates competency with the wide range of methods used in community development. Note: Basic computer skills required. By lecture 4, students must have familiarity with Microsoft Excel. Go to <http://www.temple.edu/cs/training/> for information on free seminars offered by Temple University Computer Services.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

CDEV 3113. Nonprofit Management. 3 Credit Hours.

The course provides an overview of management of nonprofit organizations, including issues pertinent for nonprofit managers and leaders faced with changing organizational environments. Most community development activities are centered within a nonprofit organization or work closely with these community-based organizations. Students are introduced to the major aspects of nonprofits and voluntary organizations that distinguish them from public and private organizations: mission/vision; legal definitions/IRS rulings; voluntary governance structures; and a social change agenda. Topics covered include the history and scope of the nonprofit sector, variations within the sector, contemporary theories of nonprofit enterprise, growth in the international nonprofit sector, management issues which pertain to nonprofits, financial management, accountability, human resources management, strategic planning, collaborative partnerships, leadership, advocacy, and the future of the sector.

Repeatability: This course may not be repeated for additional credits.

CDEV 3155. Healthy Community Design and Development. 3 Credit Hours.

This course seeks to bridge the gap between planning and public health, providing an interdisciplinary approach to address the health implications of the built environment. Students will understand public health and planning history, evolution and significant movements to the present, and historical and current theories on the relationship between the built environment and public health. They will identify contemporary features of the built environment such as patterns of development, parks, public works projects, houses, and transportation systems that reflect past efforts to influence health, and use methods developed by architects, urban planners, public health professionals, sociologists and anthropologists to address current health impacts of the built environment. Students learn about vulnerable populations and health disparities, and develop skills to identify studies and engage communities, critique methods and findings, and apply lessons from planning and public health research to current and future problems.

Course Attributes: SE, SF, SS

Repeatability: This course may not be repeated for additional credits.

CDEV 3165. Placemaking: Revitalizing Urban Communities. 3 Credit Hours.

The term placemaking (sometimes referred to as "creative placemaking") refers to a particular approach to community building and revitalization that has gained popularity in recent years. Through readings, lectures, exercises, and tours students will explore placemaking practices focused on asset based, bottom up approaches that seek to enhance the social fabric while improving physical places. This includes local economic development and revitalization practices that value community identity as expressed in local cultural, historic and natural resources, but also includes other types of practices that simply seek to create a sense of "place" in some otherwise under-used or ill-defined space. Students will assess placemaking practices and identify opportunities for "creative placemaking" in Philadelphia's neighborhoods.

Repeatability: This course may not be repeated for additional credits.

CDEV 3175. Gentrification and Equitable Development. 3 Credit Hours.

With the recent revitalization of cities, gentrification has become a real, complex and highly contested issue that represents progress for some and displacement or its threat for others. This course investigates gentrification and interventions aimed at limiting its negative effects. Through analyzing academic literature, current events and case studies, we consider: the processes, forms, agents and impacts (positive and negative) of gentrification; examine the roles of policy, planning and community development in the gentrification process; and investigate programs and strategies that practitioners could implement to foster equitable development.

Repeatability: This course may not be repeated for additional credits.

CDEV 3197. Community-based Organizations. 3 Credit Hours.

For the past 50 years, community-based organizations (CBOs) have played an important role in the housing, economic and social development in low-income communities: community development corporations (CDCs) were established to construct and manage affordable housing; community economic development programs seek to empower local residents through job training and entrepreneurial assistance; and faith-based organizations continue to play an important role in social service provision in many communities. Fundamentally, CBOs strive to build community leadership and empower low-income people to take charge of their own future. Understanding the role of such organizations is crucial in being an effective planner. Synthesizing skills developed in lower-level courses within the Community Development major, students in this writing-intensive course produce - over the course of the full semester - a strategic plan for a community-based organization of their choosing. Beginning with a profile of the community served, students develop a profile of a specific CBO within the Philadelphia region. After meeting with stakeholders, students develop and present a strategic plan to assist that organization in meeting the needs of its client community, both now and in the future. The plan produced is a result of ongoing feedback from classmates, stakeholders, and the instructor.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CDEV 1113 and CDEV 2596.

CDEV 3313. Community Development Finance. 3 Credit Hours.

The course examines the history and practice of community development finance in the United States. Low-income communities face particular challenges in meeting their credit needs through the traditional financial sector. Over the past 100 years, various institutions have developed to both advocate for change and to cover this gap. The course explores strategies for developing assets for low-income families and low-income communities. Different types of community development finance projects are discussed, including affordable housing, charter schools, community facility, small business lending, and nonprofit real estate projects. The course concludes with an examination of continuing challenges to meet the depository and credit needs of low-income communities.

Repeatability: This course may not be repeated for additional credits.

CDEV 3334. Community Economic Development. 3 Credit Hours.

This elective course within the community development program is designed for students seeking to work in the areas of community economic development. It begins with a thorough examination of the theories of regional, city, and local economic growth and development, including tools necessary to document economic indicators. The second part of the course utilizes a case-study approach of methods and practice, including topics such as workforce development, entrepreneurship, small business attraction and retention, commercial corridors, immigrant communities, leveraging the creative economy, and development without displacement. Examples from the Philadelphia region will be given particular focus.

Course Attributes: SI, SP, SS

Repeatability: This course may not be repeated for additional credits.

CDEV 3455. Community Engagement and Empowerment. 3 Credit Hours.

This class explores the theory and practice of involving citizens in agency-led and community-based planning processes. Readings, class discussions, case studies, and guest lectures emphasize building knowledge and skills necessary to develop open and inclusive processes using a continuum of civic engagement practices such as community organizing, outreach and education, interactive tools and technologies, charrettes and full empowerment.

Course Attributes: SI, SS

Repeatability: This course may not be repeated for additional credits.

CDEV 3860. Topics in Community Development. 1 to 3 Credit Hour.

Variable offerings from semester to semester of selected topics not part of the regular listing of courses. The topic can be in an area of specialization of a faculty member or an examination of a current development in the field. NOTE: Students may obtain a description of the current version at the department office and in the schedule of classes. This course may be repeated for credit.

Repeatability: This course may be repeated for additional credit.

CDEV 3870. Special Topics in Community Development. 1 to 3 Credit Hour.

Variable offerings from semester to semester of selected topics not part of the regular listing of courses. The topic can be in an area of specialization of a faculty member or an examination of a current development in the field. Students may obtain a description of the current version at the department office and in the schedule of classes. This course may be repeated for credit.

Repeatability: This course may be repeated for additional credit.

CDEV 3882. Independent Study in Community Development. 1 to 3 Credit Hour.

An advanced course that involves explorative study or research not met in any established course. Initiated by the student, the project must be sponsored by a faculty member with an approved agreement outlining the content and requirements, including readings, meetings, and papers. NOTE: Students must have the agreement of a faculty sponsor and must submit a formal proposal to this faculty member and Department before registering for the course. A maximum of 3 s.h. of Community Development directed reading/study or independent study may be used as elective credit toward the B.S. in Community Development.

Repeatability: This course may be repeated for additional credit.

CDEV 3883. Directed Reading/Study in Community Development. 1 to 3 Credit Hour.

Prerequisite: Written contract with faculty member and approval of the Department Chair.

Advanced reading/study tutorial arranged between the student and a faculty member. Requirements are jointly determined relative to the specific focus of the course and may include literature review; preparation of journals, bibliographies and/or paper(s); and participation in regularly scheduled discussions. The level of work required is equivalent to a traditional course. Writing skills are evaluated for the final grade. Students are expected to demonstrate personal initiative in framing and meeting course requirements. NOTE: This course may be repeated for credit. A maximum of 3 s.h. of Community Development directed reading/study or independent study may be used as elective credit toward the B.S. in Community Development.

Repeatability: This course may be repeated for additional credit.

CDEV 4885. Internship and Professional Practice in Community Development. 3 Credit Hours.

The course requires 180 hours of supervised internship experience with public agencies, non-profit institutions, and private entities. The internship must have a designated field supervisor and must emphasize the acquisition and application of practical skills in community development. Undergraduates may register for CDEV 4885 only once.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CDEV 1113, CDEV 2596, (CRP 2524 or CTRP 2524), and (CDEV 3113 or CDEV 3197)

CDEV 4889. Community Development Workshop. 3 Credit Hours.

This capstone course in the Community Development major focuses the practice of contemporary community development in collaboration with a community-based organization. It builds upon the knowledge and skills students acquired earlier in the degree program and demonstrate their abilities to resolve real-life problems. Students work in small teams to formulate a research design and scope of services to investigate existing conditions; collect and analyze data needed to devise effective solutions to local problems which build on available community assets; and produce reports local leaders can use to guide their future revitalization efforts.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CDEV 1113, CDEV 2596, CTRP 2524, CDEV 3197, CDEV 2013, and CDEV 3455.

Computer & Information Science (CIS)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

CIS 0822. Technological Horizons: Information Technology in the 21st Century. 3 Credit Hours.

This single semester course hopes to equip students with critical consciousness around information technologies. The course is designed with the presumption that living and working with 21st Century technologies requires not only vocational skills but also theoretical grounding. Key themes such as "Computational Thinking" or "21st Century Economics and Global Communication" embed an introduction to highly impactful technologies within a discussion of their historical, economic, and cultural contexts, highlighting the importance and impact information and communication technologies have on the students' lives today. Throughout the course, virtual coding lab will give students hands-on, practical experience with the computational thinking that underlies the many technologies addressed. By requiring all students to be exposed to a multi-faceted and rigorous understanding of computational thinking, societal and cultural issues raised by technology, critical and creative thinking, data and information analysis, along with some basic programming, Temple University can prepare them to thrive in a technological world.

Course Attributes: GS

Repeatability: This course may not be repeated for additional credits.

CIS 0823. Math for a Digital World. 4 Credit Hours.

This course is not offered every year.

This course is about becoming an "informed user" of quantitative information. Do numbers make us more or less rational? What does "free" really mean? What's the difference between "correlation" and "cause"? How can we be misled by numbers? How can we make better decisions and have more effective discussions by understanding mathematics? Does it make sense to play the lottery? What are your chances of drawing the card you need in a poker game? How long will it take you to save a million dollars assuming interest is earned but you keep spending? How does math play into the digital world that surrounds us, whether it is email, online tools or the creation of passwords, IDs or serial numbers? These and many other questions will be explored and answered throughout the course. NOTE: (1) This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. (2) Duplicate Course: Students cannot receive credit for CIS 0823/0923 if they have successfully completed MATH 0823/0923.

Course Attributes: GQ

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 0701 to 0702, any MATH course numbered 0800 to 0822 (may be taken concurrently), any MATH course numbered 0824 to 0922 (may be taken concurrently), any MATH course numbered 0924 to 4999 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, STAT 1001 (may be taken concurrently), 'Y' in STT2, STAT 1102 (may be taken concurrently), STAT 1902 (may be taken concurrently), 'Y' in MC3A, 'Y' in MC6A, 'Y' in MATW, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

CIS 0835. Cyberspace & Society. 3 Credit Hours.

This course is typically offered in Fall, Spring, Summer I and Summer II.

This course provides students with an understanding of the underlying foundations of technology that have an impact on their lives and integrates those principles with real-world activities. It promotes information fluency by giving students an understanding of the foundational concepts from which the technology is derived and helping them to develop higher-level intellectual capabilities for applying the technology. The class is broken into three sections - technology principles, technology's impact in society and labs. It is the combination of these three sections that will enable students to understand the foundation and the implementation of technology in their daily lives. Class lectures incorporating a myriad of digital technologies including computer hardware, readings, labs and student discussions will be utilized to integrate the application of technology and the impact facing society. NOTE: (1) Duplicate Course: No credit for students who have taken CIS 1055 (C055), 1955 (H095) or 0935. (2) This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core.

Course Attributes: GS

Repeatability: This course may not be repeated for additional credits.

CIS 0923. Honors Math for a Digital World. 4 Credit Hours.

This course is not offered every year.

This course is about becoming an "informed user" of quantitative information. Do numbers make us more or less rational? What does "free" really mean? What's the difference between "correlation" and "cause"? How can we be misled by numbers? How can we make better decisions and have more effective discussions by understanding mathematics? Does it make sense to play the lottery? What are your chances of drawing the card you in need in a poker game? How long will it take you to save a million dollars assuming interest is earned but you keep spending? How does math play into the digital world that surrounds us, whether it is email, online tools or the creation of passwords, IDs or serial numbers? These and many other questions will be explored and answered throughout the course. NOTE: (1) This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. (2) Duplicate Course: Students cannot receive credit for CIS 0823/0923 if they have successfully completed MATH 0823/0923.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GQ, HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 0701 to 0702, any MATH course numbered 0800 to 0822 (may be taken concurrently), any MATH course numbered 0824 to 0922 (may be taken concurrently), any MATH course numbered 0924 to 4999 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, STAT 1001 (may be taken concurrently), 'Y' in STT2, STAT 1102 (may be taken concurrently), STAT 1902 (may be taken concurrently), 'Y' in MC3A, 'Y' in MC6A, 'Y' in MATW, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

CIS 0935. Honors Cyberspace & Society. 3 Credit Hours.

This course is typically offered in Fall and Spring.

This course provides students with an understanding of the underlying principles of technology that have an impact on their lives and how those principles are related to real-world activities. The course promotes information fluency by giving students an understanding of the foundational concepts on which the technology is derived and helping them to develop higher-level intellectual capabilities for applying the technology. The class is broken into three equal sections - technology, ethics and virtual labs. It is the combination of these three sections that will enable students to understand the foundation and the implementation of technology in their daily lives. Class lectures, readings, virtual labs and student discussions will be utilized to integrate the application of technology with social and ethical issues facing society. As examples, discussions might include: What is the impact of the Internet on intellectual property? How far can government surveillance go to detect criminal behavior without reducing our civil liberties? How can vulnerable groups be protected from predators, scam artists, and identity theft? Is it ethical to download free music and video from the Internet? NOTE: (1) Duplicate Course: No credit for students who have taken CIS 1055 (C055), 1955 (H095) or 0835. (2) This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. (3) This is an Honors course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GS, HO

Repeatability: This course may not be repeated for additional credits.

CIS 1001. Introduction to Academics in Computer Science. 1 Credit Hour.

This course is typically offered in Fall and Spring.

Students will be introduced to the field of computing, including potential career opportunities, the Computer & Information Sciences department and its resources, the departmental faculty, and the Computer Science degree programs, as well as the opportunities for internships and research. There will be guest lectures by Computer & Information Sciences faculty, students and alumni, demonstrations of computing technology, and discussions to illustrate the interdisciplinary nature of Computer Science and Information Science and Technology. NOTE: This is a required course for all Computer Science and Information Science and Technology majors. It is also recommended for undecided students looking for a major.

Repeatability: This course may not be repeated for additional credits.

CIS 1049. Comp Tools Competency. 1 Credit Hour.

Repeatability: This course may not be repeated for additional credits.

CIS 1051. Introduction to Problem Solving and Programming in Python. 4 Credit Hours.

This course introduces computer programming using Python, a computer language which is widely used in industry, scientific research, game programming and web applications. Students will learn how to design a program to solve a problem using procedural programming constructs such as loops, branching structures, and functions. Students will write programs that are testable (using assertions) and maintainable (using good programming style, naming conventions, indentation, and comments). Topics covered also include the general characteristics of computers, techniques of problem solving, and algorithm specification. Students are also introduced to software engineering practices, including unit testing techniques, debugging techniques, and version control management.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (MATH 0702 (C or higher), any MATH course numbered 1021 to 4999 (may be taken concurrently), 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, STAT 1001 (C or higher), STAT 1102, STAT 1902, 'Y' in MC6A, 'Y' in MATW, 'Y' in CRMA01, 'Y' in CRMA04, 'Y' in CRST01, or 'Y' in MC6T)

CIS 1052. Introduction to Web Technology and Programming. 4 Credit Hours.

This course is typically offered in Fall and Spring.

This course is designed to introduce students with no programming experience to the programming languages and techniques associated with the World Wide Web. The course will introduce web-based media-rich programming tools for creating interactive web pages. Basic animation programming is also introduced with an emphasis on media-rich content creation, distribution and tracking capabilities.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 0701 to 0702, any MATH course numbered 0800 to 4999 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, STAT 1001 (may be taken concurrently), 'Y' in STT2, STAT 1102 (may be taken concurrently), STAT 1902 (may be taken concurrently), 'Y' in MC3A, 'Y' in MC6A, 'Y' in MATW, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

CIS 1053. Programming in Matlab. 4 Credit Hours.

Introduces students to computers and computer programming. Topics covered include the general characteristics of computers, techniques of problem solving and algorithm specifications, and the debugging and testing of computer programs in Matlab. NOTE: This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: QB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (MATH 1021 (C or higher), any MATH course numbered 1022 to 4999 (may be taken concurrently), 'Y' in MC5, 'Y' in MC6, 'Y' in MA03, STAT 1001 (C or higher), STAT 1102, STAT 1902, 'Y' in MC6A, 'Y' in MATW, 'Y' in CRMA04, 'Y' in CRST01, or 'Y' in MC6T)

CIS 1055. Computers and Applications. 4 Credit Hours.

With the explosion of computer technology, knowledge of computing applications as tools for all disciplines has become a necessary asset. This course will introduce the student to understanding the components of a computer system; the use of the computer to process information; the technology behind computers and networks and how this technology is likely to change; purchasing and maintaining a personal computer system; understanding the technology of the Internet; and social and ethical implications of computing. The laboratory portion of this class will provide students with hands-on experience to supplement the lecture material. Operating system concepts, a working knowledge of collaborative software and the following applications are covered: advanced features of word processing, spreadsheets, presentation software and the resources of the Internet including developing a web site using sound design techniques to publish course documents and incorporating multi-media components. NOTE: (1) Duplicate Course: No credit for students who have taken CIS 0835 (GE-SCI 0060) or 0935 (GE-SCI H060). (2) This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement.

Course Attributes: SB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 0701 to 0702, any MATH course numbered 0800 to 4999 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, STAT 1001 (may be taken concurrently), 'Y' in STT2, STAT 1102 (may be taken concurrently), STAT 1902 (may be taken concurrently), 'Y' in MC3A, 'Y' in MC6A, 'Y' in MATW, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

CIS 1056. Advanced Web Technology and Programming. 4 Credit Hours.

This course is typically offered in Fall.

In this course, students will learn how to write web applications using Java and JSP (Java Server Pages). This course focuses on fundamental programming concepts such as data types, type conversion, exception handling, assignment statements, methods, objects, conditions, and loops. SQL (Structured Query Language) will be used to communicate with a database. JSP implicit objects (e.g., session, response) will be employed for the management of log-in and security. Students are expected to have prior knowledge of basic web design, since HTML, CSS, and Javascript will be reviewed only briefly. By the end of the course, each student will have created a simple web application that accesses a database.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 1052.

CIS 1057. Computer Programming in C. 4 Credit Hours.

This course introduces students to computer programming using the C language. Students will solve programming problems using procedural programming constructs such as variable assignment, loops, branching structures, and functions. Students will write programs that are testable (using assertions) and maintainable (using good programming style, naming conventions, indentation, and comments). Topics covered also include the general characteristics of computers, techniques of problem solving, and algorithm specification. Students also begin the debugging and testing of computer programs in the C language. Students are also introduced to software engineering practices, including unit testing techniques, debugging techniques, and version control management. NOTE: This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Course Attributes: QB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (MATH 0702 (C or higher), any MATH course numbered 1021 to 4999 (may be taken concurrently), 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, STAT 1001 (C or higher), STAT 1102, STAT 1902, 'Y' in MC6A, 'Y' in MATW, 'Y' in CRMA01, 'Y' in CRMA04, 'Y' in CRST01, or 'Y' in MC6T)

CIS 1068. Program Design and Abstraction. 4 Credit Hours.

Introduction to problem solving and programming in Java, software engineering, procedural and data abstraction, and object-oriented programming, including class hierarchies, inheritance and interfaces. Data types covered include primitive data types, strings, classes, arrays, vectors, and streams. Programming techniques include at least one technique for searching and sorting an array and an introduction to file processing. Note: For Computer Science Majors and IST Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (CIS 1051, CIS 1057, or 'Y' in CISA) and (MATH 0702 (C or higher), any MATH course numbered 1021 to 4999 (may be taken concurrently), 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC6A, 'Y' in MC6T, or 'Y' in MATW)

CIS 1166. Mathematical Concepts in Computing I. 4 Credit Hours.

Introduction to the mathematical concepts fundamental to computer and information science. Topics include an introduction to predicate and propositional calculus; sets and set operations; functions and mappings; big-O notation and the growth of functions; algorithms, integers, and matrices; mathematical induction and recursive definitions; combinations, permutations, and binomial coefficients; discrete probability, expected value and variance. Students will also learn formal methods for writing mathematical proofs. Applications to computer science will be illustrated. NOTE: For Computer Science and Information Science and Technology Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1021, any MATH course numbered 1022 to 4999 (may be taken concurrently), 'Y' in MC5, 'Y' in MC6, 'Y' in MC6A, 'Y' in MATW, or 'Y' in MC6T)

CIS 1951. Honors Introduction to Problem Solving and Programming in Python. 4 Credit Hours.

An Honors version of CIS 1051, this course introduces computer programming using Python, a computer language which is widely used in industry, scientific research, game programming and web applications. Students will learn how to design a program to solve a problem using procedural programming constructs such as loops, branching structures, and functions. Students will write programs that are testable (using assertions) and maintainable (using good programming style, naming conventions, indentation, and comments). Topics covered also include the general characteristics of computers, techniques of problem solving, and algorithm specification. Students are also introduced to software engineering practices, including unit testing techniques, debugging techniques, and version control management. Expect the usual boundary between lab and lecture to be somewhat blurred as we look at design and implementation in both places, often in the context of small group activities. The course will end with small group programming projects of modest complexity chosen jointly by the students and instructor based on their areas of interest. These could include elements of graphics, robotics, applied mathematics, engineering, or projects from other disciplines.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (MATH 1021 (C or higher), 'Y' in MATW, any MATH course numbered 1022 to 4999 (may be taken concurrently), 'Y' in MC5, 'Y' in MC6, 'Y' in MA03, STAT 1001 (C or higher), STAT 1102, STAT 1902, 'Y' in MC6A, 'Y' in CRMA04, 'Y' in CRST01, or 'Y' in MC6T)

CIS 1966. Honors Mathematical Concepts in Computing I. 4 Credit Hours.

An honors version of CIS 1166, this course provides an introduction to the mathematical concepts fundamental to computer and information science. Topics include an introduction to predicate and propositional calculus; sets and set operations; functions, sequences and matrices; big-O notation and the growth of functions; algorithms; number theory; mathematical induction and recursive definitions; combinations, permutations, and binomial coefficients; probability, relations. Students will also learn formal methods for writing mathematical proofs. Additional topics beyond the scope of an introductory course will be included. These topics will not only enrich the class, but also show how the concepts can be applied to solve cutting edge problems in science and technology.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (MATH 1041 (C or higher; may be taken concurrently), MATH 1941 (C or higher; may be taken concurrently), MATH 1038 (C or higher; may be taken concurrently), MATH 1042 (may be taken concurrently), MATH 1044 (may be taken concurrently), MATH 1942 (may be taken concurrently), MATH 1951 (may be taken concurrently), any MATH course numbered 2043 to 3080 (D or higher; may be taken concurrently), 'Y' in MA06, 'Y' in MATW, 'Y' in CRMA08, or 'Y' in CRMA21)

CIS 1968. Honors Program Design and Abstraction. 4 Credit Hours.

An Honors version of CIS 1068, this course provides an introduction to problem solving and programming in Java, software engineering, procedural and data abstraction, and object-oriented programming, including class hierarchies, inheritance and interfaces. Data types covered include primitive data types, strings, classes, arrays, vectors, and streams. Programming techniques include at least techniques for searching and sorting an array. In addition to the standard materials for 1068, this course will look more deeply into the underlying representations of numeric data types, it will consider some more advanced language topics including a more detailed look at polymorphism, and it may consider additional techniques such as linked data structures and recursion. Expect the usual boundary between lab and lecture to be somewhat blurred as we look at design and implementation in both places, often in the context of small group activities. The course will end with small group programming projects of modest complexity chosen jointly by the students and instructor based on their areas of interest. These could include elements of graphics, robotics, applied mathematics, engineering, or projects from other disciplines.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (CIS 1051, CIS 1057, or CIS 1951) and (MATH 1041 (C or higher; may be taken concurrently), MATH 1941 (C or higher; may be taken concurrently), MATH 1038 (C or higher; may be taken concurrently), MATH 1042 (may be taken concurrently), MATH 1044 (may be taken concurrently), MATH 1942 (may be taken concurrently), MATH 1951 (may be taken concurrently), any MATH course numbered 2043 to 3080 (D or higher; may be taken concurrently), 'Y' in MA06, 'Y' in MATW, 'Y' in CRMA08, or 'Y' in CRMA21)

CIS 2004. Sci+Tech Scholars Seminar. 1 Credit Hour.

This seminar course provides students participating in the Sci+Tech Scholars program with advanced preparation for success in exploring tech-focused science education and career opportunities. The goals of the course are to: 1) foster a cohort experience and build community among Sci+Tech Scholars; 2) enhance students' understanding of the social relevance and interdisciplinary applications of computing concepts within scientific industries; 3) explore professional development topics that enhance students' understanding of research, graduate school, and careers related to their sci+tech studies; and 4) support students' engagement in experiential service-learning projects that apply and enhance their technical skills. This course is repeatable for credit; Sci+Tech Scholars are expected to enroll in this seminar in each year of their participation in the Sci+Tech Scholars program.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCITECHSCH.

Repeatability: This course may be repeated for additional credit.

CIS 2033. Computational Probability and Statistics. 3 Credit Hours.

This course is typically offered in Spring.

The goal is to introduce students to modern and extremely useful topics in computational statistics. It focuses on computational aspects and provides a hands-on introduction to fundamental concepts of data analysis. The course offers a foundation for further courses in data mining, machine learning, artificial intelligence, robotics, computer vision, and in general in computational statistics and scientific computing.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CIS 1068 or CIS 1073), CIS 1166, and (MATH 1041, MATH 1038, (MATH 1031 and MATH 1022), MATH 1941, MATH 1042 (may be taken concurrently), MATH 1044 (may be taken concurrently), MATH 1942 (may be taken concurrently), MATH 1951 (may be taken concurrently), any MATH course numbered 2043 to 3080 (may be taken concurrently), 'Y' in MA05, 'Y' in MA06, or 'Y' in MATW)

CIS 2082. Independent Research I. 1 to 4 Credit Hour.

This course is typically offered in Fall, Spring, Summer I and Summer II.

Prerequisites: Completion of CIS 2168 with at least a C-, and a GPA of 3.0 or better in the major. Supervised research under the direction of a faculty member in the Department of CIS. All students must obtain the approval of the CIS Administrative Coordinator. NOTE: Not available for major credit and does not count in the major GPA. This course is repeatable.

Repeatability: This course may be repeated for additional credit.

CIS 2100. Special Topics in CIS. 1 to 6 Credit Hour.

The aim of this course is to examine current problems in Computer Science. Subject matter varies from semester to semester.

Repeatability: This course may be repeated for additional credit.

CIS 2107. Computer Systems and Low-Level Programming. 4 Credit Hours.

This course is typically offered in Fall and Spring.

This course introduces computer systems architecture at the level required to understand low-level systems programming. It examines issues of information representation, the form of machine instructions and addressing, the implementation of programming language constructs in terms of machine instructions, the interfaces to peripheral devices. Programming is done in assembly language and in C. NOTE: For Computer Science Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Computer & Information Science, Computer Science, Computer Science and Physics, Data Science: Comp Analytics, Mathematics/Computer Science, Mathematics & Comp Sci w/Teach.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CIS 1068 or CIS 1073) and CIS 1166.

CIS 2109. Database Management Systems. 4 Credit Hours.

This course is typically offered in Fall and Spring.

This is an introductory course in database management systems (DBMS) and file management systems. The course covers data modeling concepts, various file management techniques, data definition and manipulation using SQL, issues in data management, development and implementation of database applications, and a perspective on emerging issues in database systems. Students work in the Lab on various assignments including prototyping and SQL, utilizing state of the art DBMS and CASE tools. NOTE: (1) Duplicate Course: No credit for students who have completed CIS 4331 (0331). (2) Prior to fall 2016, the course title was "Database and File Management Systems."

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CIS 1051, CIS 1057, CIS 1068, CIS 1951, or CIS 1968)

CIS 2166. Mathematical Concepts in Computing II. 4 Credit Hours.

This course is typically offered in Fall and Spring.

A continuation of CIS 1166. Concepts include recursion and recursive algorithms; relations including equivalence, congruence, and order; introduction to graphs and trees. Additional topics include Boolean algebra and finite automata. Applications to computer science will be illustrated. NOTE: For Computer Science Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (MATH 1041 (C or higher), MATH 1941 (C or higher), MATH 1038 (C or higher), MATH 1042 (may be taken concurrently), MATH 1044 (may be taken concurrently), MATH 1942 (may be taken concurrently), MATH 1951 (may be taken concurrently), any MATH course numbered 2043 to 3080 (may be taken concurrently), 'Y' in MA06, 'Y' in MATW, 'Y' in CRMA08, or 'Y' in CRMA21), (CIS 1068 or CIS 1968), and (CIS 1166, CIS 1966, or MATH 2111)

CIS 2168. Data Structures. 4 Credit Hours.

A continuation of CIS 1068. Program style organization and design with continued emphasis on the object-oriented design paradigm. Understanding and use of data abstraction through Java classes and class libraries. Understanding and use of the following Abstract Data Types: strings, stacks, queues, priority queues, lists, linked lists, binary trees, heaps, and hash tables. Introduction to expression evaluation and other applications. Introduction to recursion and comparative analysis of searching and sorting algorithms and data structures. Sorting algorithms include insertion sort, mergesort, heapsort, and quicksort. Searching algorithms include binary search, hashing, and Huffman coding. NOTE: For Computer Science and Information Science and Technology Majors.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CIS 1068 or CIS 1968), (CIS 1166, CIS 1966, or MATH 2111), and (MATH 1022, any MATH course numbered 1038 to 4999 (may be taken concurrently), 'Y' in MC6, 'Y' in MA04, 'Y' in MC6A, 'Y' in MATW, or 'Y' in MC6T)

CIS 2229. Architecture, Operating Systems and Networking. 4 Credit Hours.

This course is typically offered in Fall and Spring.

This course provides an introduction to computer system architecture, operating systems concepts, and network organization, structure, and management. NOTE: For Information Science and Technology Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CIS 1051, CIS 1951, CIS 1057, CIS 1068, or CIS 1968)

CIS 2305. Mobile Computing Technologies. 4 Credit Hours.

This course is typically offered in Spring.

This course provides an environment for students to learn and experiment with mobile computing technologies in different platforms, such as iPhone, Android and Windows Mobile (in partnership with Microsoft Research). The actual platform may rotate according to students' interest, device and instructor availability. The course is tutorial and project oriented. The first eight weeks are for tutorials and laboratories. The remaining weeks are for group projects. Each team will consist of students with programming, management and critical analysis skills. NOTE: For Information Science & Technology Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CIS 1068, CIS 1073, or CIS 1056)

CIS 3100. Special Topics in CIS. 1 to 6 Credit Hour.

The aim of this course is to examine current problems in Computer Science. Subject matter varies from semester to semester.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in CIS 2168.

CIS 3191. Independent Research II. 1 to 4 Credit Hour.

This course is typically offered in Fall, Spring, Summer I and Summer II.

Prerequisites: Completion of CIS 2168 and [CIS 3223 or CIS 3309] with at least a C-, and a GPA of 3.0 or better in the major. Research under the direction of a faculty member in the Department of CIS. All students must obtain the approval of the CIS Administrative Coordinator. NOTE: Not available for major credit and does not count in the major GPA. This course is repeatable.

Repeatability: This course may be repeated for additional credit.

CIS 3203. Introduction to Artificial Intelligence. 4 Credit Hours.

This course is typically offered in Fall.

Introduction to the issues and ideas of artificial intelligence using LISP and PROLOG. Knowledge of representation, search, problem solving, learning and mathematical reasoning. NOTE: For Computer Science Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2033, CIS 2166, and CIS 2168.

CIS 3207. Introduction to Systems Programming and Operating Systems. 4 Credit Hours.

This course is typically offered in Fall and Spring.

This course is concept-oriented, not specialized to a particular operating system, and not trying to teach how to code the kernel of an operating system. After reviewing a number of system programming issues, it examines the basic components of modern operating systems in terms of their function, domain, design, principles and implementation techniques, use and impact on systems programming. It describes and uses in programming homework two modern operating systems (UNIX and Windows NT). Design and implementation of a number of concurrent programs is examined. Hardware support for operating system functions is discussed. Performance issues are considered through the course. NOTE: For Computer Science Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 1166, CIS 2107, and CIS 2168.

CIS 3211. Automata, Computability, and Languages. 3 Credit Hours.

This course is not offered every year.

Finite automata, their limitations and capabilities, and Kleen's theorem or regular expressions. Other types of automata and their events. Turing machine and computability, computable functions, and halting problems. Introduction to context-free languages. Syntactical analysis of such languages with application to translation. NOTE: For Computer Science Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2166.

CIS 3217. Computer Architecture. 3 Credit Hours.

This course covers the fundamentals of computer architecture with an emphasis on how application software is executed on computing systems. The primary goal is to provide a deeper understanding of how machines are built and execute programs so that students learn to develop software that runs on modern multiprocessing computing systems more efficiently and become more effective at program debugging. Students also gain exposure to techniques and tools used by system designers such as code profilers, disassemblers, debuggers, and other performance measurement tools.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2107 and CIS 2168.

CIS 3219. Computer Graphics and Image Processing. 4 Credit Hours.

This course is typically offered in Spring.

An analysis of the techniques used in computer manipulation of two- and three-dimensional images. Hardware and software for displaying images, two- and three-dimensional transformations, the hidden line problem, picture processing, character recognition, and two-dimensional filtering. NOTE: For Computer Science Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in CIS 1166, CIS 2107, CIS 2168, and (MATH 1042 (C or higher), MATH 1942 (C or higher), MATH 1951 (C or higher), any MATH course numbered 2043 to 3080 (may be taken concurrently), 'Y' in MA07, 'Y' in MATW, 'Y' in CRMA09, or 'Y' in CRMA11)

CIS 3223. Data Structures and Algorithms. 3 Credit Hours.

This course is typically offered in Fall and Spring.

Comparative analysis of algorithms and data structures. Data structures include heaps, priority queues, binary and general trees, binary search trees, AVL trees, Red-Black trees, B-trees, and graphs. Algorithms include heapsort, topological sort, breadth-first search, depth-first search, shortest path algorithms, and Greedy algorithms. Students will gain experience working in a group on at least one moderate-size project. NOTE: For Computer Science Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2166, CIS 2168, (CIS 2033 or MATH 3031), and (MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), 'Y' in MA07, or 'Y' in MATW)

CIS 3238. Software Design. 4 Credit Hours.

This course is typically offered in Spring.

Provides direct experience in the design, development, documentation, testing and maintenance of medium size software projects, in the use of modern software problem solving abstractions and solution patterns, and in the use of software development environments. This course is the capstone of the programming course sequence.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2168 and CIS 3207.

CIS 3242. Discrete Structures. 3 Credit Hours.

This course is typically offered in Fall.

Introduction to algebraic structures fundamental to various areas of computer science. Graphs, planar graphs, algorithms on graphs and their analysis, sequential machines and their minimization, semi-groups, and groups and their application to computer science. NOTE: For Computer Science Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2166.

CIS 3281. Cooperative Education Experience in Information Science & Technology. 4 Credit Hours.

This course is typically offered in Fall, Spring and Summer I.

Prerequisites: Completion of CIS 2168 with at least a C-. All students must obtain the approval of the IST Faculty Advisor. In this course, students undertake directed study in Information Science and Technology, which integrates academic program and work experience. The course is coordinated by an Information Science & Technology faculty member, but supervised by the student's work supervisor. At the end of the semester students will turn in a final report detailing the work done on the project. NOTE: For Information Science and Technology Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may be repeated for additional credit.

CIS 3287. Software Design/Practicum. 4 Credit Hours.

This course is typically offered in Fall.

Provides direct experience in the design, development, documentation, testing and maintenance of medium size software projects, in the use of modern software problem solving abstractions and solution patterns, and in the use of software development environments. This course is the capstone of the programming course sequence. NOTE: For Computer Science Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (CIS 2168 or 'Y' in CRCI02) and (CIS 3207 or 'Y' in CRCI03)

CIS 3296. Software Design. 4 Credit Hours.

This course provides direct experience in the design, development, documentation, testing and maintenance of medium size software projects, in the use of modern software problem solving abstractions and solution patterns, and in the use of software development environments. This course is the capstone of the programming course sequence. By its very nature, the capstone course is a method of summative evaluation of students' previous learning in computer science disciplines. It provides a forum that allows an instructor to assess the student's overall collegiate learning experience. Students are assumed to have gained adequate computer language (C and Java in particular) and programming skills in their early-year curriculum. As this is a writing-intensive course, students are required to submit written assignments that go through an iterative writing cycle: a student submits an assignment, the instructor gives feedback on the assignment, student revises and resubmits work, and the instructor assigns a grade for the revised version. Writing assignments in this course will be grounded in the expression of technical computer science concepts and are designed to help students to develop and practice skills in writing for the computer science discipline.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2168 and CIS 3207.

CIS 3308. Web Application Programming. 4 Credit Hours.

This course is typically offered in the Spring.

This course introduces the techniques used in the design and implementation of web applications. Using development environments such as Dreamweaver, Visual Studio, Eclipse, Netbeans, and SQL Management Studio, students write code for the browser (HTML, Cascading Style Sheets, javascript, ajax), web application server (JSP, PHP, or C# .NET), and database server (SQL, stored procedures, triggers). Students learn about internet protocols and how to work with web application objects (e.g., request, response, session). Students learn how design patterns such as MVC (Model-View-Controller) can and should be applied to the multi-tiered, distributed software that make up today's web applications. XML (a format commonly used to transfer data over the internet) and web services (a method call to a remote computer over the internet) are discussed and demonstrated. Each student will program their own web application, expanding on its functionality each week in the lab.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2107 and (CIS 2168 or CIS 2173)

CIS 3309. Component-Based Software Design. 4 Credit Hours.

This course is typically offered in Fall and Spring.

This course emphasizes component-based software development using a modern object-oriented programming (OOP) language (currently C#). Students are introduced to software development techniques applicable in a component (class)-based, integrated software development environment (IDE). Students will learn (and practice using) the OOP language, object-oriented software design techniques, and the principles of good user interface design. Students will also learn how to navigate in, and take full advantage of, an IDE in building quality software, including user interfaces to databases, sequential files, and graphics tools. Object-oriented concepts such as inheritance, polymorphism, static and dynamic binding, and interface (abstract class) components will be covered. The primary focus is on windows-based software products, but the use of ASP.NET for client-server systems development is also introduced. NOTE: (1) Duplicate Course: Students may not get credit for both CIS 4309 and 3309. (2) For Information Science and Technology Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CIS 2109 (may be taken concurrently) or CIS 4331), (CIS 2168 or CIS 2173), and (MATH 1022, any MATH course numbered 1038 to 4999, 'Y' in MC6, 'Y' in MA04, 'Y' in MC6A, 'Y' in MATW, or 'Y' in MC6T)

CIS 3319. Wireless Networks and Security. 4 Credit Hours.

This course is typically offered in Spring.

The students are expected to learn fundamental knowledge of cryptography, several types of important wireless networks, and security issues and defenses in the wireless networks and systems.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2107 and CIS 2168.

CIS 3329. Network Architectures. 4 Credit Hours.

This course covers the operation of computer networks and internets. It provides the background to enable students to evaluate alternative approaches to client-server computing and n-tier software development. To accomplish this the course includes communications technology, computer network technology internetworking using the TCP/IP protocol suite, client-server protocols, client-server computing, network program component models as well as issues involving security, privacy, authentication, intellectual property rights, and social changes related to computer networking. NOTE: For Information Science and Technology Majors and Minors only.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2168 and (CIS 2107 or CIS 2229)

CIS 3342. Server-Side Web Application Development. 4 Credit Hours.

This course is typically offered in Fall and Spring.

The objective of this course is to provide further depth, beyond CIS 3309, into the development of network deployed systems. Its emphasis is on distributed, multi-tier architectures. The course is divided into 3 parts. First is the theory associated with software engineering design principles and distributed processing in client/server architectures and database systems. The second part is a deeper knowledge of the ASP.NET and C#.NET languages beyond CIS 3309. This would include such topics as web and windows applications, user interfaces, event handling, database design and ADO.NET, Web Services, Ajax, user controls, and report generation. The third part of the course is a project that the student will perform in the design and programming of a distributed client/server application. NOTE: (1) For Information Science and Technology Majors. (2) Prior to fall 2017, the course title was "Networked Application Systems."

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2109, CIS 3309, and CIS 3344.

CIS 3344. Client-Side Scripting for the Web. 4 Credit Hours.

This course is typically offered in Fall and Spring.

Today's web applications are becoming more interactive, doing more on the client side and less on the server side. A new software design goal is to write a single code base that can support many formats, from mobile phones, to tablets, to computer monitors. This course will focus on current technologies in client side web scripting, such as: HTML, CSS, responsive web design techniques, JavaScript, JavaScript libraries (such as jQuery), JSON (or other web data formats), Ajax (a technique using JavaScript to make asynchronous calls to web APIs), and client side web application frameworks (such as AngularJS). Students will create web applications that access a database using client side code that invokes web APIs. NOTE: (1) For Information Science and Technology Majors. (2) Prior to fall 2016, the course title was "Advanced Web Application Design and Scripting."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2109 (may be taken concurrently) and CIS 2168.

CIS 3374. Quality Assurance & Testing. 4 Credit Hours.

This course is typically offered in Fall.

Learn the techniques for creating quality systems. This course discusses the crucial steps to be taken to assure that systems: do what they are intended to do; work reliably; satisfy the client's requirements; are completed on time and within budget. Quality practices will be introduced and reviewed to give you a perspective as to why some systems succeed and others fail. Most importantly, students will learn techniques for building quality systems. A number of software tools will be introduced and discussed. Participants will be expected to complete one research paper on test automation, write test plans, and develop the skills to improve the software development process. NOTE: For Information Science and Technology Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2168.

CIS 3376. Enterprise Resource Planning (ERP) Design and Implementation. 3 Credit Hours.

This course is typically offered in Spring.

This course is designed to teach students about implementation of integrated information system for the enterprise using SAP ERP. The course will explain the fundamental concepts of ERP implementations, including cost/benefit, infrastructure design and integration issues. Online tutorials will be used to provide an introduction to the SAP and navigation exercises to acquaint students with getting around within SAP ERP. Students then will work in teams on case studies that execute business process integration in five key areas: sales logistics, production logistics, procurement logistics, accounting/controlling, and human resources. Additionally, students are introduced to SAP master data creation and use. NOTE: For Information Science & Technology Majors.

NOTE: This is a new course number for the SAP course, which had been offered as CIS 4340. Students may not take this course if you already took CIS 4340. For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2109 and CIS 2168.

CIS 3381. Cooperative Education Experience in Computer Science. 4 Credit Hours.

This course is typically offered in Fall, Spring, Summer I and Summer II.

Students undertake directed study in Computer Science, which integrates academic program and work experience. The course is coordinated by a Computer Science faculty member, but supervised by the student's work supervisor. Students will submit a weekly log and turn in a final report detailing the work completed at the end of the semester. NOTE: For Computer Science Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may be repeated for additional credit.

CIS 3441. Software Security. 3 Credit Hours.

This course will familiarize students with the common vulnerabilities that plague developed code as outlined in publications like the OWASP Top 10 and SANS Top 25. They will understand what type of development behaviors lead to vulnerabilities and how to avoid those behaviors when creating secure code. Students will learn how to perform a threat model on development features to understand what threats could impact code, where they come from and how to mitigate them. They will also review and operate analysis tools that are available to developers in order to analyze their code and discover vulnerabilities, allowing them to be corrected early in the development life cycle.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2168.

CIS 3513. Introduction to iOS Application Development. 4 Credit Hours.

One of the two major mobile computer system platforms, the Apple iOS SDK has proven to be a powerful platform upon which to build sophisticated mobile applications. Students will learn to design, build and test mobile applications on Intel Apple Mac computers using a freely available compiler and simulator. The applications can be transferred to iOS devices such as iPhones and iPads. Students will become proficient in the object-oriented language Objective-C or Swift, Apple iOS Frameworks, and the XCode development environment.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CIS 3207 or CIS 3342)

CIS 3515. Introduction to Mobile Application Development. 4 Credit Hours.

This course is typically offered in Fall and Spring.

This course will introduce students to application development for mobile devices, and the various concerns of mobile platforms. Students will learn about the various constraints inherent to mobile applications as well as the new opportunities that they present. They will learn how to address challenges in hardware and mobile interface modalities by incorporating software design and user-interaction design principles. Additionally, students will be exposed to new models of software and data distribution, leveraging third party software, and managing local and remote data.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2168.

CIS 3603. User Experience Design. 3 Credit Hours.

This course is typically offered in the Fall and Spring.

This course will focus on the effective understanding and implementation of the iterative UX design process. Students will learn to have empathy for users by putting into practice each phase of the design process, including Scoping, Research, Analysis, Ideation, Design, Validation, and more. Students will gain exposure and experience in a simulation of a real-world experience.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2168.

CIS 3605. Introduction to Digital Forensics. 3 Credit Hours.

This course is typically offered in Fall.

This course is a broad introduction to the field of Digital Forensics. It covers various fundamental topics necessary for digital forensics investigation. The course begins with foundations of electronic evidence including cyber crime laws, the 4th Amendment, compliance and requirements, collection and handling, analysis, and reporting. The course also covers fundamentals of file systems with specific details pertaining to Microsoft FAT file systems. Students will learn two important forensics techniques - file recovery and file carving - among other things. Finally, forensics artifacts relevant to Windows Systems and Networks are discussed with relevant lab activities and students are also introduced to Antiforensics. Hands-on lab activities familiarize students with several relevant investigation techniques and the use of open source forensics tools.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CIS 2107 or CIS 2229) and CIS 2168.

CIS 3715. Principles of Data Science. 4 Credit Hours.

This course is typically offered in Spring.

Introduction to the practice of data science. Students will leave the class with a broad set of practical data analytic skills based on building real analytic applications on real data. Skills include collecting, accessing, and transferring data, applying methods from machine learning and data mining to analyze data, and visualization and presentation of results. The students will gain experience in processing "big data" which are too big to fit in the computer's memory. NOTE: For Computer Science and Information Science and Technology Majors.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CIS 2166, MATH 2101, MATH 2103, or ENGR 2011) and (CIS 1051, CIS 1057, CIS 1068, or CIS 1968)

CIS 3755. Introduction to Information Visualization. 3 Credit Hours.

Data is everywhere. People, organizations, and governments are increasingly using this data to inform personal behaviors, guide decision-making, and craft public policy. However, data is not objective. The way it is collected, analyzed, and presented can strongly influence the story that is communicated. In the worst case, charts can even be designed to mislead and misinform. This course will help students learn how to communicate important insights about people through data and visualization. They will be able to identify ineffective and misleading visualizations. Through a series of in-class activities, take-home assignments, and group projects, students will have opportunities to flex their new skills and develop portfolio items to showcase their ability to craft and publish compelling data stories.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2168.

CIS 3775. Information Technology Project Management. 3 Credit Hours.

This course will be offered in the Fall and Spring semesters.

Strong business leaders in today's marketplace use project management knowledge and skills as a key differentiator driving success in their organizations. This course will use case studies to examine basic components of time, scope and resources within the project management processes defined by the Project Management Institute. This course lays the foundation for learning project management with practical examples and tools used in actual business situations. Learn how project management can be driven not only from a monitoring and numbers perspective but also from a people perspective to reach business goals. NOTE: For Information Science and Technology Majors.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2168.

CIS 4083. Directed Reading/Study. 1 to 4 Credit Hour.

This course is typically offered in Fall, Spring, Summer I and Summer II.

Prerequisites: Completion of CIS 2168 and [CIS 3223 or CIS 3309] with at least a C-, and a GPA of 3.0 or better in the major. A tutorial opportunity for a student to work with a faculty member to investigate areas of study not covered by courses in the department. All students must obtain the approval of the CIS Administrative Coordinator. NOTE: Not available for major credit. Counts toward the major GPA. This course is repeatable.

Repeatability: This course may be repeated for additional credit.

CIS 4105. Information Technology Process Management. 3 Credit Hours.

This course is typically offered in Fall.

An introduction to essential techniques for successfully creating, organizing and managing IT projects. The course provides the foundation for more advanced studies in process management and software engineering. Enterprise-wide requirements, long-range planning and managing all aspects of the development process will be emphasized. The course will stress the use of appropriate software tools and process modeling throughout the development lifecycle. Quality assurance techniques are introduced at the outset to guide IT processes and decision making. Methods and tools for the technical development of IT systems are presented and used in case projects. The course follows the normal development lifecycle, starting with the recognition and justification of the need for either a new system or an upgrade to an existing system. It then proceeds through analysis, specification, design, implementation, testing (quality assurance), client training and turnover, and maintenance. The importance of each development stage will be taught within the framework of systems reliability, effectiveness, security, scalability, and development cost. NOTE: For Information Science & Technology Majors.

NOTE: For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2168.

CIS 4106. System Development Process. 3 Credit Hours.

This course is typically offered in Spring.

Methods and tools for the technical development of IT systems are presented and used in case projects. The course follows the normal development lifecycle, starting with the recognition and justification of the need for either a new system or an upgrade to an existing system. It then proceeds through analysis, specification, design, implementation, testing (quality assurance), client training and turnover, and maintenance. The importance of each development stage will be taught within the framework of systems reliability, effectiveness, security, scalability, and development cost. NOTE: For Information Science & Technology Majors.

NOTE: For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 3309.

CIS 4108. Emerging Technologies and Tools for Enterprise Management. 3 Credit Hours.

This course is typically offered in Spring.

The purpose of this course is to provide students with an understanding of maturing and emerging technologies and their likely impact on the networked information paradigm and enterprise management. Both hardware and software technologies will be covered. Students will be introduced to advanced software tools that demonstrate how agency enterprises make use of vast information flows and interconnectivity. NOTE: For Information Science & Technology Majors.

NOTE: For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 3309.

CIS 4282. Independent Study. 1 to 6 Credit Hour.

This course is typically offered in Fall, Spring, Summer I and Summer II.

Research under supervision of a faculty member.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may be repeated for additional credit.

CIS 4296. Information Systems Analysis and Design. 4 Credit Hours.

This course is typically offered in Fall and Spring.

The analysis and design phases of the System Development Life cycle are covered in detail. Methodologies for systems analysis, specifications, and design are covered. Both the Traditional Structured and Object Oriented methodologies are used by the students, working in teams, to develop real-life information systems. Emphasis is placed on well-written documentation as well as oral communication typically required during the software development life cycle. Project management tools are employed by students to monitor their progress and the costs associated with their projects. CASE tools are employed for data and information modeling and specification. NOTE: (1) Duplicate Course: No credit for students who have completed CIS 4298 (W338). (2) For Information Science and Technology Major.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2109, CIS 3309, and CIS 3342 (may be taken concurrently)

CIS 4305. Real Time Computer Systems. 4 Credit Hours.

This course is not offered every year.

Introduction to the problems and techniques of designing and developing real-time systems. Topics will include components of real-time and embedded systems, system and device architecture, synchronous and asynchronous event handling, multi-tasking in real-time systems, scheduling and synchronization, and real-time data acquisition and control. The laboratory component involves building systems and simulations in real-time environments, with real-time kernels. NOTE: For Computer Science Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 3207 and CIS 3223.

CIS 4307. Introduction to Distributed Systems and Networks. 4 Credit Hours.

This course is not offered every year.

Introduction to the concepts that are fundamental for understanding distributed systems and the technical infrastructure that makes them possible. Lectures will mostly be expository and conceptual. Directed closed laboratories and home assignments will be applied and involve the solution of distributed programming problems. NOTE: For Computer Science Majors.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2166, CIS 3207, and CIS 3223.

CIS 4308. Development of Multi-tier Client/Server Systems. 4 Credit Hours.

This course is not offered every year.

The objective of this course is to teach the principles and development of multi-tiered distributed systems. It is introduced with a basic review of internet communications and the architecture of client and server sites, including the functions of and relationships among the browser, web server, operating and file systems, middle-ware, database server, and application servers. Concepts involving various types of client/server side processing and remote connectivity methodologies are reviewed, including scripting languages, HTML, Dynamic HTML, XML, ASP, CGI, and DCOM. About 30% of the course is devoted to the above-described theory. The remainder of the course will be devoted to putting some of these principles and techniques into practice using the DCOM technology. A series of progressively sophisticated problems will be studied and programmed in the lab. NOTE: For Computer Science Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 3207 and CIS 3223.

CIS 4319. Computer Networks and Communications. 4 Credit Hours.

This course is not offered every Fall.

Introduction to computer networks and communications. Local and wide area networks. Network topology and routing. Internet and ISO protocols. Applications including remote procedure calls, remote logon, and file transfer. Network operating systems. NOTE: For Computer Science Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 3207 and CIS 2166.

CIS 4324. Compiler Design. 4 Credit Hours.

This course is not offered every year.

The student will learn what a compiler is and how it works. Topics covered include: how to specify what a legal program is in a language (syntax); how to specify what a legal program does (semantics); how a computer uses these specifications to recognize a legal program and translate this program into the machine's language. Students will develop a working compiler for a simple object-oriented programming language using an Object-Oriented approach, using Java, and the compiler construction tool ANTLR. The target will be the Java Virtual Machine. NOTE: For Computer Science Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2168 and CIS 2166.

CIS 4330. Current Topics in Information Science & Technology. 3 Credit Hours.

This course is typically offered in Fall and Spring.

Current problems in information science and technology. NOTE: For Information Science and Technology Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

This course is repeatable for credit.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Information Science & Technolo.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in CIS 2168.

CIS 4331. Principles of Database Systems. 4 Credit Hours.

This course will cover the fundamental concepts of database systems, with an emphasis on relational database systems. It will cover both the theory and practice of relational databases, including Codd's original relational model, the relational algebra and calculus, and normalization. Students will learn how to do database design using the (extended) entity-relationship model. There will be a semester-long project in which students will design and implement an actual database, using an existing relational database management system, such as Access, MySQL, or Oracle. NOTE: (1) Duplicate Course: No credit for students who have completed CIS 2109. (2) For Computer Science Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2107 and CIS 2166.

CIS 4340. Seminar in Information Science & Technology. 4 Credit Hours.

This course is typically offered in Spring.

Current problems in information science and technology. NOTE: For Information Science and Technology Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

This course is repeatable for credit.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Information Science & Technolo.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in CIS 2168.

CIS 4344. Advanced Web Application Design & Scripting. 4 Credit Hours.

This course is typically offered in Fall and Spring.

A principal objective of the course is to present web site design and web application programming as separate technical disciplines and, at the same time, to show how they must be carefully integrated to produce effective results. The course will provide the student with the principal design techniques and associated implementation languages for creating dynamic web pages and for both client and server side processing via scripting and an object oriented, event driven language. The new concepts associated with Web 2.0 are presented. These capabilities are sometimes collectively described as Rich Internet Applications (RIA). They greatly enhance the dynamics and interactivity of web presentation and include the "push" vs. "pull" paradigms. Prevalent technologies and languages for web design to be taught are XHTML, CSS, XML, XSL, and DaM, Javascript, Action Script and Adobe FLEX. The prerequisite courses will provide students with the necessary elements of VB.NET for server side processing as well as SQL for database design. Together, the client side scripting languages and the server side .NET and SQL languages will enable students to create applications for the complete client/server cycle. Two other technologies will also be introduced as important contributors to RIA: (1) AJAX, which enhances the effectiveness and speed of the client/server interaction, and (2) Really Simple Syndication (RSS), which provides new delivery modes of web based information in terms of the "push" paradigm. Online tutorials and reference manuals will be made available for all languages used in the course as a supplement to the Text Book. The course will emphasize good web design practice, client server architecture, and the principles of event oriented programming. It will be shown how the use of an Integrated Development Environment (IDE) and other specialized tools can enhance programmer/designer productivity and quality of the final product. NOTE: For Information Science and Technology Majors. Prior to spring 2011, the course title was "Client/Server Scripting Languages for Web Development."

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 3309 and CIS 2168.

CIS 4345. Introduction to Cloud Computing. 3 Credit Hours.

Cloud Computing is concerned with the use and architecture of this model of computation. We study the services provided by clouds, their internal structure, and their possibilities and limitations. Topics include: Infrastructure as a Service, Middleware (Platform) as a Service, Software as a Service, Service-oriented architectures, Web Services and standards, cloud security, reliability, governance, and wireless clouds.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 3207.

CIS 4350. Seminar on Topics in Computer Science. 4 Credit Hours.

This course is typically offered in Fall.

Current problems in computer science. NOTE: For Computer Science Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

This course is repeatable for credit.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Computer & Information Science, Computer Science, Computer Science and Physics, Data Science: Comp Analytics, Data Science, Mathematics/Computer Science, Mathematics & Comp Sci w/Teach.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in CIS 2168.

CIS 4360. Seminar on Topics in Computer Science. 3 Credit Hours.

Course content varies from semester to semester and is concerned with current issues in computer science. Note: For Computer Science Majors.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Computer & Information Science, Computer Science, Computer Science and Physics, Data Science: Comp Analytics, Data Science, Mathematics/Computer Science, Mathematics & Comp Sci w/Teach.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in CIS 2168.

CIS 4362. Application System Development Using Relational Technology. 4 Credit Hours.

This course is not offered every year.

This course will assist in achieving a significant level of understanding and synergy of a variety of Oracle tools, environments and languages including SQL*Plus, PL/SQL, Oracle Forms and Reports. As a parallel line it will be supported by a course project done in a team environment where every team member will do independent work in addition to learning how to work in a team. The course project will include a functional requirements specification, database design, SQL queries, SQL-based listings and reports, reports developed using Oracle Reports, online interface using Oracle Forms, and PL/SQL code supporting the developed application system. NOTE: For Information Science and Technology Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CIS 2109 or CIS 4331)

CIS 4372. C++ Applications Programming. 4 Credit Hours.

This course is not offered every year.

The C++ programming language is used extensively for interest and applications programming. This course is aimed at providing students with the object-oriented programming experience needed in applying C++ to these problem areas. The objectives are two-fold. One aim is to enhance the student's ability to organize large scale programming tasks using the object oriented approach. The second aim is to further the student's ability to develop error-free maintainable code. NOTE: For Information Science and Technology Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2229 and CIS 3309.

CIS 4376. E-Commerce System Development. 4 Credit Hours.

This course is typically offered in Fall.

The objective of this course is to teach the technical aspects of developing a commercial web site. This process combines a number of technologies: (1) web page and style sheet design, (2) dynamic web pages that access data from relational and XML databases, (3) client and server side transaction processing, (4) principles of internet security, scalability, and database reliability, (5) distributed component integration using packages for major functions such as credit card validation, shopping cart management, order fulfillment and inventory management. Students will develop a site as a course project. They will use the Microsoft Visual Studio.NET as the principal software development tool. This includes the ASP.NET and VB.NET languages. Tools to perform the other tasks include Front Page for web design, an XML editor for XML pages, and the Microsoft Enterprise Manager for the management of SQL Server databases and VS.NET component deployment. The course will provide numerous online references to all of these languages and tools. NOTE: For Information Science and Technology Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2168.

CIS 4378. Computer and Network Security. 4 Credit Hours.

This course is typically offered in Spring.

This course provides an introduction to the inherent insecurities in today's computer systems and networks, and the commonly used tools and techniques used to secure them. Topics include cryptography basics, virtual private networks, secure sockets, e-mail security, firewalls, building secure software, kerberos, web server security, viruses, intrusion detection systems, and privacy issues. NOTE: For Information Science and Technology Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2229 and CIS 3329.

CIS 4382. Independent Study. 1 to 6 Credit Hour.

This course is typically offered in Fall, Spring, Summer I and Summer II.

Research under supervision of a faculty member.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may be repeated for additional credit.

CIS 4396. Information Systems Implementation. 4 Credit Hours.

This course is typically offered in Fall and Spring.

This is a capstone course where teams of students implement the information system for which they developed specifications in CIS 4296 (W281). The teams create the database, programs, procedures and documentations necessary for their project. Techniques of modular design, program development, testing and integration are employed. Emphasis is placed on writing documentations, oral presentations and project management. NOTE: (1) Duplicate Course: No credit for students who have completed CIS 4398 (4339, 0339). (2) For Information Science and Technology Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 4296 and (CIS 3342 or CIS 4342)

CIS 4397. Independent Research in Computer Science. 3 Credit Hours.

This course is typically offered in Fall, Spring, and Summer (12 weeks).

Students undertake research under the supervision of a CIS faculty member. The research project must be approved by the chair of the student's undergraduate program. Students must apply by November 15 for Spring, March 15 for Summer, and April 15 for Fall. Requirements include a 3.0 GPA overall and a 3.3 GPA in the major, and students must have completed all required courses in the major except for no more than 2 required electives in the major (CIS, Math, or Data Science Electives). Students are strongly urged to take an independent study with their research professor prior to enrolling in this course. Note: (1) This course is used to fulfill the capstone requirement in the major and (2) For Computer Science, Math & Computer Science, and Data Science majors.

Course Attributes: WI

Repeatability: This course may be repeated for additional credit.

CIS 4398. Projects in Computer Science. 3 Credit Hours.

This course is typically offered in Fall and Spring.

Team-oriented design and implementation of large programming project. Students will propose topics for review and acceptance early in the semester. Students will provide written documentation of their completed projects and will demonstrate the operation of their completed projects in an oral presentation. Projects will be solicited from industry and other departments at the University. NOTE: For Computer Science Majors (For Math/CS Majors see your advisor).

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CIS 3238, CIS 3287, or CIS 3296) and CIS 3223.

CIS 4419. Securing the Internet of Things. 3 Credit Hours.

We are seeing the rise in popularity of embedding computing and communication capabilities into everyday objects to make them "smarter". From smart cities to smart power grids, from autonomous vehicles to AI-powered decision systems, this new Internet of Things (IoT) world brings with it many new security and privacy challenges. The objective of this course is to introduce students to the new cybersecurity and privacy issues in these emerging systems, as well as the latest research on defending against these threats. Students will build on their knowledge of fundamental cybersecurity concepts and techniques from CIS 4378 or CIS 3319, and learn to apply them in these new problems. Upon successful completion of the course, students are expected to demonstrate knowledge and understanding of these contemporary systems and be able to identify the vulnerabilities in these systems as well as countermeasures to address these threats. Some of the topics that will be covered include: 1) Security of standards and protocols used in smart environments such as MQTT, CoAP, UPnP, 2) Security and privacy of wireless communications used in IoT systems, including Bluetooth, Zigbee, RFID, 3) Security and privacy issues in various application domains such as smart homes, public safety, healthcare, and wearable systems, and 4) Security and privacy challenges of AI-enabled systems such as autonomous vehicular networks, voice/facial recognition, virtual and augmented reality (VR/AR), etc.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2168 and (CIS 2107 or CIS 3329)

CIS 4496. Projects in Data Science. 3 Credit Hours.

This course provides students an experience in the design and implementation of an end-to-end pipeline for a challenging real-world data science project. Students will work in teams of 4-6 to identify a practical problem scenario, apply knowledge synthesized from previous courses to design a solution, and learn new skills and techniques in the process of implementing the proposed solution. Lecture times will be used to discuss components of a data science project life cycle, to consider common issues in data science projects, to deliberate over business case studies, to brainstorm ideas for addressing stumbling blocks in team projects, and to seek and share feedback on project decisions and progress. Lab times will be used to develop project design, code, and documentation. Students will receive project feedback from the instructor as well as from student peer groups which will be used for iterative development and improvement. Upon completion of the course, students are expected to have gained essential professional and technical skills to enter the work force as a data science professional.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2168, CIS 3715, and MATH 3032 (may be taken concurrently)

CIS 4515. Advanced Mobile Application Development. 4 Credit Hours.

This course is typically offered in Spring.

This course will introduce students to advanced concepts in application development for mobile devices. Students will learn to leverage the various novel components found in modern mobile devices such as NFC, Bluetooth, and GPS, to build applications that are aware of and act based on their environment. Students will learn to work in teams to design and implement complex applications and learn how to address challenges in hardware and user interfaces by incorporating software design and user-interaction design principles. Students will also be introduced to current software distribution models and the ethics of managing user data.

Note: Students can enroll in this course without the prerequisite if instructor permission is granted.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 3515.

CIS 4517. Data-Intensive and Cloud Computing. 3 Credit Hours.

This course is typically offered in Spring.

This course will expose students to recently emerged and fast moving technology of big data and cloud computing. It will cover a spectrum of topics from core techniques in data management and analysis to highly-scalable data processing using parallel database systems. Students will be introduced to big data ecosystems such as Hadoop, Spark, Storm and MapReduce; cloud technologies such as Amazon EC2, Microsoft Azure and Google Cloud; data management tailored to cloud and big data such as NoSQL, Google Big Table/Apache HBase, and introductory applications to big data and cloud environment. Students will work directly with a selected set of these platforms, compare and contrast their relative strengths and weaknesses, and characterize the problems they are designed to solve. Note: Students may not receive credit for both CIS 4517 and CIS 5517.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2168 and (CIS 2166, MATH 2101, MATH 2103, ENGR 2011, or MATH 3045)

CIS 4523. Knowledge Discovery and Data Mining. 3 Credit Hours.

This course is not offered every year.

Basic concepts and techniques for the automated extraction of interesting patterns in large databases. Topics covered include: association-rule mining, sequence mining, web and texting mining, data warehousing, information filtering, classification and clustering analysis, Bayesian and neural networks, classification and regression trees, hypotheses evaluation, feature extraction, dimensionality reduction, singular value decomposition, data compression and reconstruction, visualization of large data sets, fractals in databases, and indexing methods that support efficient data mining and queries by content. Special emphasis is given in multimedia, business, scientific, and medical databases. Note: Students may not receive credit for both CIS 4523 and CIS 5523.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MATH 2043, (CIS 2166, MATH 2101, or ENGR 2011), (MATH 3031, ECE 3522, STAT 2103, or BIOL 3312), and (CIS 1051, CIS 1057, or CIS 1068)

CIS 4524. Analysis and Modeling of Social and Information Networks. 3 Credit Hours.

This course is not offered every year.

This course will include methods for analyzing and modeling the following aspects of social networks: the small-world network models, centralized and decentralized social network search algorithms, power-laws and preferential attachment, diffusion and information propagation in social networks, influence maximization in social networks, community detection in social networks, models of network cascades, models of evolving social networks, links and attributes prediction. Note: Students may not receive credit for both CIS 4524 and CIS 5524.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MATH 2043, (CIS 2166, MATH 2101, or ENGR 2011), (MATH 3031, ECE 3522, STAT 2103, or BIOL 3312), and (CIS 1051, CIS 1057, or CIS 1068)

CIS 4526. Foundations of Machine Learning. 3 Credit Hours.

This course is typically offered in Fall.

The goal of the field of machine learning is to build computer systems that learn from experience and are able to adapt to their environments. This introductory machine learning course will present modern machine learning algorithms from supervised and unsupervised learning. It will provide the basic intuition behind the algorithms as well as a more formal understanding of how and why they work. Students will learn how to apply machine learning algorithms on a range of real-life problems and how to evaluate their performance. Note: Students may not receive credit for both CIS 4526 and CIS 5526.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MATH 2043, (CIS 2166, MATH 2101, MATH 2103, or ENGR 2011), (CIS 2033, MATH 3031, ECE 3522, STAT 2103, or BIOL 3312), and (CIS 1051, CIS 1057, CIS 1068, CIS 1951, or CIS 1968)

CIS 4615. Ethical Hacking and Intrusion Forensics. 3 Credit Hours.

This course is typically offered in Spring.

This class teaches students how to use hacking techniques to perform a hack within legal confines. Such hacking is more commonly referred to as a white-hat or an ethical hack. The course will focus on both technical and social aspects of security, ranging from cryptography and biometrics to risk mitigation and disaster recovery aspects of security. Based on the ethical concepts built during the first half of the semester, students will learn the process involved with intrusion attack detection and forensics investigation. Finally, the course will significantly emphasize the key factors that differentiate a hacker (adversary/black-hat) from an ethical hacker, stressing the importance of being within legal confines, an important prerequisite for a successful ethical hacking career. NOTE: For Computer Science and Information Science and Technology Majors.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CIS 3319 or CIS 4378)

CIS 4625. Audit and Compliance for Security and Digital Forensics. 3 Credit Hours.

This course is typically offered in Spring.

This course will provide students with a basic understanding of IT systems and the need for audit and compliance. Students will learn about IT terminology, governance, and the IT audit practice that has matured into given sets of frameworks, methodologies, approaches, and models with certain sets of underlying assumptions such as COBIT and SOX. Students will be exposed to various governance standards and federal compliance requirements. NOTE: For Computer Science and Information Science and Technology Majors.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CIS 2229 and CIS 4378.

Construction Management Technology (CMT)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

CMT 1005. Elements of Surveying. 3 Credit Hours.

Activities that will acquaint the student with instruments and tools of the surveyor, including their use in the techniques of field surveying. Emphasis on actual layouts and areas and elevations as performed in the civil and construction discipline.

Repeatability: This course may not be repeated for additional credits.

CMT 2010. Computers and Special Topics. 3 Credit Hours.

The application of computers for computer-aided drawings, graphical presentations, communications, data base operations and engineering computations, which require the writing of higher level language program segments to solve engineering application problems in statics and dynamics; with laboratory.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in PHYS 1021.

CMT 2124. Construction Methods and Materials. 3 Credit Hours.

Materials and construction processes of importance to the designer and constructor; construction equipment and methods of handling and placing these materials on the job.

Repeatability: This course may not be repeated for additional credits.

CMT 2125. Construction Contracts and Specifications. 3 Credit Hours.

Analysis of construction contract law cases, analysis of selected contracts, bidding and contract award procedures, interpretation of specifications. Preparation of written reports and oral presentations are required.

Repeatability: This course may not be repeated for additional credits.

CMT 2271. Building Systems. 3 Credit Hours.

A basic study of the primary mechanical and electrical equipment and systems used in buildings. Design principles for selecting and sizing various systems are stressed throughout the course. Mechanical topics include plumbing, heating, ventilating, air conditioning, water supply, fire protection, and sanitary sewer systems. Electrical topics include basic principles of electricity, single and three phase systems, transformers, branch circuits and feeders, and residential and commercial illumination.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (PHYS 1022, PHYS 1062, or PHYS 1962) and CMT 2124 (D- or higher)

CMT 3121. Construction Estimating. 3 Credit Hours.

Estimating quantities of materials, labor, and equipment for various construction tasks; pricing of cost items; indirect costs; types of bids and bidding process; term project using actual construction blueprints; written and oral presentations; computer applications using spreadsheet program and Timberline Precision Estimating Software.

Co-requisites: CMT 3123.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in (CMT 2124 and CMT 2125)

CMT 3123. Construction Estimating Laboratory. 1 Credit Hour.

Introduction of the construction bidding process and construction documents; blueprint reading; programming and database generation with spreadsheet software; computer applications using Timberline Precision Estimating Software.

Co-requisites: CMT 3121.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in (CMT 2124 and CMT 2125)

CMT 3145. Structural Analysis. 3 Credit Hours.

The analysis of statically determinant structures under static and moving loads, techniques for determining the deflection of structural members, and analysis of indeterminate structures.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in (ENGT 2322 or ENGR 2333)

CMT 3322. Construction Planning and Scheduling. 3 Credit Hours.

Field office planning, quality control plan development, construction planning and scheduling; term project using actual construction blueprints; written and oral presentations; computer applications using Primavera Project Planner Software.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in (CMT 2124 and CMT 2125)

CMT 3333. Soils Mechanics. 3 Credit Hours.

Physical composition of soils, weight-volume relationships, absorption, soil classifications, seepage and flow nets, settlement analysis, lateral earth pressure, and foundation design.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in (ENGT 2331 or ENGR 2331)

CMT 3341. Environmental and Safety Aspects of Construction. 2 Credit Hours.

Construction-related environmental issues, erosion control, wetland areas, habitat protection. Issues which relate to protective equipment, safety and potential hazards for construction workers, construction equipment operators, and others impacted by on-going construction activities; with laboratory.

Course Attributes: SE, SF, SS

Repeatability: This course may not be repeated for additional credits.

CMT 3351. Applied Hydraulics. 3 Credit Hours.

The design of water conveying and containment systems; pumps, sewers, open channels, dams, reservoirs, and water-related structures.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (ENGT 2331 or ENGR 2331 (D- or higher))

CMT 4040. CMT - Special Topics. 1 to 4 Credit Hour.

A course designed to present new and emerging areas of Construction Management Technology. The course may also be used to present areas not normally taught in the College. Course requirements vary with the topic and instructor. Offered as needed or as appropriate.

Repeatability: This course may be repeated for additional credit.

CMT 4182. Independent Study in Construction Management Technology. 2 to 5 Credit Hours.

Student may complete a regular course during a semester the course is not offered, to meet prerequisite or graduation requirements. An instructor is assigned to supervise the student.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

CMT 4183. Directed Study in Construction Management Technology. 1 to 4 Credit Hour.

An opportunity to study specialized topics not covered in currently available courses and providing significant progress towards the technical/professional objectives of the program. An instructor is assigned to define the scope, direct, supervise, and evaluate student progress.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

CMT 4191. Independent Research in Construction Management Technology. 2 to 5 Credit Hours.

A project assigned with the approval of the department chair and conducted under the supervision of a faculty sponsor.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

CMT 4335. Steel and Wood Structures. 3 Credit Hours.

Structural systems and framing plans are developed for simple wood and steel structures. Typical framing members are designed and analyzed for adequate strength and serviceability.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in CMT 3145.

CMT 4336. Concrete and Masonry Design. 3 Credit Hours.

Structural systems and framing plans are developed for simple concrete and masonry structures. Typical sub-systems and framing members are designed and analyzed for adequate strength and serviceability. The design of plain and reinforced concrete footings is included.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in CMT 3145.

CMT 4355. Transportation Systems Management. 3 Credit Hours.

Transportation systems of the United States; design and technology of signalized traffic intersections, coordinated for the design of flexible and rigid pavements.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

CMT 4373. Construction Financial Management. 3 Credit Hours.

Construction cost accounting systems, job costing approaches, project budgeting, financial reporting procedure. Term project; written and oral presentations. Computers applied as required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in (CMT 3121 and CMT 3322)

CMT 4396. Capstone in Construction. 3 Credit Hours.

Synthesis of estimating, scheduling, and cost control for selected construction projects. Project management computer application. Preparation of written reports and oral presentations is required.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in (CMT 2125, CMT 3121, and CMT 3322)

Counseling Psychology (CPSY)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

CPSY 2301. Helping Professions for Diverse Populations. 3 Credit Hours.

This course prepares students for work in the helping professions. In this seminar, students will learn how to use empirical findings from psychological research to address issues encountered in community placements. Effective applications of the science of psychology in community settings depend not only upon the technical expertise of the student, but also on the student's adoption of a professional role. Thus, the course assists students in learning attitudes and behaviors that are characteristic of the profession of psychology.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

CPSY 2302. Can We Talk? Real World Interviewing. 3 Credit Hours.

The purpose of this course is to provide students with both an understanding of the theoretical concepts of interviewing as well as practice in developing interviewing skills. Students will understand the interviewer's role in the change process as applied to problems of education, counseling, performance, health care, and employment. Finally, students will become aware of the impact of personal attitudes, feelings, and behaviors upon the interviewing process.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

CPSY 3571. Introduction to Counseling Psychology. 3 Credit Hours.

A lecture course providing an overview of the field of counseling psychology as well as the role and function of the counselor in community and educational settings. Basic theories and principles of the counseling process, skills career, assessment, and group counseling approaches (couples, families, addictions and others) are covered.

Repeatability: This course may not be repeated for additional credits.

CPSY 3572. Interviewing Techniques. 3 Credit Hours.

The theory and techniques of interviewing, especially as they apply to problems of educational, vocational, and social counseling, rehabilitation, and employment. Course includes learning skills and applying techniques in various work settings.

Repeatability: This course may not be repeated for additional credits.

Criminal Justice (CJ)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

CJ 0812. Criminal Behavior. 3 Credit Hours.

Although we like to think differently, committing crime is an extremely common human behavior. From the extremes of armed robbery or serial murder to the ordinary failure to declare income on tax returns or the tendency to speed on the highway, nearly everyone has broken the law and committed a crime at some point. Considering physiological, psychological and pharmacological factors, we explore the influences of family, peers and the effects of alcohol and drugs on the incidence of criminal behavior. And we examine how the urban and social environment encourages (or inhibits) opportunities to commit crime. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed CJ 0912.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

CJ 0852. Justice in America. 3 Credit Hours.

This course invites students to engage in an interdisciplinary examination of one of U.S. society's most enduring conflicts - the struggle to achieve an acceptable balance between state power to prevent and control crime, and the rights of individuals to be free from undue government coercion. Within the context of the structures and processes of the criminal justice system, students will investigate a select number of critical policy issues/problems, and ponder questions about the legitimacy of the criminal law method of social control. Against a brief introductory background to some of the major criminal justice policies and practices, students will have the opportunity to question their effectiveness, efficiency, and fairness, and to increase their skill in being able to articulate reasoned, logical, and evidence-based grounds for their conclusions and opinions. Key questions include: How well is society doing in its efforts to prevent/control crime? How do those efforts rate in terms of securing a just balance between the rights of individuals and the coercive powers of the government? Are we doing things right? Are we doing the right things? What improvements should be made? How can we know/decide? NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed CJ 0952.

Course Attributes: GU, SI

Repeatability: This course may not be repeated for additional credits.

CJ 0853. Doing Justice. 3 Credit Hours.

Justice agencies - the juvenile justice system, police, judges and juries in courts, and prisons - are expected to create justice in response to lawbreakers. These agencies, however, often operate under enormous political, cultural, social, organizational and economic pressures. Further, what citizens or local leaders sometimes want from these agencies may create challenges and temptations. Thus, just outcomes are sometimes elusive. Focusing on the period 1925-2025 and largely on Philadelphia data, students will explore conceptual frameworks in the sociology of law, research articles, movies, maps, Census data, historical documents and newspaper archives to help understand these outcomes. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed CJ 0953.

Course Attributes: GU, SI

Repeatability: This course may not be repeated for additional credits.

CJ 0912. Honors Criminal Behavior. 3 Credit Hours.

Although we like to think differently, committing crime is an extremely common human behavior. From the extremes of armed robbery or serial murder to the ordinary failure to declare income on tax returns or the tendency to speed on the highway, nearly everyone has broken the law and committed a crime at some point. Considering physiological, psychological and pharmacological factors, we explore the influences of family, peers and the effects of alcohol and drugs on the incidence of criminal behavior. And we examine how the urban and social environment encourages (or inhibits) opportunities to commit crime. (This is an Honors course.) NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed CJ 0812.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GB, HO

Repeatability: This course may not be repeated for additional credits.

CJ 0952. Honors: Justice in America. 3 Credit Hours.

This course invites students to engage in an interdisciplinary examination of one of U.S. society's most enduring conflicts - the struggle to achieve an acceptable balance between state power to prevent and control crime, and the rights of individuals to be free from undue government coercion. Within the context of the structures and processes of the criminal justice system, students will investigate a select number of critical policy issues/problems, and ponder questions about the legitimacy of the criminal law method of social control. Against a brief introductory background to some of the major criminal justice policies and practices, students will have the opportunity to question their effectiveness, efficiency, and fairness, and to increase their skill in being able to articulate reasoned, logical, and evidence-based grounds for their conclusions and opinions. Key questions include: How well is society doing in its efforts to prevent/control crime? How do those efforts rate in terms of securing a just balance between the rights of individuals and the coercive powers of the government? Are we doing things right? Are we doing the right things? What improvements should be made? How can we know/decide? (This is an Honors course.) NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed CJ 0852.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GU, HO, SI

Repeatability: This course may not be repeated for additional credits.

CJ 0953. Honors: Doing Justice. 3 Credit Hours.

Justice agencies - the juvenile justice system, police, judges and juries in courts, and prisons - are expected to create justice in response to lawbreakers. These agencies, however, often operate under enormous political, cultural, social, organizational and economic pressures. Further, what citizens or local leaders sometimes want from these agencies may create challenges and temptations. Thus, just outcomes are sometimes elusive. Focusing on the period 1925-2025 and largely on Philadelphia data, students will explore conceptual frameworks in the sociology of law, research articles, movies, maps, Census data, historical documents and newspaper archives to help understand these outcomes. (This is an Honors course.) NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed CJ 0853.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GU, HO, SI

Repeatability: This course may not be repeated for additional credits.

CJ 1001. Introduction to Criminal Justice. 3 Credit Hours.

This course, provides an overview of a broad range of ways of understanding "criminal justice" - as an academic discipline, a philosophical construct, and, most especially, a system and process defining a large-scale enterprise characterized by a complex and fascinating array of public and private agencies, laws, rules, theories, policies, practices, technologies, problems and controversies. Emphasis is placed upon a critical understanding of the key foundations [e.g., constitutions, statutes, case law, administrative rules], components [e.g., law enforcement, courts, corrections], processes [e.g., legislation, arrest, prosecution, conviction, sentencing, correctional intervention], and goals [e.g., due process, crime prevention and control, retribution, reparation] of the criminal justice system and, to a far lesser degree, related social control mechanisms such as mental health, juvenile, and civil justice systems. NOTE: This course can be used to satisfy the university Core Individual and Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: IN

Repeatability: This course may not be repeated for additional credits.

CJ 1002. Professional Development in Criminal Justice. 1 Credit Hour.

This one-credit seminar will focus on the various traditional and non-traditional career avenues that graduates of an undergraduate program in Criminal Justice can pursue. Upon successful completion of this course, students will have developed the skills necessary to effectively search for career opportunities and communicate professionally. Students will also develop an application-ready resume and will be well-prepared for networking and professional interviews. Because there is significant overlap in course content, students will receive credit for only one of these courses: CLA 1002, CJ 1002, ENG 1801, HIST 1012, NSCI 1002, POLS 1002, PSY 1002, SOC 1002.

Repeatability: This course may not be repeated for additional credits.

CJ 1901. Honors Introduction to Criminal Justice. 3 Credit Hours.

Honors version of Criminal Justice 1001 (C050). NOTE: This course can be used to satisfy the university Core Individual and Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, IN

Repeatability: This course may not be repeated for additional credits.

CJ 2000. Special Topics. 3 Credit Hours.

Topics will be arranged each semester. Please consult with the instructor for more information.

Repeatability: This course may be repeated for additional credit.

CJ 2001. Introduction to Juvenile Justice. 3 Credit Hours.

Study of the juvenile justice system, including its origins, and development and contemporary calls for reform. Topics include definition of juvenile delinquency, philosophy and procedures of the juvenile justice system. Processes and policies used to control juvenile offenders, correctional treatment of juveniles, and prevention and intervention strategies will also be discussed.

Repeatability: This course may not be repeated for additional credits.

CJ 2002. Victims in Society. 3 Credit Hours.

This course explores the problem of victimization - both general and criminal; the types of victims involved -- direct and indirect, and individual and collective; and the harms they sustain -- financial, physical and mental. It also examines the fairness and efficacy of a wide variety of preventive and reactive ways of dealing with it -- by society in general and by the criminal justice system in particular. Emphasis is upon data sets and research studies shedding light upon the levels, correlates, dynamics, and consequences of major forms of victimization, as a basis for critical assessment of victimization theory, as well as existing and potential laws, policies, programs, practices, and technologies for reducing its incidence and impact.

Repeatability: This course may not be repeated for additional credits.

CJ 2101. Introduction to Law Enforcement. 3 Credit Hours.

Explores major trends and issues in law enforcement. The history and contemporary operation of police organizations, as well as the legal framework within which they operate. Examines police behavior and attitudes, especially as they effect discretionary decision making, and issues such as police brutality and corruption.

Repeatability: This course may not be repeated for additional credits.

CJ 2201. Criminal Courts and Criminal Justice. 3 Credit Hours.

Comprehensive introduction to the U.S. criminal court system including the structure and administration of federal and state court systems. The course focuses on several significant stages in the criminal process, including decision to charge, pretrial release, preliminary hearings, the grand jury, jury trials, and sentencing. Examines the roles of the prosecutor, defense attorney, judge, and victim. The course contrasts the popular image with the reality of the court system.

Repeatability: This course may not be repeated for additional credits.

CJ 2301. Introduction to Corrections. 3 Credit Hours.

An overview of sentencing, punishment, and treatment of convicted offenders. Beginning with sentencing, the course explores the options for dealing with convicted persons, including institutional and community dispositions.

Repeatability: This course may not be repeated for additional credits.

CJ 2304. Ethics, Crime, and Justice. 3 Credit Hours.

Police brutality, prosecutorial misconduct, prison guards who look the other way when rules are violated: these are just a few examples of ethical choices that undermine the public trust in the Criminal Justice System. This course will examine the meaning of ethics and its importance in modern society. Ethical decision making systems and theories will also be explored in detail. In addition the course will examine examples of ethical misconduct and the responses by the criminal justice system, in the context of three main arenas: law enforcement, lawyers and corrections. Finally, students will learn to apply these decision making systems to ethical dilemmas, as they develop an understanding of the factors that influence the criminal justice professional's decisions in real life verses theory.

Repeatability: This course may not be repeated for additional credits.

CJ 2401. Nature of Crime. 3 Credit Hours.

Overview of the various theories explaining crime and deviance. Emphasis on understanding the wide range of theoretical perspectives on crime and criminals, and how these theories impact criminal justice policy and treatment of offenders.

Repeatability: This course may not be repeated for additional credits.

CJ 2501. Introduction to Criminal Law. 3 Credit Hours.

Study of the general principles of substantive criminal law. Topics include the American legal system and appellate process; nature, origin and purposes of criminal law; constitutional limits on criminal law; elements of crime - actus reus, mens rea, causation; and defenses to charges of crime. The course emphasizes the application of legal rules to solve hypothetical and real life legal problems.

Repeatability: This course may not be repeated for additional credits.

CJ 2597. Criminal Justice Research Methods. 3 Credit Hours.

Introduces the scientific method and research designs including qualitative field methods, survey research, experiments, and quasi-experiments. Evaluation of research quality and synthesis of research evidence related to criminal justice issues emphasized. Special attention devoted to research problems often salient when researching criminal justice topics. Students who have taken CJ 2601 will not earn additional credit for CJ 2597.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CJ 1001.

CJ 2602. Criminal Justice Statistics. 3 Credit Hours.

Introduction to basic statistical methods and their application to criminal justice data. Covers both descriptive and inferential statistics. Topics include frequency distributions, measures of central tendency and dispersion, and basic hypothesis testing. NOTE: This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement. Although it may be used towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. (Prior to spring 2017, the course title was "Criminal Justice Research and Analysis.")

Course Attributes: QB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CJ 1001 and CJ 2597.

CJ 2701. Inside-Out Prison Exchange. 3 Credit Hours.

The "Inside-Out" Prison Exchange Program is an opportunity for a small group of Temple students to go behind the walls of an area prison or jail to take a course with a comparable number of residents of the correctional facility. Using a unique pedagogical approach, approximately 15 "inside" students and 15 "outside" students (from Temple) meet for class once a week to explore issues of crime and justice, the criminal justice system, corrections and imprisonment. These topics are examined in depth, through an ongoing facilitated dialogue involving all participants, both in small groups and in the full class. There are numerous texts for the course, as well as several reflective/analytical assignments throughout the semester. Additionally, students work on a project together towards the end of the semester, developing solutions to the problems examined during the term. The course offers a chance for all participants to gain a deeper understanding of the criminal justice system through the marriage of theoretical knowledge and practical experience achieved by weekly meetings throughout the semester inside the facility.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

CJ 3000. Special Topics. 3 Credit Hours.

Topics will be arranged each semester. Please consult with the instructor for more information.

Repeatability: This course may be repeated for additional credit.

CJ 3002. Drugs, Crime, and Justice. 3 Credit Hours.

This course examines the role that drugs play in the U.S. criminal justice system. Topics covered include the history of drug prohibition in the U.S.; the types of illegal drugs currently available in the United States; patterns, trends, and scope of illicit drug use; consideration of the relationship between drugs and crime; and manifestations and consequences of the criminal justice system response. The course includes hands-on experimental learning including site visits to locations such as drug court and rehabilitation programs. Note: This course was previously known as CJ 4002 or 4902. Students who have already received credit for this topic under those numbers will not receive additional credit but can repeat the topic under this new course number for a better grade if they wish.

Repeatability: This course may not be repeated for additional credits.

CJ 3003. Race and Criminal Justice. 3 Credit Hours.

Study of the social, cultural, economic, psychological, and political factors associated with race and crime in the United States. This course examines the real and perceived relationship between race/ethnicity and criminal activity, as well as the impact of both personal and institutional racism on the criminal justice system. NOTE: This course was formerly taught as "Urban Minorities and the Criminal Justice System." Students who received credit under the prior title will not receive additional credit because the content overlaps significantly. This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. Note also that this course existed previously under the course number of CJ 4003. Students who have already received credit for this topic under that number will not receive additional credit but can repeat the topic under this new course number for a better grade if they wish.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

CJ 3004. Women and Criminal Justice. 3 Credit Hours.

Examination of historic and contemporary treatment of women involved in the criminal justice system as offenders, victims of crime, and workers and criminal justice professions. Specific topics may include criminological theories of women's crime, prostitution, infanticide, women's prisons, sexual offenses, domestic violence, and women's experience in policing, corrections, and law. Note that this course was formerly known as CJ 4004. Students who have already received credit for this topic under that number will not receive additional credit but can repeat the topic under this new course number for a better grade if they wish.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

CJ 3005. Historical Roots of Urban Crime. 3 Credit Hours.

The historical development of organized crime (gambling, prostitution, narcotics, and bootlegging), professional theft, juvenile delinquency, and deviant subcultures in American cities since the Civil War. The development of criminal justice institutions, especially police, and their relationship to criminal activity. NOTE: Prior background in history or criminal justice preferred, but not required. Please also know that this course was formerly known as CJ 4005. Students who have already received credit for this topic under that number will not receive additional credit but can repeat the topic under this new course number for a better grade if they wish.

Repeatability: This course may not be repeated for additional credits.

CJ 3006. Crime and Justice Around the World. 3 Credit Hours.

Philosophies, practices, and institutions of criminal justice in other countries. Crime & Justice Around the World was formerly known as CJ 4006 Comparative Criminal Justice. Students who have already received credit for CJ 4006 will not receive additional credit but can repeat the topic as CJ 3006 Crime & Justice Around the World for a better grade if they wish.

Repeatability: This course may not be repeated for additional credits.

CJ 3007. Cybercrime. 3 Credit Hours.

This course examines the criminal activity that occurs in cyberspace, the criminal actors that operate and organize in this space, the various criminological theoretical explanations for their crimes, and how policing and legal bodies are managing these crimes and criminals. Emphasis is on how communication technologies (e.g., computers and related networking technologies) can be targets of crime, instruments of crime, and important sources of criminal evidence. Students in this class will examine how cybercrime occurs along a continuum of technical expertise and physical-cyber operations. Students will also engage in practical experiential learning projects that emphasize everyday safe cyber-hygiene. Note: This course was formerly known as CJ 4007 and CJ 3007 Computer Crime. Students who have already received credit for this topic under the prior course number or former title will not receive additional credit but can repeat the topic/title under this new course number or title for a better grade if they wish.

Repeatability: This course may not be repeated for additional credits.

CJ 3101. Police Organization and Management. 3 Credit Hours.

Historical and contemporary management practices as applied to law enforcement organizations are examined, with particular concern for assessing police management accountability. Theories of organization and management are examined with regard to the police role and the efficient and effective provision of law enforcement services to the community.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CJ 2101.

CJ 3102. Community and Crime Prevention. 3 Credit Hours.

Course links features of community and individuals with different responses to crime and disorder, including individual and community prevention efforts. Examines causes of fear of crime, impacts of neighborhood features on reactions to crime, and types of prevention efforts mounted in different types of neighborhoods. The course emphasizes the links among individuals, community context, and psychological and behavioral reactions to disorder. Note that this course was formerly known as CJ 4102. Students who have already received credit for this topic under that number will not receive additional credit but can repeat the topic under this new course number for a better grade if they wish.

Repeatability: This course may not be repeated for additional credits.

CJ 3201. The American Jury System. 3 Credit Hours.

Examination of the role of the jury within the larger context of the criminal justice system. Explores the origins of the concept of "trial by jury" in an historical and philosophical context. Analyzes obstacles to definitions and operationalization of the notion of a "trial by jury of one's peers." Discusses contribution of juries to attainment of criminal justice system goals and critiques suggestions for jury reform.

Repeatability: This course may not be repeated for additional credits.

CJ 3301. Community Corrections. 3 Credit Hours.

Various dimensions of community corrections, including the effect of the community on the formation of correctional policy, as well as the numerous intermediate sanctions (community corrections) available on the continuum between probation and incarceration. Analysis of correctional policy making. Topics include probation, parole, electronic monitoring, day reporting centers, boot camps, and many other sentencing options.

Repeatability: This course may not be repeated for additional credits.

CJ 3302. Prisons in America. 3 Credit Hours.

Focus on development, current state of, and issues related to the U.S. prison system. Examination of the reality of the prison experience. Analysis of the system's efficacy and strategies for prison reform. Topics include prison life and culture, correctional management, the history of incarceration, and AIDS, drugs, sexual activity, and prison privatization.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

CJ 3303. Rehabilitation of the Offender. 3 Credit Hours.

Community and institutional correctional interventions are considered, examination of various treatments for certain kinds of offenders, problems in providing services in correctional settings, and research findings on the effectiveness of correctional interventions. NOTE: This course was formerly numbered CJ 2302 under the same title. Students who have earned credits for CJ 2302 will not receive additional credit for CJ 3303. Students who earned a low grade in CJ 2302 may take CJ 3303 to improve their grade point average.

Repeatability: This course may not be repeated for additional credits.

CJ 3304. Capital Punishment. 3 Credit Hours.

An examination of the highly controversial subject of the death penalty. The history of capital punishment in America and the types of offenses to which it has been applied; arguments for and against its use; its status in current legislation; significant cases; the current death row population and the likelihood of execution; public attitudes toward capital punishment; and the moral issues it raises. Note that this course was formerly known as CJ 4301. Students who have already received credit for this topic under that number will not receive additional credit but can repeat the topic under this new course number for a better grade if they wish.

Repeatability: This course may not be repeated for additional credits.

CJ 3401. White Collar Crime. 3 Credit Hours.

The continued rate of white-collar offending in the U.S. has presented many significant and unique issues for criminological theory and the criminal justice system. This course will expose students to the nature, extent, and costs of white-collar crime. Students in this course will explore contemporary forms of white-collar crime through reported legal cases, case studies, and other materials to investigate the complexities of this form of criminal offending. The course will also delve into the problems of detection and punishment and the causes of this social problem, including discussions of policy evaluation and suggested reforms. Note: This course description changed in summer I, 2020. Students who have taken White Collar Crime in prior semesters should not repeat this course; no additional credit will be given.

Repeatability: This course may not be repeated for additional credits.

CJ 3402. Street-Level Criminology. 3 Credit Hours.

This course introduces a set of crime theories that emphasize the role of the built environment in shaping human behavior and consequently where crime happens. The basic question asked in environmental criminology is why crime occurs where it does. Theoretical frameworks used to explore this question include: behavioral geography, routine activities, crime pattern theory, rational choice and human territorial functioning. In addition, various crime prevention strategies are examined such as situational crime prevention, CPTED, and defensible space. Note: This course was formerly known as "Environmental Criminology." Students who received credit under the prior title will not receive additional credit because the content overlaps significantly.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CJ 2401.

CJ 3403. Organized Crime. 3 Credit Hours.

Analysis of definitional issues and methodological problems in the study of organized crime. This course studies a variety of organized criminal activities on the local, national and international level. It explores of the origins, opportunity, motives for criminal enterprises and examines the interconnections between organized criminals and legitimate organizations. Legislative and policy responses are investigated.

Repeatability: This course may not be repeated for additional credits.

CJ 3404. Urban Crime Patterns. 3 Credit Hours.

The spatial variation of crime is analyzed at three levels. Cultural variables are used to explain crime in regions of the United States within which the cities are located. Economic base is used to explain variation in crime between cities. Finally, housing and income segregation are used to explain the spatial variation of crime within a city. Much of the course focuses on Philadelphia.

Repeatability: This course may not be repeated for additional credits.

CJ 3405. Terrorism, Transnational Crime and Global Security. 3 Credit Hours.

Acts of terrorism can include crimes committed to disrupt governments, change political will, instigate religious furor, and impose a transformation by violent means. These actions can interrupt or damage critical infrastructure, cause fear amongst citizens and require governments to expend huge resources and efforts to marginalize the effect of terrorist acts or prevent them from occurring. This course will address the causes and consequences of terrorism and transnational crime; the interaction between terrorist groups, other criminal elements such as organized crime and other entities that provide material support to these groups; the mechanisms employed by global organizations to conduct terrorist acts; and how dealing with terrorist events has changed the global concept of security and its implications on the rule of law.

Repeatability: This course may not be repeated for additional credits.

CJ 3406. Youth and Crime. 3 Credit Hours.

An examination of key issues associated with youth and crime in the United States, and the educational, social, and cultural efforts to reduce youth involvement with guns, drugs, and gangs. Emphasis will be on the nature and structure of youth gangs, drug use by juveniles, and risk factors associated with youth violence. Other issues may involve curfews, gun violence, victims of youth violence, and the over-representation of minority youth in the juvenile justice system. Note that this course was formerly known as CJ 4401. Students who have already received credit for this topic under that number will not receive additional credit but can repeat the topic under this new course number for a better grade if they wish.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

CJ 3407. Violence, Crime, and Justice. 3 Credit Hours.

Exploration of violence in its diverse aspects as well as collective and individual questions about its nature and causes. Of particular interest are definitions of violence: when is violence criminal, when is it political? In addition to discussion of the causes of violence, emphasis will be placed on society's response to violent acts. Note that this course was formerly known as CJ 4402. Students who have already received credit for this topic under that number will not receive additional credit but can repeat the topic under this new course number for a better grade if they wish.

Repeatability: This course may not be repeated for additional credits.

CJ 3408. Forensic Psychology. 3 Credit Hours.

The contribution of psychology to our understanding of various aspects of, and decisions within, the criminal justice process. The psychological implications of criminal behavior, criminal justice decision-making, jury selection, witness recall, sentencing, prisonization, and correctional treatment. Note that this course was formerly known as CJ 4403 and CJ 4903. Students who have already received credit for this topic under those numbers will not receive additional credit but can repeat the topic under this new course number for a better grade if they wish. Please also be advised that this course was previously titled "Psychology and Criminal Justice"; students who received credit under that title will not receive additional credit for this course.

Repeatability: This course may not be repeated for additional credits.

CJ 3409. Criminal Gangs. 3 Credit Hours.

This course explores the modern urban street gang and specialty gangs (e.g. outlaw biker gangs, skinhead groups, etc.) by investigating the extensive history of theory and research on gangs. The first half of the course will attempt to answer such questions as: What is a gang? How does one differentiate between the different types of gang? Why do individuals join gangs? The second half of the course will focus on the law enforcement and community response to gangs with a heavy emphasis on comparing and contrasting a variety of "evidence-based" models of gang prevention and intervention.

Repeatability: This course may not be repeated for additional credits.

CJ 3501. Criminal Procedure: Police Phase. 3 Credit Hours.

In depth exploration of the law of criminal procedure applicable to the police phase of the criminal process, based primarily on reading and analysis of Supreme Court opinions establishing the legal rules that govern searches and seizures, arrests, interrogation, identification procedures, investigating grand juries, and entrapment. The course includes investigation of the historical roots of the "Bill of Rights" and study of the process by which criminal procedure became constitutionalized. Emphasis is on application of legal rules to real and hypothetical situations and critical analysis of rules' impact on the criminal justice system. Note: This course was formerly known as "Criminal Procedure: Law Enforcement Practices and Procedures." Students who received credit under the prior title will not receive additional credit because the content overlaps significantly.

Repeatability: This course may not be repeated for additional credits.

CJ 3502. Criminal Procedure: Prosecution & Adjudication. 3 Credit Hours.

The legal principles governing the post-investigation phase of the criminal justice process: bail, pretrial detention, arraignment, preliminary hearings, guilty pleas, right to counsel, speedy trial, double jeopardy, and the right to trial by jury, including practical impact of these rules on the criminal justice system. Law and legal issues are examined primarily through study of U.S. Supreme Court cases.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CJ 2501.

CJ 3503. Sex Crimes and the Law. 3 Credit Hours.

An exploration of the definition and nature of sexual crimes, the experiences of victims of sexual violence, and the criminal justice system and community response to sex crime offenders. Note that this course was formerly known as CJ 4501. Students who have already received credit for this topic under that number will not receive additional credit but can repeat the topic under this new course number for a better grade if they wish.

Repeatability: This course may not be repeated for additional credits.

CJ 3504. Hate Crimes. 3 Credit Hours.

This course focuses on hate crime as a specific type of crime as well as a social problem connected to strained intergroup relations, discrimination, the politics of lawmaking and enforcement, and social control more generally. The purpose of this course is to examine the causes, manifestations, and consequences of hate crimes, as well as the larger social context in which they occur and get reacted to in both legal and extra-legal ways.

Repeatability: This course may not be repeated for additional credits.

CJ 3505. Restorative Justice. 3 Credit Hours.

Many individuals view our criminal justice system as being in a state of crisis, pointing to issues such as overcrowded prisons, poor treatment of victims, the school to prison pipeline, and racial, economic and geographic inequalities. Restorative justice offers a different approach, focused mainly on repairing the harms caused by crimes for victims, offenders, and the community. In this course, we will try to imagine what a justice system based on the principles of restorative justice would look like. We will begin our journey by exploring the historical development of restorative justice practices and theories. We will also review the underlying principles that guide restorative justice programs, thinking critically about where those ideas fit into current methods across the country. And finally, students will assess the pros and cons of a few examples of restorative justice programs at local, state and national levels.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

CJ 3506. Cyber-Investigations, Digital Forensics, and the Law. 3 Credit Hours.

This course explores the impact of rapidly evolving technology on criminality and the response of the criminal justice system. Cybercrime will be examined through the lens of evolving law enforcement techniques, and the response of the courts to many of the new ideas that are continually presenting themselves, such as encryption, the expanding range of personal information that is digitally stored, shifting perceptions of expectations of privacy, and the challenges presented by remote data storage and the resulting difficulties in the service of legal process. Focal points will include law enforcement response to crimes on the internet, the capabilities and limitations of digital and network forensics, and legal issues that have developed as a result of the dynamic landscape of the digital environment.

Repeatability: This course may not be repeated for additional credits.

CJ 3602. Evidence-Based Policing. 3 Credit Hours.

Policing is often described as a craft; however, science is increasingly playing a role in operational law enforcement. This course traces the origins and principles of evidence-based policy-making, and how these ideas have helped define evidence-based policing (EBP). It also provides an overview of research methods and research design relevant to EBP and how these have examined a variety of policing issues. We will explore the challenges of science knowledge translation and the conflicts between policing as a science and as a craft. The course will help students understand what is necessary to develop and use scientific research evidence to strategically guide law enforcement practice.

Repeatability: This course may not be repeated for additional credits.

CJ 3603. Mapping Crime and Justice Data. 3 Credit Hours.

Why do some streets have more drug deals than others? Is travel distance a barrier to successfully completing probation? Can locating more after-school programs in particular neighborhoods reduce juvenile delinquency in a city? This course uses geographic information systems (GIS) to address questions like these as well as to disentangle criminal justice-related problems and inform criminal justice policy.

Repeatability: This course may not be repeated for additional credits.

CJ 3701. Land Management and Federal Law Enforcement. 3 Credit Hours.

This course offers a broad introduction to the history, operation and governing laws of the United States Public Lands System as well as a more detailed examination of several federal government agencies with law enforcement divisions, namely, the National Park Service (NPS), the U.S. Forest Service (USFS), the U.S. Fish and Wildlife Service (USFWS), the Bureau of Indian Affairs (BIA) and the Bureau of Land Management (BLM), that are responsible for providing visitor and resource protection in areas that are or have been owned or administered by the federal government. Several themes underpinning the course include: the discretionary prerogatives of law enforcement branches of land management agencies, the scope of federal and state authority and jurisdiction on public lands and their regulating mechanisms (i.e., law/policy, markets, norms, architecture), the significance of enabling legislation for the stewardship of cultural, natural and historical resources, and the issues and challenges inherent in the protection, conservation and preservation of vast public lands and resources.

Repeatability: This course may not be repeated for additional credits.

CJ 3901. Honors Issues in Criminal Procedure. 3 Credit Hours.

Students in this class will get a "taste of law school" while studying the constitutional law that governs the police phase of the criminal process. Students will learn what police can and cannot do when they initiate an encounter with a citizen, search the citizen's person or property, and seek to obtain a confession. The rules that have developed are the result of a constant tension between safeguarding our personal liberty and protecting public safety. By exploring the impact of these rules on real and hypothetical situations, students will critically analyze and debate the balance that the Supreme Court has established in this on-going conflict. Students will also learn about the Supreme Court; the historical roots of the Bill of Rights and the process by which the law of criminal procedure became constitutionalized; and how to find, read, and analyze U.S. Supreme Court decisions.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

CJ 3902. Honors: Street-Level Criminology. 3 Credit Hours.

This course introduces a set of crime theories that emphasize the role of the built environment in shaping human behavior and consequently where crime happens. The basic question asked in environmental criminology is why crime occurs where it does. Theoretical frameworks used to explore this question include: behavioral geography, routine activities, crime pattern theory, rational choice and human territorial functioning. In addition, various crime prevention strategies are examined such as situational crime prevention, CPTED, and defensible space. (Students who have received credit under the former title of this course, Honors Environmental Criminology, will not earn additional credit for taking this course.)

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

CJ 3903. Honors Forensic Psychology. 3 Credit Hours.

The contribution of psychology to our understanding of various aspects of, and decisions within, the criminal justice process. The psychological implications of criminal behavior, criminal justice decision-making, jury selection, witness recall, sentencing, prisonization, and correctional treatment. Note that this course was formerly known as CJ 4403 and CJ 4903. Students who have already received credit for this topic under those numbers will not receive additional credit but can repeat the topic under this new course number for a better grade if they wish. Please also be advised that this course was previously titled "Honors: Psychology and Criminal Justice"; students who received credit under that title will not receive additional credit for this course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

CJ 3904. Honors: Drugs, Crime, and Criminal Justice. 3 Credit Hours.

This course examines the role that drugs play in the U.S. criminal justice system. Topics covered include the history of drug prohibition in the U.S.; the types of illegal drugs currently available in the United States; patterns, trends, and scope of illicit drug use; consideration of the relationship between drugs and crime; and manifestations and consequences of the criminal justice system response. The course includes hands-on experimental learning including site visits to locations such as drug court and rehabilitation programs. Note: This course was previously known as CJ 4002 and CJ 4902. Students who have already received credit for this topic under those numbers will not receive additional credit but can repeat the topic under this new course number for a better grade if they wish.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

CJ 4075. Criminal Justice Internship Seminar. 3 Credit Hours.

Mandatory weekly seminar to be taken in conjunction with field service internship with law enforcement and other criminal justice agencies, rehabilitation and prevention programs, and community organizations dealing with the crime problem. Students who have earned credits for CJ Internship Seminar (CJ 4077) will not be permitted to earn additional credits in CJ 4075. Must be taken with CJ 4085.

Co-requisites: CJ 4085.

Repeatability: This course may not be repeated for additional credits.

CJ 4082. Independent Study. 1 to 3 Credit Hour.

For students wishing to engage in intensive study of a specific topic in consultation with a faculty member. Not intended to be a substitute for any required course. The student and faculty member must enter into an agreement regarding the content and requirements, including readings, meetings, and papers. NOTE: The agreement must be filed in the department office before the end of the first two weeks of the semester.

Repeatability: This course may be repeated for additional credit.

CJ 4085. Criminal Justice Internship. 1 to 9 Credit Hour.

Field Service Training is provided with law enforcement and other criminal justice agencies, rehabilitation and prevention programs, and community organizations dealing with the crime problem. Allows a student to clarify career interests, synthesize prior knowledge from the classroom with direct experience, critically examine the criminal justice system in operation, and sharpen analytic and observational skills. NOTE: Students must complete 50 hours of work at their placement for each credit they take, for example a 4 credit internship requires 200 hours at the placement site. NOTE: Enrollment requires permission from the Instructor. Students who have earned credits for CJ Practicum (CJ 4087) will not be permitted to earn additional credits in CJ 4085. Must be taken with CJ 4075.

Co-requisites: CJ 4075.

Repeatability: This course may not be repeated for additional credits.

CJ 4097. CJ Capstone Seminar. 3 Credit Hours.

This topical seminar focuses on a broad topic of interest within Criminal Justice. The specific content will vary with individual instructors. This is a writing-intensive course designed to integrate knowledge and critical thinking skills developed in the major. Each seminar will focus upon analysis and synthesis of scholarly sources, culminating in an independent research paper. This course is required for all CJ majors and must be taken during the senior year.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Criminal Justice.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CJ 1001, CJ 2401, CJ 2501, and CJ 2602.

CJ 4941. Honors Youth and Crime. 3 Credit Hours.

An examination of key issues associated with youth and crime in the United States, and the educational, social, and cultural efforts to reduce youth involvement with guns, drugs, and gangs. Emphasis will be on the nature and structure of youth gangs, drug use by juveniles, and risk factors associated with youth violence. Other issues may include curfews, gun violence, victims of youth violence, and the over-representation of minority youth in the juvenile justice system.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Cultural Studies (CLST)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

CLST 2000. Special Topics. 3 Credit Hours.

Unique topics are arranged each term; subtitle and course description are added to each section for students to review. For more information, consult with the instructor.

Repeatability: This course may be repeated for additional credit.

CLST 2401. The Italian Origins of Classic Fairy Tales. 3 Credit Hours.

In this course we will trace the Italian origins of some of the best-known fairy tales of the Western tradition. We will compare versions from the sixteenth and seventeenth centuries with later French and German versions. Furthermore, we will discuss international screen adaptations, including Jean Cocteau's surrealist film *Beauty and the Beast* (1946), Pedro Almodovar's *Talk to Her* (2002), and a few Disney adaptations. We will analyze such classics as *Beauty and the Beast*, *Cinderella*, *Sleeping Beauty*, *Jack and the Beanstalk*, and *Pinocchio*. The course will look at how fairy tales have shaped, strengthened or questioned gender stereotypes, normative gender and sexual identity, and traditional power relations through the lens of gender, feminist and queer theory, psychoanalysis, narratology, and social history.

Repeatability: This course may not be repeated for additional credits.

Dance (DANC)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

DANC 0806. The Jazz Century in America. 3 Credit Hours.

What is jazz? Students will explore its roots and reinventions in Ragtime, Hot Jazz, Blues, Swing, Bebop, Free Jazz, Rhythm & Blues, and Hip Hop throughout the 20th century in America. We'll experience its manifestations across media, screening dance films, listening to music, viewing visual art works, and reading poetry. Then we'll move into the studio to experience first-hand its rhythms, moods, dynamics, creative expression and improvisation. A key theme will be how the individual and the collective nurture each other in jazz. Intellectually, we'll examine the historical and social backdrop and analyze the essential components of jazz. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core.

Department Restrictions: May not be enrolled in one of the following Departments: Music:Dance.

Field of Study Restrictions: May not be enrolled in one of the following Fields of study: Dance.

Course Attributes: GA

Repeatability: This course may not be repeated for additional credits.

DANC 0827. Philadelphia Dance Experience. 3 Credit Hours.

Open your eyes to the wealth of culture right at your doorstep. Deepen your appreciation of dance as you become an educated audience member about the various styles and layers of meaning present in any one dance. We will look at dance primarily from a cultural studies perspective, focusing specifically on European, African, Asian, and Latin influences in the Philadelphia experience. We will attend performances in the city, interact with guest artists and lecturers, observe performances on video, and engage in guided viewing exercises to enhance your knowledge and understanding of dance. Dance concerts are selected from a variety of styles, including classical and contemporary forms from around the world. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

DANC 0828. Embodying Pluralism. 3 Credit Hours.

How do dance and the arts represent diversity? Were we humans born to dance? From everyday interactions to dance theater to music videos, movement expresses human identity and difference. Through a variety of media, we will explore these themes in relation to race, ethnicity, gender, sexuality, and other constructions that form our perceptions of self and others. Embodying Pluralism combines dance and movement experiences with reading, writing, discussion, and viewing of videos and live performance. Classes and assignments emphasize active learning in small groups. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core.

Course Attributes: GD, SI

Repeatability: This course may not be repeated for additional credits.

DANC 0831. Shall We Dance? Dance as Narrative in American Film. 3 Credit Hours.

"Shall We Dance?" introduces students to a myriad of dance styles that appear on the popular American screen. It looks at how the screen apparatus is employed to shape the ways in which dancing bodies are represented across a range of film and television genres, and it develops interpretive methods to read popular screen dance within its social, historical and economic contexts of production. The course examines how dance on screen can impact spectators' lived experience, and the affect that screen images have on the broader social world. The course covers dance in Hollywood musicals, narrative dance films, film documentaries, pop music video, reality television contests, commercial advertisements, and YouTube clips. Students will be assessed on class participation, a short answer quiz, a written analysis, a group project, and a final essay. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed Dance 0931.

Course Attributes: GA, SI

Repeatability: This course may not be repeated for additional credits.

DANC 0931. Honors Shall We Dance? Dance as Narrative in American Film. 3 Credit Hours.

Investigate the role dance plays and has played in informing and acknowledging social trends in the twentieth and early twenty-first centuries. Connections are made between dance and immigration, industry, politics, fashion, social change, class and gender, nationalism, education and popular culture. Dance both perpetuates and challenges social and cultural issues of power, class, gender, sexual orientation, and age, and acts as a mirror of our society. We will study popular perceptions of dance, dance in Hollywood, and dance as a reflection of social change, dance as social ritual, dance and contemporary notions of the "Impossible Body." You will not be dancing in the course, but will learn through lecture, discussion and film/videotape viewing. (This is an Honors course.) NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed Dance 0831.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GA, HO, SI

Repeatability: This course may not be repeated for additional credits.

DANC 1801. First Year Seminar in Dance. 1 or 3 Credit Hour.

Through a varied range of movement experiences, students investigate the conceptual and theoretical foundations of modern dance. NOTE: Required of freshman dance majors. Prior to fall 2010, the course titles were "Freshman Seminar in Dance" and "Movement Sources and Concepts."

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance Foundation.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

DANC 1802. Breaking: Moves and Meanings. 2 Credit Hours.

Breaking: Moves and Meanings is a studio-based dance technique course that welcomes both beginners and dancers who have already been exposed to the various hip hop dance forms. Students will be introduced to and build upon the foundational vocabulary of "breaking" (sometimes termed "b-boying" or "breakdancing"), and will trace its journey from a Black social dance practice through to an elite competition sport. Students will not only learn and create original choreographic phrases, but they will develop the capacity to freestyle in the context of a breaking cipher. Students will learn various techniques of breaking through a historical lens, examining multiple styles, moves, and motivations which thread through the dance's rich cultural history. Through studio practice, discussion, and supporting media, students will gain an understanding of why and how breaking evolved. Students will be exposed to the myriad genres of music, approach, and contexts which surround this traditional American vernacular dance. Students are asked to attend class in loose comfortable clothing and indoor sneakers, and will spend the majority of the class participating in embodied learning, although there may also be opportunity for watching screen examples, reading articles related to the dance, and engaging in discussion. Students will be graded on their motivation, attitude and commitment to the class, as well as on demonstrating their movement skills, creative and interpretive capacities, and the ability to freestyle within the cipher context.

Repeatability: This course may not be repeated for additional credits.

DANC 1803. House and Hip Hop Social Dance. 2 Credit Hours.

House and Hip Hop Social Dance is a studio-based dance technique course that welcomes both beginners and dancers who have already been exposed to house dance and hip hop social dances. Students will be introduced to and build upon the foundational vocabulary of each style, and they will develop the capacity to freestyle in each form through task-based learning so that they can throw down a round within the context of a hip hop dance cypher. Students are asked to attend class in loose comfortable clothing and indoor sneakers and will spend the majority of the class participating in embodied learning, although there may also be opportunities for watching screen examples, reading articles related to the dances, and engaging in discussion. Students will be graded on their motivation, attitude, and commitment to the class, as well as on demonstrating their movement skills and capacity to freestyle within the context of a cypher.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

DANC 1804. Jazz Dance I. 2 Credit Hours.

Jazz Dance I presents introductory experience in the movement vocabularies used in contemporary dance and theater.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

DANC 1805. Tap Technique I. 2 Credit Hours.

Emphasis is on basic principles and practices of tap dancing.

Repeatability: This course may be repeated for additional credit.

DANC 1807. Hatha Yoga I. 2 Credit Hours.

This course promotes the health of the entire body through the performance of asanas or postures.

Repeatability: This course may be repeated for additional credit.

DANC 1808. Flamenco. 2 Credit Hours.

This is a basic level Flamenco dance class that introduces the complex history, the "compas" (rhythm structure) of the "palo" (rhythm families) of "Alegrias." The study will involve the "colocacion" (body placement) specific technique of arm work and footwork in relation to the "compas" and "palo." Flamenco "palos" have a specific rhythm and "cante" (verse/song) structure that will be studied through the phrase work and rhythm training with "palmas" (hand clapping).

Repeatability: This course may not be repeated for additional credits.

DANC 1811. Movement Improvisation I. 2 Credit Hours.

This course provides experiences in the spontaneous use of movement structures derived from movement concepts, games, imagery, and media sources. It is designed to help students discover and develop their own movement potential.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance, Dance Foundation.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

DANC 1812. Movement Improvisation II. 2 Credit Hours.

Weight, speed, momentum, inertia, and relationships are explored through structural improvisational exercises. These techniques provide the basis for improvised duets and group dances. Issues of performance are also addressed.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in DANC 1811.

DANC 1813. Dance Repertory I. 2 or 3 Credit Hours.

This course for entering dance majors is designed to provide a structured rehearsal experience with a faculty choreographer that culminates in performance in the fall. NOTE: Required of freshman dance majors. Prior to fall 2010, the course title was "Freshman Repertory."

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance, Dance Foundation.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

DANC 1814. Graham-Based Technique. 2 Credit Hours.

Introduces students to the fundamentals of the modern dance technique developed by Martha Graham. Students will learn the principals of contraction and release, and to increase the strength and mobility of the spine, and to find the full use of the breath.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

DANC 1815. Modern Dance Technique I A. 2 Credit Hours.

This course addresses the development of basic movement skills and concepts as a means toward effective performance. Note: Prior to fall 2010, the course title was "Elements of Modern Dance I."

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance, Dance Foundation.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

DANC 1816. Rhythmic Analysis. 3 Credit Hours.

This course explores temporal and rhythmic organizations of movement and dance analyzed for the purpose of enhancing clarity in performance, choreography, and teaching. Elementary musical notation, scoring, and accompaniment skills developed. NOTE: This course is for dance majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

DANC 1817. Modern Dance Technique I B. 2 Credit Hours.

This course addresses the development of basic movement skills and concepts as a means toward effective performance. Note: Prior to fall 2010, the course title was "Elements of Modern Dance II."

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance, Dance Foundation.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

DANC 1818. Elements of Modern Dance III. 2 Credit Hours.

This course addresses the development of basic movement skills and concepts as a means toward effective performance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

DANC 1819. Dance Production. 1 Credit Hour.

This course provides dance majors with an introduction to the technical aspects of dance production. Students will gain practical experience in the theater, learning about the equipment and tasks necessary for effective dance production. Production participation is required. NOTE: Required of freshman dance majors.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance, Dance Foundation.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

DANC 1821. Michael Jackson: Entertainer, Artist, Celebrity. 3 Credit Hours.

Who was Michael Jackson and why was he such an important figure in the cultural imagination? We will examine the cultural phenomenon of pop superstar Michael Jackson (1958-2009) through his career as a singer, dancer, and celebrity. Topics will include American entertainment history, the media and popular culture, and the politics of race, gender, and sexuality. Students will be asked to research Michael Jackson through the rich literature that comprises 'Michael Jackson studies', viewing his corpus of music videos and short films, activities that involve moving, thinking, and making, and group discussions and individual study.

Repeatability: This course may not be repeated for additional credits.

DANC 1831. Ballet I A. 2 Credit Hours.

This course provides further skills in basic classical ballet vocabulary and preparation for professional study at the intermediate level.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance, Dance Foundation.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

DANC 1832. Ballet I B. 2 Credit Hours.

This course provides further skills in basic classical ballet vocabulary and preparation for professional study at the intermediate level. Note: Prior to fall 2010, the course title was "Classical Ballet II."

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance, Dance Foundation.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in DANC 1831.

DANC 1834. Introduction to African Diasporic Dance Traditions. 2 Credit Hours.

The purpose of each African Diasporic Dance course is to experience selected dances, styles, and techniques as movement practices that embody aspects of African culture and history. In this introductory course, three dance genres will be studied in some depth: Neo-Traditional West African, Hip-Hop and the Umfundalai technique.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

DANC 1835. Early Modern Dance I. 2 Credit Hours.

Temple University's Department of Dance takes an inclusive approach to technical training that honors a range of artistic voices. Early Modern Dance I is the first foundation level technique class that aims to inform students' dance skills through studying the concepts and techniques of early modern dance pioneers who expanded knowledge and expressive range to increase potential as a dancer and artist. This course will begin with the Graham base technique which provided a solid base and foundation to be able to deal with many kinds of movement and styles of dance later on. The course will progress throughout the semester and will be based on the foundational exercises including those listed below. Variation on the exercises will be practiced as the class progresses. The sequence of movements - floor work, standing center work, and traveling across the floor - is usually taught in order. The contraction and release principle is used throughout the classwork.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Dance.

College Restrictions: May not be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

DANC 1836. Introduction to Classical Ballet. 2 Credit Hours.

This course provides a foundational study of ballet for dancers within a university setting. Classes concentrate on foundational concepts within ballet technique and theory. Work focuses on alignment and core connection; balance and/or aplomb; physical strength and flexibility; upper and lower body integration and coordination; clarity of line and direction in movement; qualitative range and expressivity inside movement; use of dynamics, weight and breath; mental dexterity; and self-motivation discipline. Over the term students become familiar with terminology and positions of the body, and gain broad knowledge of the protocols and traditions of ballet class.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

DANC 1837. Neo-Traditional West African Dance I. 2 Credit Hours.

Neo-Traditional West African Dance I is an exploration in fundamentals of Neo-Traditional West African dance through kinesthetic engagement and selected philosophical and aesthetic perspectives. This course will explore selected dances and their associated cultural functions as a way to enter an embodied dialogue in African Diasporic dance. Primary focus will be placed on dance from Senegal, Ghana, Mali and Gambia as many of those dance traditions that we have been exposed to in the US come from these countries.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in DANC 1834.

DANC 1838. Early Modern Dance II. 2 Credit Hours.

Early Modern Dance II is the second foundation level technique class that aims to further form students' dance skills, from studying the concepts and techniques of early modern pioneers to expanding knowledge and expressive range to increase potential as a dancer and artist. This course will start out with deepening students' study in Graham base technique then introduce the contrasting technique of Humphrey-Limo.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in DANC 1835.

DANC 1839. Ballet Enchainments. 2 Credit Hours.

This course provides beginning level study of ballet for dancers within a university setting. Classes concentrate on foundational concepts within ballet technique and theory. Work focuses on alignment and core connection; balance and/or aplomb; physical strength and flexibility; upper and lower body integration; clarity of line and direction in movement; qualitative range and expressivity inside movement; use of dynamics, weight and breath; mental dexterity; and self-motivation and discipline. In this class students move beyond learning components of ballet vocabulary to perform more complex combinations of steps and short phrases or enchainments.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in DANC 1836.

DANC 1841. Music for Dancers. 2 Credit Hours.

Dance and Music share a dynamic connection; yet, dance performers, teachers, and choreographers sometimes have difficulties communicating their artistic ideas to musicians and composers. This course will teach dancers to understand the language of music and build the necessary vocabulary to analyze, develop, and communicate musical ideas. We will explore the basic elements of music through the study of rhythmic structures, an introduction to fundamental music theory, critical analysis of compositions & choreography of various genres, and experiential activities that combine music & movement.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance, Dance Foundation.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

DANC 1851. Global Dance Traditions. 2 Credit Hours.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance, Dance Foundation.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

DANC 1852. Ways of Knowing Dance. 2 Credit Hours.

"Ways of Knowing Dance" is a foundation course that seeks to provide students with a basic knowledge of ways in which we might study dance. It commences with the fundamental questions of 'what is dance' and 'what is the dancing body' before moving on to other approaches to reading and understanding dance.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Dance.

Repeatability: This course may not be repeated for additional credits.

DANC 2801. Entry to Dance as Art. 3 Credit Hours.

This course is designed to provide the basis for understanding, appreciating, and participating in dance as art in culture and individual life. Concepts, intuitions, and communication in dance will be cultivated through lectures, films, live performances, and studio experiences. NOTE: This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AR

Repeatability: This course may not be repeated for additional credits.

DANC 2802. Pathways in American Dance. 3 Credit Hours.

This course provides participants with concentrated beginning level studio experiences in urban popular dance forms, jazz, and modern dance, each presented in a five-week unit. Through active participation, students will dance, observe videos, and read articles to gain insight into these three approaches to dancing. Learning the movement vocabularies, values, aesthetics, and techniques of these different traditions will move students into a physical and conceptual understanding of the kinetic and cultural sources that inform dance as a contemporary performance art. NOTE: This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AR

Repeatability: This course may not be repeated for additional credits.

DANC 2803. Dance in Human Society. 3 Credit Hours.

This course offers students an opportunity to explore the world of dance. Through video observation, readings, and dancing, students will be exposed to many faces of dance as an expression of cultural values. Dance as art, religion, social custom, and political action will be examined as evidenced in many human societies. Examples will be primarily drawn from North America, West Africa, Brazil, Japan, India, Bali, and the Cook Islands. Students will be introduced to the field of dance anthropology and have the opportunity for on-site observation of dance events. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors.

Course Attributes: IS

Repeatability: This course may not be repeated for additional credits.

DANC 2805. Dance, Movement, and Pluralism. 3 Credit Hours.

This course will focus on movement as a language of expression that conveys culturally learned values. From pedestrian behaviors to social dance to artistic traditions, movement will be explored as a carrier of cultural and aesthetic meaning. The works of contemporary dance artists will be examined within their socio-cultural and historical contexts. Issues of race and racism will be addressed in relationship to the content, context, and appreciation of the specific works viewed. Students will participate in movement improvisations and theater games. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: RS

Repeatability: This course may not be repeated for additional credits.

DANC 2806. Funk Styles: Locking and Popping. 2 Credit Hours.

Funk Styles: Locking and Popping is a studio-based dance technique course that welcomes both beginners and dancers who have already been exposed to the hip hop dance forms of locking and popping. Students will be introduced to and build upon the foundational vocabulary of each style, and they will develop the capacity to freestyle in each form through task-based learning so that they can throw down a round within the context of a hip hop dance cypher. Students will not only develop skills in the movement techniques of locking and popping, but they will also gain an understanding of the histories of each form as dances of the African diaspora that evolved within the US West Coast and were then circulated through the popular screen media. Students will be exposed to a range of funk music, and learn to develop musical awareness as they respond to its form and structure while engaged in the dance. Students are asked to attend class in loose comfortable clothing and indoor sneakers, and will spend the majority of the class participating in embodied learning, although there may also be opportunity for watching screen examples, reading articles related to the dance, and engaging in discussion. Students will be graded on their motivation, attitude and commitment to the class, as well as on demonstrating their movement skills and capacity to freestyle within the context of a cypher.

Repeatability: This course may not be repeated for additional credits.

DANC 2807. Creating Hip Hop for the Theater Stage. 2 Credit Hours.

Creating Hip Hop for the Theater Stage focuses on how students can bring the principles and aesthetics of hip hop to the concert stage. Students will be introduced to a range of methods for developing hip hop as a theatrical form, including autobiographical story-telling techniques, narrative-driven structures, and as an expressive or formalist movement device. Examples of professional hip hop theater will be analyzed, and students will develop their own creative techniques for developing a short performance using one or more dancers. Students can expect to engage in hands-on task based learning, movement exploration and improvisation, and independent research throughout the course. Students will also have opportunity to watch and analyze professional examples of hip hop dance performance through class observation and discussion. Each student will create a hip hop performance for the culminating project.

Repeatability: This course may not be repeated for additional credits.

DANC 2809. Hip Hop Entrepreneurship. 2 Credit Hours.

In this course, students examine the intersection between hip hop and entrepreneurship and how to develop methods to sustain artistic pursuits and professional skills in hip hop culture. This class teaches students how to leverage their artistic knowledge and deploy their creative worth in the workplace. We discuss how personal passions align with career paths, and focus on how students can successfully envision possible streams of income. As the entertainment industry has recognized the value of hip hop, we want employers and educators also to recognize the economic, social and cultural value of hip hop. The hip hop industry continually evolves and the course shows students how to adapt to changing conditions in order to remain profitable. We will focus on case studies of artists who have monetized their skills and knowledge.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

DANC 2811. Hip Hop History and Performance. 2 Credit Hours.

In Hip Hop History and Performance, the communities of origin in which hip hop dance and culture developed are examined alongside the many ways in which hip hop dance has circulated across various performance sites. The mythologies and historiographies of hip hop dance culture inform the introductory material. Four foundational elements: breaking, MC-ing, DJ-ing and graffiti writing enable a focus on the development of hip hop across the East and West Coasts of America while also tracing the influence of the expressive practices of the African diaspora and the Latin sounds and moves that contributed to its development. In addition to oral methods of transmission, we consider how hip hop dance has circulated across popular television shows, fiction and documentary film, music video performance, concert dance performance, competition battles, and social media. A consideration of what is at stake socially, politically, and aesthetically in considerations of race and racism, cultural appropriation, consumer capitalism, and African heritage and values is a key aspect of this course.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

DANC 2813. Dance Composition I. 2 Credit Hours.

The fundamentals of choreography are explored in this course. Solo studies based on choreographic problems are presented and performed. NOTE: Required of sophomore dance majors.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance Foundation.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in DANC 1811.

DANC 2814. Dance Composition II. 2 Credit Hours.

This course addresses problems in presentation, form, design, and content. Experiences include experimentation with musical settings, voice, spoken word, and duets. NOTE: Required of sophomore dance majors.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance, Dance Foundation.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in DANC 2813.

DANC 2815. Modern Dance Technique II A. 2 Credit Hours.

This course addresses the extension of range, control, and clarity of performance for more complex dance sequences. Note: Prior to fall 2010, the course title was "Intermediate Modern Dance I."

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance, Dance Foundation.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in DANC 1815.

DANC 2816. Intermediate Modern Dance II. 3 Credit Hours.

This course addresses the extension of range, control, and clarity of performance for more complex dance sequences.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

DANC 2817. Modern Dance Technique II B. 2 Credit Hours.

This course addresses the extension of range, control, and clarity of performance for more complex dance sequences. Note: Prior to fall 2010, the course title was "Intermediate Modern Dance III."

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance, Dance Foundation.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in DANC 1817.

DANC 2818. Intermediate Modern Dance IV. 3 Credit Hours.

This course addresses the extension of range, control, and clarity of performance for more complex dance sequences.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

DANC 2822. Pilates: Body Conditioning. 1 to 2 Credit Hour.

The course will begin with an in-depth exploration of Joseph Pilates original mat work, its origins, and its applications. We will focus on skills of self-assessment, using the system as a tool to improve both strength and alignment. We will look at multiple facets of the Pilates system and industry, as well as the benefits and limitations of the system as a wellness tool. Finally, each student will examine multiple ways of integrating the fundamental concepts of the system into both their movement training and their pedagogy.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

DANC 2823. Pilates II: Applications. 1 to 2 Credit Hour.

This course is designed for students looking to further their already in-depth understanding of Joseph Pilates original mat and tower work. This course seeks to expose students to the current philosophies and schools of thought on the Pilates method. Students will emerge from the course with an understanding of the history of the method, and the ways in which it has evolved to meet the needs of today's practitioners. During this course, students will advance in their practice from intermediate to advanced level mat and tower exercises, visit and report on a Philadelphia Pilates studio, practice peer teaching, and report on relevant articles from Pilates publications.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in DANC 2822.

DANC 2831. Ballet II A. 2 Credit Hours.

This course addresses increased vocabulary and skills for increasing demands of more complex combinations and sequences.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance Foundation.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

DANC 2832. Ballet II B. 2 Credit Hours.

This course addresses increased vocabulary and skills for increasing demands of more complex combinations and sequences. Note: Prior to fall 2010, the course title was "Classical Ballet III."

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance, Dance Foundation.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in DANC 1832.

DANC 2833. Contemporary Approaches to Ballet I. 2 Credit Hours.

This course provides intermediate level study of ballet for dancers within a university setting. Classes concentrate on foundational concepts within ballet technique and theory. Work focuses on alignment and core connection; balance and/or aplomb; physical strength and flexibility; upper and lower body integration; clarity of line and direction in movement; qualitative range and expressivity inside movement; use of dynamics, weight and breath; mental dexterity; and self-motivation and discipline. In keeping with contemporary practice in higher education, students deepen their understanding of ballet as historically situated, linking work done in class with historical ballet repertory as well as the historical context of the form's emergence.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in DANC 1839.

DANC 2834. Neo-Traditional West African Dance II. 2 Credit Hours.

Neo-Traditional West African Dance II is a continuation of the exploration of Neo-Traditional West African dance through kinesthetic engagement and selected philosophical and aesthetic perspectives. This course will explore selected dances and their associated cultural functions as a way to enter an embodied dialogue in African Diasporic dance. Primary focus will be placed on dances from Senegal and Mali as many of those dances have gained exposure in the West through National Dance Company tours and dancers from these companies have relocated to the States and teach the repertory of their national dances.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in DANC 1837.

DANC 2835. Post-Judson Dance Practices I. 2 Credit Hours.

Post-Judson Dance Practices I addresses the period after the 1960s cultural upheaval that occurred in American modern dance. Inspired by Robert Dunn's composition classes at the Cunningham studio from 1960-1962, the Judson Dance Theater questioned and rebelled against ingrained values, forms, and presentational contexts. In this spirit, members of the Judson movement rejected technical virtuosity, embraced "pedestrian" movement and combined different techniques to initiate a period of "eclecticism" within American modern dance. In this course, students will experience material inspired by this movement, focusing upon expanding their spatial parameters and incorporating weight and breath into full-bodied explorations.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (DANC 1838 or 'Y' in CRDA01)

DANC 2836. Pointe I. 2 Credit Hours.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

DANC 2837. Umfundalai Technique I. 2 Credit Hours.

Students of Umfundalai Technique will explore and embody a codified technique based on the principles and movement vocabularies that they have been learning. The class is structured with an on the floor series of movements, an across the floor series of movements and from time to time and at the end of each course, a Bantaba, which is a circle formation that allows space for students to acknowledge each other, the musicians and the teacher.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in DANC 2834.

DANC 2838. Post-Judson Dance Practices II. 2 Credit Hours.

Post-Judson Dance Practices II deepens students embodied investigations of material influenced by post-1960s developments within American modern dance. Inspired by Robert Dunn's composition classes at the Cunningham studio from 1960-1962, the Judson Dance Theater questioned and rebelled against ingrained values, forms, and presentational contexts. In this spirit, members of the Judson movement rejected technical virtuosity, embraced "pedestrian" movement, and combined different techniques to initiate a period of "eclecticism" within American modern dance. In this course, students will deepen their awareness of qualitative approaches towards dance performance initiated by the Judson era. They will continue to focus upon expanding their spatial parameters, experiencing more challenging off-vertical movements, and floorwork.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in DANC 2835.

DANC 2839. Contemporary Approaches to Ballet II. 2 Credit Hours.

This course provides intermediate level study of ballet for dancers within a university setting. Classes concentrate on foundational concepts within ballet technique and theory. Work focuses on: alignment and core connection; balance and/or aplomb; physical strength and flexibility; upper and lower body integration; clarity of line and direction in movement; qualitative range and expressivity inside movement; use of dynamics, weight and breath; mental dexterity; and self-motivation and discipline. In keeping with contemporary practice in higher education, students continue to deepen their understanding of ballet as a historically-situated movement practice and oral tradition, learning and performing historical ballet repertory and the many ways this choreographic legacy is evolving over time.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in DANC 2836.

DANC 2844. Hip Hop. 2 Credit Hours.

Initially an U.S. black urban expressive culture, hip-hop has become a formidable global cultural phenomenon. In going global, hip-hop has taken the angst, hope, social and political conditions of life in the inner cities to the global stage. It has become an anti-establishment culture, spawning its own special mode of communication and dress styles, and fostering a culture of resistance to institutional dominance, class exploitation, and middle class values. This course will study the development, history, communication style, dance form, moral framework, and processes of globalization. It begins by asking what hip-hop is. Next, it outlines the relationship between rap, dub, and hip-hop, and determines who the key figures of this global movement are. In reconstructing the growth and key moments of this life form, we will examine the myriad dimensions of this culture, through its music, music videos, dance styles, and films.

Repeatability: This course may be repeated for additional credit.

DANC 2853. African Dance I. 1 to 3 Credit Hour.

This introductory studio course is a survey of core movements and rhythms from Africa and the Diaspora. Students learn the Umfundalai technique as a way to integrate song, dance and music into a meaningful and aesthetic experience.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance Foundation.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

DANC 2861. Non-Western Dance Traditions. 3 Credit Hours.

Different modes of choreographic and movement inquiry will be used to interpret and create movement and movement styles. Students will learn skills in culturally specific spatial designs and explorations in order to expand their choreographic landscape. Choreographic explorations will include definition, explanation, and evaluation of movements. Non-Western movement vocabularies will be explored examining a variety of non-western performance aesthetics. Experiences with visual arts, literature, drama, and music will govern the class' approach to the study of non-western performance. Movement studies will be assigned to incorporate various interpretations of non-western performance genres in the context of students' individual expressions and experiences.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

DANC 2862. Foundations of Dance Pedagogy. 3 Credit Hours.

The purpose of this course is to introduce, explore and practice basic principles of teaching and learning in dance. Acknowledging that teaching is a very complex activity, the course will try to delineate specific needs, skills and materials that might be helpful in planning and executing a class or course in dance. The teacher must ultimately make the decisions in a class. This course will offer information and skills so that those decisions are based on thoughtful reflection on why you want to teach, what constitutes good teaching, and how you can continue to improve as well as incorporate student participation. Remember--the best teacher never stops being a student! This course will strive to be a hands-on practical "How do I do this?" class. It will explore such questions as: Who am I as a learner? What do I consider good teaching? Why do I want to teach? A general outline of essential elements in the classroom/studio will be presented and discussed, followed by practice in designing within that framework for materials and experiences. The course will address the role/use of such topics as anatomy/kinesiology, learning theory, technology, texts, movement analysis/design, history/aesthetics in teaching various parts in a dance curriculum.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

DANC 2868. Studies in Dance. 1 to 3 Credit Hour.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

DANC 2869. Studies in Dance Technique. 2 Credit Hours.

This course will focus on dance technique. It will only be recommended for those students who have shown competence at a specific level of technique and it would be in their interests to pursue further in-depth study at this particular level.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Dance.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

DANC 2872. Foundations of Dance Education. 3 Credit Hours.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance Foundation.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in DANC 1801.

DANC 2897. Creative Process in Dance. 3 Credit Hours.

In this course, students investigate motives and values in creating dance. The development of individual aesthetics and the ability to articulate these is cultivated. NOTE: Required of junior dance majors.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

DANC 2901. Honors Entry to Dance as Art. 3 Credit Hours.

This course is designed to provide the basis for understanding, appreciating, and participating in dance as art in culture and individual life. Concepts, intuitions, and communication in dance will be cultivated through lectures, films, live performances, and studio experiences. NOTE: (1) Open to Honors students only. (2) This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: AR, HO

Repeatability: This course may not be repeated for additional credits.

DANC 2904. Honors Dance in Human Society. 3 Credit Hours.

This course offers students an opportunity to explore the world of dance. Through video observation, readings, and dancing, students will be exposed to many faces of dance as an expression of cultural values. Dance as art, religion, social custom, and political action will be examined as evidenced in many human societies. Examples will be primarily drawn from North America, West Africa, Brazil, Japan, India, Bali, and the Cook Islands. Students will be introduced to the field of dance anthropology and have the opportunity for on-site observation of dance events. NOTE: (1) Required for dance majors and is for University Honors Program students. (2) This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, IS

Repeatability: This course may not be repeated for additional credits.

DANC 3385. Diamond Peer Teachers - Internship I. 1 Credit Hour.

The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

Repeatability: This course may be repeated for additional credit.

DANC 3386. Diamond Peer Teachers - Internship II. 1 Credit Hour.

The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

Repeatability: This course may be repeated for additional credit.

DANC 3811. Field Experience in Dance. 1 to 8 Credit Hour.

Opportunity for experience in teaching dance.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

DANC 3812. Creative Process in Dance. 3 Credit Hours.

This course explores the creative process, particularly as it applies to dance making. The course will focus on the development of skills that facilitate creative processes in art. We will look at our own ways of working as well as those of other artists. One objective of the course is for each student to further define his/her personal tastes, commitments, and passions within the field of dance, while also expanding current preferences and practices.

NOTE: This course is for junior dance majors.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in DANC 2814.

DANC 3813. Dance Repertory II. 3 Credit Hours.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Dance, Dance Foundation.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

DANC 3815. Dance Composition III. 2 Credit Hours.

This course addresses various approaches to group composition. Students choreograph a series of studies for small groups of dancers that address counterpoint, stage space, and movement manipulation and development. NOTE: Required of junior dance majors.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

DANC 3817. Modern Dance Technique III A. 2 Credit Hours.

This course addresses increased technical accuracy, sensitivity, and versatility of performance. The dance material offered covers a wide range of spatial, dynamic, and rhythmic qualities. Note: Prior to fall 2010, the course title was "Advanced Modern Dance I."

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in DANC 2815.

DANC 3818. Modern Dance Technique III B. 2 Credit Hours.

This course addresses increased technical accuracy, sensitivity, and versatility of performance. The dance material offered covers a wide range of spatial, dynamic, and rhythmic qualities. Note: Prior to fall 2010, the course title was "Advanced Modern Dance II."

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance Foundation.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in DANC 2817.

DANC 3831. Global Ballet Styles and Conventions. 2 Credit Hours.

This course provides advanced level study of ballet for dancers within a university setting. Classes concentrate on foundational concepts within ballet technique and theory. Work focuses on: alignment and core connection; balance and/or aplomb; physical strength and flexibility; upper and lower body integration; clarity of line and direction in movement; qualitative range and expressivity inside movement; use of dynamics, weight and breath; mental dexterity; and self-motivation and discipline. Students deepen their understanding of ballet as a culturally expressive and responsive movement practice. In the third year, students move beyond technical proficiency, exploring ballet as a window into understanding larger cultural processes and historical frameworks. Classes interweave embodied and theoretical approaches to ballet performance, allowing students to develop insights into personal and cultural identity, and stimulating an expanded recognition and appreciation of difference within the cultural landscape of dance.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in DANC 2839.

DANC 3832. Ballet and Abstraction. 2 Credit Hours.

This course provides advanced level study of ballet for dancers within a university setting. Classes concentrate on foundational concepts within ballet technique and theory. Work focuses on: alignment and core connection; balance and/or aplomb; physical strength and flexibility; upper and lower body integration; clarity of line and direction in movement; qualitative range and expressivity inside movement; use of dynamics, weight and breath; mental dexterity; and self-motivation and discipline. Students deepen their understanding of ballet as an aesthetic philosophy based upon abstract concepts and ideas. In the third year, students interweave embodied and theoretical material into their performance of ballet, demonstrating critical thinking, as well as an understanding of how ballet technique relates and transfers to and supports other dance forms/techniques.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in DANC 2839.

DANC 3834. Umfundalai Technique II. 2 Credit Hours.

Students of the Umfundalai Technique will continue their exploration and embodiment of a codified technique based on the principles and movement vocabularies that they have been learning. The class is structured with an on the floor series of movements, an across the floor series of movements and from time to time and at the end of each course, a Bantaba, which is a circle formation that allows space for students to acknowledge each other, the musicians and the teacher.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in DANC 2837.

DANC 3835. Somatic Dance Explorations I. 2 Credit Hours.

Somatic Dance Explorations I applies basic kinesiological principles that have informed a range of somatic practices such as Feldenkrais, Bartenieff Fundamentals, Alexander Technique, and yoga. These practices have become widely incorporated into the contemporary dance field as a means of developing greater movement efficiency, enhancing mindfulness, and preventing injuries. In this course, students will gain an understanding of dance performance as it relates to functional anatomy. Building knowledge of the body's structures and regions, particularly the musculoskeletal system, the course will incorporate imagery and kinesthetic exercises to expand the students' technical proficiency and expressivity.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in DANC 2838.

DANC 3837. Hip Hop I. 2 Credit Hours.

Hip Hop I introduces students to the foundations of hip hop dance through contextualizing the development of the form with the U.S., across East Coast and West Coast locations, and through learning the fundamental movement patterns of five hip hop styles: breaking, locking, popping, house and hip hop social dances. Students will acquire a basic knowledge of key terminology, rhythmic awareness and improvisational techniques.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in DANC 3834.

DANC 3838. Somatic Dance Explorations II. 2 Credit Hours.

Somatic Dance Explorations II delves into more complex kinesiological principles that have informed a range of somatic practices such as Feldenkrais, Bartenieff Fundamentals, Alexander Technique, and yoga. These practices have become widely incorporated into the contemporary dance field as a means of developing greater movement efficiency, enhancing mindfulness, and preventing injuries. In this course, students will deepen their ability to apply anatomical knowledge in understanding physical idiosyncrasies and movement behaviors and enhancing expressivity. Exploring further the body's structures and regions, particularly the musculoskeletal system, the course will incorporate imagery and kinesthetic exercises in expanding students' technical proficiency and expressivity.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in DANC 3835.

DANC 3851. Lighting Design for Dance. 3 Credit Hours.

This course introduces concepts and techniques through lecture-demonstrations focusing on the impact of light as a supportive medium and a source for dance composition, problems and projects.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in DANC 1819.

DANC 3853. African Dance II. 1 to 3 Credit Hour.

This is the second course in the series of Umfundalai dance studies. Students learn to recognize rhythms and movements by region, country and selected ethnic groups. More advanced studio work is performed as students develop their expressive voices via movement studies.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in DANC 2853.

DANC 3868. Studies in Dance. 1 to 3 Credit Hour.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

DANC 3871. Dance and the Child. 3 Credit Hours.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

DANC 3872. Dancing Places. 3 Credit Hours.

In *Dancing Places*, we examine the creation of, and participation in, dance that occurs in everyday spaces and environments. We look to choreographies and dance events that take place outside the formality of the concert stage and consider how and why people dance in alternative locations. From the vogue-ing balls of Harlem to the bordellos of Argentine tango we reflect on how geographic and social locations are embodied in dance, and how histories and cultural memories are embedded in dance sites and moving bodies. Delivered as an online course, through a combination of discussion forums, reading assignments, video analysis and participation in live dance events, students will discover how dance emerges through everyday sites as a creative practice, as a leisure pursuit, as a form of social action, and as a global phenomenon. Through this interactive course, students will create original choreography, develop experiential writing, engage in movement analysis, and foster research skills in site specific dance.

Repeatability: This course may not be repeated for additional credits.

DANC 3873. Creating Dance Histories. 3 Credit Hours.

This course will focus on historical research methods. The class provides students with the necessary research skills to understand how those who undertake historical research shape historiography. In addition, students are equipped with the tools necessary to undertake their own historical investigations. We will explore a broad range of dance genres and time periods in dance history, ensuring students encounter a significant amount of both conceptual and concrete dance historical content.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Dance.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (DANC 1852 or DANC 1851)

DANC 3876. Rhythmic Analysis. 3 Credit Hours.

This course explores temporal and rhythmic organizations of movement and dance analyzed for the purpose of enhancing clarity in performance, choreography, and teaching. Musical notation, scoring, and accompaniment skills are developed.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

DANC 3882. Independent Study in Dance. 1 to 4 Credit Hour.

Student may propose individual projects in areas such as choreography, production, and history.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

DANC 3896. Dancing Cultures. 3 Credit Hours.

In "Dancing Cultures" we seek to examine how dance practice forms an important expression of our cultural landscape and, in return, how dance maintains, negotiates and challenges the social, political, historical and economic frameworks through which it exists.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Dance.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in DANC 1811.

DANC 3897. Making Meaning in Dance. 3 Credit Hours.

"Making Meaning in Dance" focuses on methods of dance analysis. The course provides students with a broad set of theoretical tools with which to describe, interpret and evaluate dance in a broad spectrum of contexts. Students will learn to utilize both structuralist and poststructuralist modes of looking at dance to their analyses of multiple dance genres.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Dance.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (DANC 1852 or DANC 1851)

DANC 4185. Dance Internship. 1 to 3 Credit Hour.

An intensive experience offering hands-on, organized, professional work, under supervision in some aspect of the music business. Open to Boyer College of Music and Dance juniors and seniors only. Students will work at a professional location earning valuable experience that relates to future opportunities. Students will keep a diary of their experiences and build a portfolio project that will aid their professional development. This course provides a learning experience that unites prior coursework with professional organizational experience. Students will have the responsibility of providing the best service possible to their agency/school/company. Practical professional application of industry related work experiences. Up to eight hours per week for 12 weeks of the semester of enrollment. Written report due after the last session has been completed. Repeatability: This course may be repeated for additional credit.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

DANC 4806. Somatic Theater. 3 Credit Hours.

This interdisciplinary studio course utilizes specific experimental theater techniques to explore new avenues of expression and to expand the participants' understanding of performance. Conventional categorical divisions between movement, dance, drama and play are blurred as are the divisions between "art" and "entertainment." Areas for investigation may include stories, myths, playscripts, poetry, and personal journals. Improvisation, structured and free-form, is used as an end in itself and as a means of arriving at composition.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

DANC 4811. African Dance Repertory. 1 to 3 Credit Hour.

Students learn selected neo-traditional dances and study the performance qualities of African dances. This course is the last in the series of Umfundalai dance studies.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance Foundation.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in DANC 3853.

DANC 4815. Modern Dance Technique IV A. 2 Credit Hours.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

DANC 4817. Modern Dance Technique IV B. 2 Credit Hours.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

DANC 4819. Advanced Modern Dance III. 3 Credit Hours.

This class seeks to train the student in a variety of fundamental issues in dance performance for the concert dance stage. Major emphasis is placed on performance practice and artistry.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

DANC 4821. Adv Modern Dance IV. 3 Credit Hours.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

DANC 4831. Introduction to Laban Movement Analysis. 3 Credit Hours.

This course introduces the theoretical framework of Laban Movement Analysis as a system of movement description. It investigates application in the fields of dance, education, anthropology, and non-verbal communications research.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in DANC 1801.

DANC 4832. Advanced Ballet Technique I. 2 Credit Hours.

This course provides pre-professional level study of ballet for dancers within a university setting. Following the structure of a traditional ballet class, the course places emphasis on rhythm, musicality, dynamic phrasing, and development of personal voice in performance. Students work collaboratively with each another and the instructor to expand, deepen and refine their grasp of the component parts of ballet technique and theory. Classes focus on: alignment and core connection; balance and/or aplomb; physical strength and flexibility; upper and lower body integration; clarity of line and direction in movement; qualitative range and expressivity inside movement; use of dynamics, weight and breath; mental dexterity; self-motivation and discipline. In this advanced class, students incorporate compositional and pedagogical perspectives and strategies to participate in the choreographic design and composition of technique class and enchainments. Students combine embodied and theoretical material at an advanced level physically, intellectually, and affectively, using a personal somatic lens that allows for a holistic understanding of ballet as a culturally responsive movement practice and aesthetic philosophy.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in DANC 2834.

DANC 4833. Advanced Ballet Technique II. 2 Credit Hours.

This course provides pre-professional level study of ballet for dancers within a university setting. Following the structure of a traditional ballet class, the course places emphasis on rhythm, musicality, dynamic phrasing, and development of personal voice in performance. Students work collaboratively with each other and the instructor to expand, deepen and refine their grasp of the component parts of ballet technique and theory. Classes focus on: alignment and core connection; balance and/or aplomb; physical strength and flexibility; upper and lower body integration; clarity of line and direction in movement; qualitative range and expressivity inside movement; use of dynamics, weight and breath; mental dexterity; self-motivation and discipline. In this advanced class, students incorporate compositional and pedagogical perspectives and strategies to participate in the choreographic design and composition of technique class and enchainments. Students combine embodied and theoretical material at an advanced level physically, intellectually, and affectively, using a personal somatic lens that allows for a holistic understanding of ballet as a culturally responsive movement practice and aesthetic philosophy, as well as a living historical tradition.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in DANC 4832.

DANC 4834. Hip Hop II. 2 Credit Hours.

Hip Hop II builds on the introduction to practice in Hip Hop I through a deeper investigation of the style and culture. We consider some of the issues that underpin hip hop practice, such as its global circulation, its appropriation by the media, and its capacity to articulate ideas of community and identity. Students will work on increasingly advanced knowledge of the form across five hip hop styles: breaking, locking, popping, house and hip hop social dances. Students will further develop rhythmic awareness and improvisational techniques, in addition to cyphering and battling strategies.

Department Restrictions: Must be enrolled in one of the following Departments: Music/Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in DANC 3837.

DANC 4835. Contemporary Hybrid Dance Practices I. 2 Credit Hours.

This course is the first advanced level technique class that aims to strengthen and enrich students' dance skills in the broadest sense and to expose students to professional working practice under the guidance of experienced artists/professors. Each Artist/Professor will base the class on her/his particular approach and research to contemporary dance.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in DANC 3838.

DANC 4837. Matters in Contemporary African Diasporic Dance. 2 Credit Hours.

In this course, students are guided and encouraged to use the aesthetic and cultural tools that they have learned to create a contemporary full length dance that indicates a substantial knowledge of the cultural foundations of the genre that they have chosen as the basis for their choreography.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in DANC 4834.

DANC 4838. Contemporary Hybrid Dance Practices II. 2 Credit Hours.

This course is the second advanced level technique class that aims to strengthen and enrich students' dance skills in the broadest sense, and to expose students to professional working practice under the guidance of experienced artists/professors. Each Artist/Professor will give her/his own first hand approach to contemporary dance.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in DANC 4835.

DANC 4842. Jazz Dance II. 2 Credit Hours.

This course provides a more sophisticated approach to jazz dance vocabularies and sensitivities used in contemporary dance and theater.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

DANC 4843. Jazz Dance III. 2 Credit Hours.

This course provides a complete integration to the approach to jazz dance vocabularies and sensitivities used in contemporary dance and theater.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

DANC 4861. Dance Science and Somatics. 3 Credit Hours.

Six themes are interwoven through this course: physiological basis of dance training; conditioning to address individual needs in dance training; dance injuries - their causes, pathology, care rehabilitation, and prevention; dancers and wellness; application of motor learning and control to dance pedagogy; and mental imagery to enhance performance.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

DANC 4864. Dance Education Project. 3 Credit Hours.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

DANC 4868. Studies in Dance. 1 to 3 Credit Hour.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

DANC 4871. Movement Improvisation II. 2 Credit Hours.

Weight, speed, momentum, inertia and relationships are explored through structural improvisational exercises. These techniques provide the basis for improvised duets and group dances. Issues of performance are also addressed.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in DANC 1811.

DANC 4872. Creative Process in Dance. 3 Credit Hours.

The course will focus on the development of skills that facilitate the role of imagination, imagery and intuition in the creation of dances. Students will look at their own ways of working as well as those of other artists. One objective of the course is for each student to further define his/her personal tastes, commitments, and passions within choreography and creative practice.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

DANC 4873. Senior Seminar. 3 Credit Hours.

In this course, students examine and clarify professional goals, values, and actions consistent with personal competencies. Dance in the larger society is discussed and professional resources and issues are addressed.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

DANC 4874. Dance Repertory III. 3 Credit Hours.

This course provides students with an opportunity to learn and perform a work by an established choreographer.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Dance, Dance Foundation.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

DANC 4875. Contact Improvisation. 1 to 2 Credit Hour.

This course provides experiences in improvisational duet dancing involving weight sharing, touch, lifting, carrying, and active use of momentum. Activities develop sensitivity to partnering and spontaneous creativity.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in DANC 1811.

DANC 4884. Senior Choreographic Project. 3 Credit Hours.

This course facilitates production of a major creative dance work that will be performed in the BFA Senior Concert as the culmination of the student's study in the BFA program. NOTE: Successful completion is prerequisite to graduation.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in DANC 3812.

Early Childhood Education (ECED)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ECED 2101. Child Development, Birth to Nine. 3 Credit Hours.

This class introduces students to trends and variations in children's physical, cognitive, and socioemotional development from the birth through the start of adolescence (around 4th grade). Specifically we will discuss how children's development proceeds in terms of physical changes to the body (and the brain), thinking skills, and social competence. We will also examine developmental differences across individual children (including those with exceptional characteristics and/or special needs) and, more broadly, across cultures within and beyond the US. Six hours of field experience required for this course.

Repeatability: This course may not be repeated for additional credits.

ECED 2104. Integrating the Arts into Early Childhood Education. 3 Credit Hours.

This course is a joint project between the College of Education and the Boyer College of Music and Dance. It is designed to provide an overview of the role and the significance of the arts in the education of children from Pre-K through fourth grade. Pre-service teachers will be exposed to art experiences that support standards, increase learning of content, teach basic aesthetic principles, and help them learn specific techniques and ideas. Through numerous hands-on experiences, students will start with their own skills and perspectives as creators of art and then move to explore the power and potential of the arts to reach children in new and effective ways. Students will be introduced to four art forms - dance, music, drama, and the visual arts - and their unique histories and pedagogies. Students will learn from disciplinary experts in each of these four domains, who also have expertise in engaging young children in developmentally appropriate ways.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Early Childhood Education.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Repeatability: This course may not be repeated for additional credits.

ECED 2105. Cognition and Learning in the Classroom. 3 Credit Hours.

Understanding how people learn is a critical part of understanding how best to teach. This course will address theories of cognition and learning and provide practice in weaving key ideas into the design, implementation, and assessment of classroom instruction. This class is not a methods class; rather, it is a perspectives class designed to help students flexibly organize and use the teaching methods that you will add to your "tool belt" in the coming semesters. NOTE: Background clearances required.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ECED 2101.

ECED 2106. Language and Literacy Development in Early Childhood: Birth through Kindergarten. 3 Credit Hours.

The main focus of this course is to develop an understanding of the development of language skills and how language lays the critical foundation for pre-literary skills, which are necessary for learning to read. The course will cover the important theories of language development and the developmental course of language acquisition. Woven throughout the class will be a discussion of dual language learners and ESL learners as they encounter the task of reading at the same time that they may be learning to speak English. Early childhood classroom activities will be discussed in relation to the six critical language and pre-literacy precursors suggested by the National Early Literacy Panel (2009). A unique emphasis is on the children's language and literacy development from birth to 6 years of age. There has been a dramatic shift in how early childhood language and pre-literacy development is perceived, taught, and learned. However, these new theoretical understandings have not translated into effective classroom practices. Through current readings and class discussion the following questions will be addressed: How should we think about language and the learning and teaching of literacy? How will we prepare young children for a world in which reading, specifically vocabulary development and comprehension will be increasingly important? How can activities be developed that embody the changes in reading teaching and learning advocated by recent recommendations? How can we form these changes to include all children, especially children in poverty and ESL children? NOTE: Background clearances required.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Co-requisites: ECED 2187.

Repeatability: This course may not be repeated for additional credits.

ECED 2108. Engaging Children in the Learning Process through Classroom Management. 3 Credit Hours.

The purpose of this course is to prepare pre-service early childhood educators with the knowledge and skills required to create classroom climates that support positive social, emotional, and academic outcomes for all learners. This course follows Child Development and is taken in conjunction with Cognition and Learning because we will work on applying these ideas about how children learn and grow in service of creating an optimal environment to foster this change. Specifically, this course will address relationship-building approaches and classroom management techniques and strategies that have been shown to promote resiliency, and mediate/moderate risk factors. Course work will focus on prevention of learner problem situations, preparation to deal with learner problem situations that cannot always be prevented, and proactively responding to learner problem situations in the future, all in the context of developmentally appropriate practices for young learners. Prevention content will explore how to create a classroom ecology that promotes safety and access to the social and academic curriculum; creating a positive and psychologically safe classroom climate; establishing relationships; using class rules and routines; and making instructional and curricular decisions that foster pro-social and emotional growth along with positive academic outcomes. Preparation to deal with concerns as they arise will include collaborative problem-solving for group and individual interventions (e.g., conflict resolution, social skills). Content on how to proactively respond to problem situations in the future will include methods on how to collaborate in the design, implementation, and monitoring of individual interventions for young learners with challenging behaviors, regardless of disability classification status and the role and function of early childhood educators in crisis responding. Across these topic areas, we will discuss how to adjust real-world techniques to a variety of children (i.e., taking a focus on every child), with attention to gender, ethnicity, language learning status, special needs, or levels of classroom engagement and attention. NOTE: Background clearances required.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

ECED 2187. Practicum for Pre-K and Kindergarten. 3 Credit Hours.

This course provides pre-service teachers with opportunities to apply theories of learning and development, observe classroom management skills, and practice effective methods of instruction under the guidance of a cooperating teacher and through interactions with the practicum instructor. This three-credit practicum integrates content from three courses (ECED 2105, ECED 2106, and ECED 2108) through practical application and implementation of assignments in pre-kindergarten and kindergarten classrooms. Pre-service teachers complete 45 hours of field experience. The majority of time is spent on classroom experience and related professional development. Three stages of field experience are incorporated into this practicum. Observation (Stage 1) occurs throughout the semester as students experience the culture of an early childhood setting and the everyday life of classrooms, teachers, and children. Exploration (Stage 2) takes place as pre-service teachers conduct individual tutorials and work with a small group of students. Activities often include subject matter experiences, such as language and literacy, as well as outdoor play, and monitoring classroom routines and procedures. Pre-student Teaching (Stage 3) occurs as students design pedagogical materials and implement instructional plans with individuals, small groups and the whole class.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may be repeated for additional credit.

ECED 2251. Effective Use of Instructional Technology in Early Childhood Classrooms. 3 Credit Hours.

This 3 semester-hour undergraduate course will provide Early Childhood pre-service teachers with knowledge and experiences necessary for incorporating appropriate educational technology into their classrooms. The course will provide hands-on experiences to examine, interact with, and evaluate educational software and web sites, along with technology intended for young learners. Students will learn to develop classroom applications for use by both teachers and students, and to develop instructional materials for use in the classroom.

Repeatability: This course may not be repeated for additional credits.

ECED 2321. Curriculum Development and Implementation in Early Childhood Program. 3 Credit Hours.

This course provides an introduction to the field of early education. Special emphasis is placed on understanding diverse program models and practices for children from birth to age eight. Students learn how to organize the classroom and plan educationally appropriate experiences for young children. Practicum experiences in local schools and child care centers provide opportunities for students to implement curricular activities in areas such as language and literacy, mathematics, science, social studies, expressive arts, and play. NOTE: This is an introductory course that serves as a prerequisite to all other early childhood courses.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may not be repeated for additional credits.

ECED 2322. Family/School/Community Environments for Young Children. 3 Credit Hours.

The purpose of this course is to provide early childhood educators with information about (a) what school-family-community relations are, (b) how they can promote children's early academic and social development as well as other family and school outcomes, and (c) how teachers and other educators can build strong, healthy, mutually beneficial relationships with families and communities.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may not be repeated for additional credits.

ECED 3106. Literacy Foundations for the Primary Grades: First Grade through Fourth Grade. 3 Credit Hours.

The main focus of this course is to develop knowledge of the theories, methods and materials that can be used to teach reading concepts and skills in the elementary classroom (from first grade through fourth grade). The core curriculum for reading education should equip graduating teachers with the theoretical and practical knowledge to teach young children how to read and comprehend written text and to produce readers who are successful in the classroom and on standardized tests and use reading effectively to negotiate the world. There is growing consensus around a set of six foundational elements that teachers must use to produce proficient readers that should be included in any systematic program of study. These six foundational elements-- foundations in theory and research, word-level instructional strategies, text-level comprehension strategies, reading and writing connections, Instructional approaches and materials, and integrated assessment-- are the key components of the syllabus. Current research has provided important insight into how young children acquire literacy skill-- reading, writing, and comprehension of text. However, these new theoretical understandings have not entirely translated into effective classroom practices. Through current readings and class discussion the following questions will be addressed: How should we think about reading and the teaching of reading? How will we motivate young children to learn to read? How do we approach instruction for children who are struggling to learn to read? How do we prepare young children to approach different types of text and text from different subject areas? How can classroom activities be developed that emphasize reading and comprehension? How can assessment be used to help tailor the literacy curriculum? How can these changes to include all children? NOTE: Must be admitted to candidacy.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: ECED 3187.

Repeatability: This course may not be repeated for additional credits.

ECED 3107. Learning Mathematics for the Primary Grades: First through Fourth Grade. 3 Credit Hours.

The main focus of this course is to develop knowledge of the theories, methods and materials that can be used to teach mathematics concepts and skills in preschool through fourth grade classrooms. Students will develop both a) a conceptual understanding of the important identified math concepts for first through fourth graders and b) procedural knowledge of how to teach children mathematical concepts using developmentally appropriate strategies and activities. The purpose of this course is to help pre-service teachers discover how early childhood and elementary children think about and learn mathematics. The overall objective of teaching mathematics should be to help each child to understand mathematical concepts, enabling them to become mathematically literate. The foundations for this course are the Professional Standards for Teaching Mathematics set forth by the National Council of Teachers of Mathematics. These standards propose significant change in mathematics teaching in the Pre-K - 12 classrooms, as well as how mathematical learning is assessed and evaluated. They are available online at <http://www.nctm.org/standards/>. NOTE: Must be admitted to candidacy.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: ECED 3109, ECED 3187.

Repeatability: This course may not be repeated for additional credits.

ECED 3108. Social Studies for the Early Years, Pre K-4. 3 Credit Hours.

The main focus of this course is to develop an understanding of the development of social skills and how they lay the critical foundation for civic and citizenship skills and habits, which are necessary for being a citizen in a democracy. The course will cover the important theories of social education and the developmental course of learning history, economics, civics, and geography. Woven throughout the class will be a discussion of culture and diversity as children encounter the world. A unique emphasis is on the children's social development from pre-K to grade 4. There has been a dramatic shift in how young children understand cultural universals, the core of the early childhood social studies curriculum. These new theoretical understandings are slowly being translated into effective classroom practices. Through current readings and class discussion the following questions will be addressed: What do young children understand about cultural universals (e.g., food, clothing, shelter)? How will we prepare young children for a world in which respect for the environment, diversity, and the principles of democracy have become increasingly important? How can activities be developed that embody the principles of children's concept development in history, economics, geography, and citizenship? How can we create learning experiences that include and value all children's backgrounds? NOTE: Must be admitted to candidacy.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: ECED 3106, ECED 3187.

Repeatability: This course may not be repeated for additional credits.

ECED 3109. Science for the Early Years. 3 Credit Hours.

This three-credit course will draw on inquiry, instructional technology (e.g., video vignettes of classroom activities and science websites), and collaborative lab-based activities to explore current issues of teaching and learning science in the pre-K and early elementary school classroom. It is very important that young children develop scientific habits of mind from the outset. As a result, this course will be based on developing these habits of mind while giving students an understanding of the "Big Ideas" in the field. Therefore, the first part of this course will be devoted to developing an understanding for those habits of minds and how to engage young children. The second part of the course will examine the Big Ideas in science as a whole, focusing heavily on scientific inquiry as a pedagogical approach and a learning goal. Throughout the course, investigating the preconceptions that young children bring to the science classroom will be emphasized, as well as discovering the pedagogical approaches to uncovering and addressing them. Students will apply, evaluate, and reflect upon early childhood science teaching methods through class activities and field experience assignments that address the interdisciplinary nature of science. The assignments for the course will use the foundation fostered in the course to (a) examine science content, (b) student conceptions, (c) the meeting of theory and practice, (d) instructional resources (e.g., museums, websites, children's literature), and (e) lesson planning. Students will have opportunities to develop their own philosophy of science education and explore each of the major content domains in science. NOTE: Must be admitted to candidacy.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: ECED 3107, ECED 3187.

Repeatability: This course may not be repeated for additional credits.

ECED 3187. Practicum for the Primary Grades. 3 Credit Hours.

This practicum is a continuation of the early childhood field experiences with 3- to 5-year-old children. For this practicum with school age children, students will be placed in 1st through 4th grade classrooms for the purpose of implementing lessons and activities in reading, math, science, and social studies. Students will be expected to implement activities and lessons with individual children, as well as small and large groups. This practicum experience is an integral part of the methods courses with which it is associated and is under the direct supervision of a university instructor and the cooperating teacher. NOTE: Must be admitted to candidacy.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: ECED 3107.

Repeatability: This course may be repeated for additional credit.

ECED 3205. Assessment in Early Childhood Education. 3 Credit Hours.

This course is designed to provide early childhood educators with the ability to use a variety of assessment methods to determine the developmental levels and needs of young children. Learners are introduced to the meaning and uses of authentic assessment as well as various tools and assessment strategies. The course addresses the interpretation of observational and assessment data to monitor children's progress, guide instructional practice, and identify at-risk children. This course requires 15 hours of field experience and, therefore, background clearances prior to enrollment. The purpose of the field work is to provide experiences for students to learn how to conduct focused, systematic, and unbiased observations useful for making informed instructional and assessment decisions on an individual case study child. In addition, students will learn ways to gather documentation on all the children in the class in multiple developmental areas.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: ECED 3296.

Repeatability: This course may not be repeated for additional credits.

ECED 3206. Differentiated Reading Instruction in the Early Grades. 3 Credit Hours.

Every classroom is made up of students who have diverse backgrounds, different strengths and weaknesses, and varying approaches to learning. A "one-size fits all" approach to reading instruction will not adequately address the needs of ALL students. Differentiated instruction is an instructional approach designed to understand students' developmental level and provide instructional support that scaffolds individual learning. At its most basic level, differentiation consists of the efforts of teachers to respond to variance among the learners in the classroom and to tailor instruction to meet individual needs. In essence, teachers differentiate instruction whenever they reach out to an individual or small group to vary their teaching skills in order to create the best learning experience possible. This course will focus on four basic classroom elements in discussing differentiated instruction - content, process, product, and learning environments. The content is what the student needs to learn about reading and what various methods will be used to help the student access that information. The process is the specific activities that the student will engage in order to master the reading content. The products are the various projects and activities that require the student to rehearse, apply and extend the information that he has learned. The learning environments are the way the classroom is structured to support the differentiated instruction activities and grouping practices.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may not be repeated for additional credits.

ECED 3207. Mathematics and Science Pedagogical Content Knowledge. 3 Credit Hours.

This three credit hour course focuses on the idea of pedagogical content knowledge (PCK) for mathematics and science teaching: the intersection of content specific knowledge and pedagogy. According to Shulman (1986), PCK includes "the ways of representing and formulating the subject that make it comprehensible to others...Pedagogical content knowledge also includes an understanding of what makes the learning of specific topics easy or difficult: the conceptions and preconceptions that students of different ages and backgrounds bring with them to the learning of those most frequently taught topics and lessons." Recently, the Common Core State Standards for Mathematics has called for a greater focus, coherence, and rigor in understanding key mathematical concepts (CCSSI, 2010). In teaching content courses for preservice teachers, Thanheiser et al., (2010) focus on engaging preservice teachers in developing their own understanding, facilitating opportunities for mathematical communication, and conducting formative assessments of their knowledge and development to inform mathematics instruction. Similarly, the Next Generation Science Standards (Quinn et al, 2012) emphasize that teachers' knowledge be built around crosscutting concepts that unify the study of science and engineering through their common application across fields. For mathematics, this course will focus on geometry, measurement, and data analysis, which are topics expected by the CCSS but have little room in ECE 3107 due to time constraints. For science, the content will focus on crosscutting topics emphasized in the NGSS in the physical, life, and earth science and engineering.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: ECED 3208, ECED 3296.

Repeatability: This course may not be repeated for additional credits.

ECED 3208. Social Studies for the Early Years, Pre K-4. 3 Credit Hours.

The main focus of this course is to develop an understanding of the development of social skills and how they lay the critical foundation for civic and citizenship skills and habits, which are necessary for being a citizen in a democracy. The course will cover the important theories of social education and the developmental course of learning history, economics, civics, and geography. Woven throughout the class will be a discussion of culture and diversity as children encounter the world. A unique emphasis is on the children's social development from pre-K to grade 4. There has been a dramatic shift in how young children understand cultural universals, the core of the early childhood social studies curriculum. These new theoretical understandings are slowly being translated into effective classroom practices. Through current readings and class discussion the following questions will be addressed: What do young children understand about cultural universals (e.g., food, clothing, shelter)? How will we prepare young children for a world in which respect for the environment, diversity, and the principles of democracy have become increasingly important? How can activities be developed that embody the principles of children's concept development in history, economics, geography, and citizenship? How can we create learning experiences that include and value all children's backgrounds? NOTE: Must be admitted to candidacy.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: ECED 3207, ECED 3296.

Repeatability: This course may not be repeated for additional credits.

ECED 3209. Teaching English Language Learners in the Early Grades. 3 Credit Hours.

This course offers students an introduction to theory, research and practice in teaching English language learners in the early grades (i.e. PreK-4). The course begins with an overview of sociocultural characteristics of ELLs, legal responsibilities, and educational and language policies in the United States. Students will also learn the basic theories and principles associated with second language acquisition. Students will explore the philosophies of bilingual and ESL education as well as different program models that address the education of linguistically diverse students. Students will be introduced to an array of contemporary, research-based instructional approaches, including content-based instruction, task-based language teaching, and sheltered English instruction. As a result, they will gain an understanding of how to adapt standards-based lessons for English language learners. Through a practicum component, students will learn to design lessons and assessments for small-group instruction. Students will also develop cross-cultural competence through interactions with ELLs, teachers and school staff in the middle grades.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: ECED 3206, ECED 3298, EDUC 4389.

Repeatability: This course may not be repeated for additional credits.

ECED 3287. Practicum II for the Primary Grades. 3 Credit Hours.

Temple University's Practicum courses provide students with an opportunity to practice the craft of teaching. Practicum II for the Primary Grades (ECED 3287) offers a second authentic, in-depth classroom experience, following on the heels of ECE 3187. This course provides practicum students in Junior 2 with the opportunity to explore, implement, and reflect on the research, theory, and strategies introduced in the methods courses. The practicum presents a unique opportunity in the life of a developing teacher in that it provides a safe space for trial and error in the development of one's professional style and practice. Throughout the semester, the practicum student has the on-going feedback and support of his peers, mentor teachers, and school leaders at the practicum site, and an experienced master teacher who serves as the University Coach. NOTE: Clearances are required.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: ECED 3207, ECED 3208, ECED 3296, SPED 3211.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in ECED 3187.

ECED 3296. Differentiated Literacy and Assessment. 3 Credit Hours.

Every classroom is made up of students who have diverse backgrounds and different strengths and weaknesses. A "one-size fits all" approach to reading instruction will not adequately address the needs of all students. Differentiated instruction is an instructional approach designed to understand students' developmental level and provide instructional support that scaffolds individual learning. At its most basic level, differentiation consists of the efforts of teachers to tailor instruction to meet individual needs. This course will focus on four basic classroom elements in discussing differentiated instruction - content, process, product, and learning environments. The content is what the student needs to learn about reading and what various methods will be used to help the student access that information. The process is the specific activities that the student will engage in order to master the reading content. The products are the various projects and activities that require the student to rehearse, apply and extend the information that he has learned. The learning environments are the way the classroom is structured to support the differentiated instruction activities and grouping practices. Assessment is essential in all facets of differentiation, because data show the teacher what children already know, how well they are learning new information, and what kinds of activities would best support their continued learning. This course has been designated as a writing intensive course. In their writing for the course, students will practice (a) effective organizational structure, (b) advanced instructional terminology, and (c) clear and logical communication. The writing assignments are designed to teach students about the kinds of writing that are specific to early childhood classroom teachers. Specifically, students will be asked to produce writing that is appropriate for fellow educators and parents.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: ECED 3287.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ECED 3298. Assessment in Early Childhood Education. 3 Credit Hours.

This course is designed to provide early childhood educators with the ability to use a variety of assessment methods to determine the developmental levels and needs of young children. Learners are introduced to the meaning and uses of authentic assessment as well as assessment terms, various tools, and assessment strategies. The course addresses the interpretation of observational and assessment data to monitor children's progress, guide instructional practice, and identify at-risk children. This course requires 15 hours of field experience. The purpose of the field work is to provide experiences for students to learn how to conduct focused, systematic, and unbiased observations useful for making informed instructional and assessment decisions on an individual case study child. In addition, students will learn ways to assess, observe, and record documentation.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ECED 3322. Observing, Documenting, and Assessing Young Children's Learning. 3 Credit Hours.

This course gives students experience in using effective methods for observing and documenting young children's development. Various recording methods are featured along with principles of child development and appropriate practice. Practicum experiences in local schools and centers provide opportunities for students to conduct focused, systematic, and unbiased observations useful for making instructional and assessment decisions.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may not be repeated for additional credits.

ECED 4101. Integrating the Arts into Early Childhood Education. 3 Credit Hours.

This course is a joint project between the College of Education and the Boyer College of Music and Dance. It is designed to provide an overview of the role and the significance of the arts in the education of children from Pre-K through fourth grade. Pre-service teachers will be exposed to art experiences that support standards, increase learning of content, teach basic aesthetic principles, and help them learn specific techniques and ideas. Through numerous hands-on experiences, students will start with their own skills and perspectives as creators of art and then move to explore the power and potential of the arts to reach children in new and effective ways. Students will be introduced to four art forms --dance, music, drama, and the visual arts -- and their unique histories and pedagogies. Students will learn from disciplinary experts in each of these four domains, who also have expertise in engaging young children in developmentally appropriate ways.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Early Childhood Education.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Repeatability: This course may not be repeated for additional credits.

ECED 4102. Children's Literature: Pre-K through Fourth Grade. 3 Credit Hours.

Books are a valuable source of learning and pleasure for children at every stage of development. This course focuses on literature for children in pre-kindergarten through fourth grade. Students in the course will engage in selecting, interpreting, discussing, and evaluating children's books in preparation for their professional careers. They will also examine theory and research as well as classroom practice relating to children's literature, with and without pictures, in a variety of genres. The field of children's literature is expanding rapidly. Vibrant picture books display many artistic media, styles and text-picture relationships. Works of fiction and non-fiction not only pertain to an increasing diversity of themes and issues but also exhibit an array of writing styles and formats. This introductory course surveys literature written for children with varied abilities, cultural backgrounds and book preferences. Its ultimate purpose is to develop future teachers' appreciation of (and passion for) a broad range of children's literature that they will be able to use effectively in the classroom.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Repeatability: This course may not be repeated for additional credits.

ECED 4106. The Learning Community: Family and Community Relationships. 3 Credit Hours.

The purpose of this course is to provide pre-service early childhood and elementary grade teachers with critical information about what school-family-community relationships are; how they can promote children's early academic and social development as well as other family and school outcomes; and how teachers and other educators can build strong, healthy, mutually beneficial relationships with families and communities. An important theme in this course is that all children, families, schools, and communities are different, thus students in this course will learn about this diversity, develop knowledge about general guidelines for good practice, and spend time tailoring these guidelines to specific situations that they have encountered or are likely to encounter in their careers as educators. Special attention will be devoted to diversity in terms of family culture, language, ethnicity, income, household structure, and disability status of children.

Repeatability: This course may not be repeated for additional credits.

ECED 4187. Senior Practicum in Early Childhood Education. 1 to 6 Credit Hour.

This integrated practicum experience provides opportunities for students to apply theories of learning and development, observe and participate in implementing classroom management, and practice developing and delivering effective evidence-based instructional practices with the guidance of a cooperating teacher and through interactions with the practicum coach in varied content areas to students ranging in grade level from Pre-kindergarten through Fourth grade, depending on individual placements in inclusive classrooms and other educational settings. Focus will be placed on delivery of instruction in Literacy, Social Studies, and Special Education. Particular emphasis will be focused on ways to connect information from your co-requisite courses and apply this knowledge to ALL learners in the classroom. Differentiated instruction, active engagement, classroom management, response to intervention, appropriate instructional modification, and use of a variety of assessments related to appropriate instructional decision-making are themes that run throughout this learning experience.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may be repeated for additional credit.

ECED 4207. Mathematics and Science Pedagogical Content Knowledge. 3 Credit Hours.

This three credit hour course focuses on the idea of pedagogical content knowledge (PCK) for mathematics and science teaching: the intersection of content specific knowledge and pedagogy. According to Shulman (1986), PCK includes "the ways of representing and formulating the subject that make it comprehensible to others...Pedagogical content knowledge also includes an understanding of what makes the learning of specific topics easy or difficult: the conceptions and preconceptions that students of different ages and backgrounds bring with them to the learning of those most frequently taught topics and lessons." Recently, the Common Core State Standards for Mathematics has called for a greater focus, coherence, and rigor in understanding key mathematical concepts (CCSSI, 2010). In teaching content courses for preservice teachers, Thanheiser et al., (2010) focus on engaging preservice teachers in developing their own understanding, facilitating opportunities for mathematical communication, and conducting formative assessments of their knowledge and development to inform mathematics instruction. Similarly, the Next Generation Science Standards (Quinn et al, 2012) emphasize that teachers' knowledge be built around crosscutting concepts that unify the study of science and engineering through their common application across fields. For mathematics, this course will focus on geometry, measurement, and data analysis, which are topics expected by the CCSS but have little room in ECE 3017 due to time constraints. For science, the content will focus on crosscutting topics emphasized in the NGSS in the physical, life, and earth science and engineering.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may not be repeated for additional credits.

ECED 4324. Integrated Programming for Young Children. 3 Credit Hours.

This advanced seminar is designed to prepare students for educating infants, toddlers, and young children who are at risk or have disabilities. The main focus is on differentiation of teaching method, curriculum content and resources considered to be key components of inclusive classroom practice. NOTE: This is an advanced seminar and should be taken as the final early childhood course.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may not be repeated for additional credits.

ECED 4588. Student Teaching in Early Childhood Education. 7 to 11 Credit Hours.

Involves a school placement where students demonstrate their knowledge of and competence in early childhood teaching, birth through third grade (N-3). Students work with a certified cooperating teacher and are supervised by a Temple University faculty member. NOTE: All coursework must be completed before taking this course.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ECED 4801 (may be taken concurrently), ECED 4803 (may be taken concurrently), or 'Y' in CREA03) and minimum GPA of 3 in: courses numbered 0700 to 4999.

ECED 4801. Senior Seminar and Performance Assessment in Early Childhood Education. 3 Credit Hours.

Students will be involved in experiences that prepare them for making the transition from college to the practice setting, and engage in activities that foster professionalism in school and community settings. The senior performance assessment, a requirement for teacher certification students, is also a part of the course. NOTE: This is a required course for all teacher certification candidates, which is taken during the student teaching semester.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: ECED 4588.

Repeatability: This course may not be repeated for additional credits.

ECED 4802. Senior Seminar I in Early Childhood Education. 1 or 3 Credit Hour.

This seminar is designed to help you make connections between the teaching experiences you will have this semester as student teachers and what you have learned in your university classes. The course will help you bridge theory and practice and provide you with a framework of support and guidance as you prepare to take charge of your own classroom. It will also provide you with tools to reflect on your experience and learn from it, which will facilitate your successful entry into the teaching profession. To accomplish this, we will engage in discussions and activities that center on your core beliefs about teaching, the context for your teaching (where you teach), your pedagogical practices (how you teach), the content you teach (what you teach), and the needs of your students (whom you teach). We will also examine how theory informs classroom practice and come to understand how instructional management strategies are inherently linked to good pedagogy. We will also examine and discuss how both formal and informal student assessments work as tools for reflection and improvement.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: ECED 4187.

Repeatability: This course may not be repeated for additional credits.

ECED 4803. Senior Seminar II in Early Childhood Education. 2 or 3 Credit Hours.

This seminar is designed to help you make connections between the teaching experiences you will have this semester as student teachers and what you have learned in your university classes. The course will help you bridge theory and practice and provide you with a framework of support and guidance as you prepare to take charge of your own classroom. It will also provide you with tools to reflect on your experience and learn from it, which will facilitate your successful entry into the teaching profession. To accomplish this, we will engage in discussions and activities that center on your core beliefs about teaching, the context for your teaching (where you teach), your pedagogical practices (how you teach), the content you teach (what you teach), and the needs of your students (whom you teach). We will also examine how theory informs classroom practice and come to understand how instructional management strategies are inherently linked to good pedagogy. We will also examine and discuss how both formal and informal student assessments work as tools for reflection and improvement.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: ECED 4588.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (ECED 4802 or 'Y' in CREA02)

Earth & Environmental Science (EES)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

EES 0827. Hidden Figures to Gamergate: Race and Gender in Science and Technology. 3 Credit Hours.

Who do you think of when someone asks you to draw a scientist? In this GenEd course we explore the myriad of ways in which racial and gender stereotypes have affected our perception of what it means to be an accomplished scientist. When we think of influential scientists, the names Claudia Alexander and Carolyn Parker should come as easily to the mind as Buzz Aldrin or Thomas Edison. We will discuss how the public perceives science and scientists, and explore the implications of this in terms of how science serves a diverse society. We will also explore the ways in which violence and misogyny have impacted our digital world. Technology and science change our society; who authors this change influences how we participate in the process and the cultural narrative of who innovates and leads our society, which is critical to the current controversy of science in politics.

Course Attributes: GD

Repeatability: This course may not be repeated for additional credits.

EES 0836. Disasters: Geology vs. Hollywood. 3 Credit Hours.

This course is typically offered in Fall, Spring, and Summer.

Clips from Hollywood disaster movies will drive our inquiry into geologic phenomena. Can you really drive over a lava flow in a jeep? (Dante's Peak) Are we foolish not to prepare for a major earthquake in New York City? (Aftershock) Could global warming melt the polar ice caps turning "dry land" into a myth? (Waterworld) Would the impact of an asteroid the "size of Texas" kill half the Earth by heat and freeze the remainder in a nuclear winter? (Armageddon) Learn the fundamentals of plate tectonics, how petrologic properties control volcanic explosivity, how to calculate earthquake locations from seismic data, and prepare a disaster readiness plan for a major U.S. city. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core.

Course Attributes: GS, SF

Repeatability: This course may not be repeated for additional credits.

EES 0837. Evolution of Earth and Its Life. 3 Credit Hours.

This course is typically offered in Fall and Spring.

The Earth is our home, but few of us stop to consider in detail how it works and changes. Although popularly applied mostly to biological systems, the word evolution simply means "change through time". This course intends to foster understanding of the Earth as an evolving and changing interconnected system across the vast expanse of 4.5 billion years of geologic history. Where did we come from? How did we get where we are now? What can we expect in the future? Through hands-on experience with fossils and rocks, students discover how to decode information about past Earth environments and ecosystems and the implications of this knowledge for understanding current and future global issues. Special focus is given to major interactions between the living and non-living parts of the Earth system, including major mass extinction events, many of which have been linked to climate shifts with disastrous consequences for living organisms. (Prior to Spring 2022, this course was titled "Evolution & Extinctions". Students may not receive credit for both EES 0837: Evolution & Extinctions and EES 0837: Evolution of Earth and Its Life.) NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core.

Course Attributes: GS, SE, SF, SS

Repeatability: This course may not be repeated for additional credits.

EES 0842. Sustainable Environments. 3 Credit Hours.

This course is typically offered in Fall, Spring, and Summer.

Humans are at a critical juncture in their relationship with the environment. Many of the global changes occurring in the atmosphere, climate, and oceans can be attributed to human activity. While the standard of living has increased for many people across the globe, the technological advancements that have made this possible endanger future generations because of their environmental impacts. Environmental toxins and air pollution are increasing, and fossil fuels and forests are being depleted at unsustainable rates. Now more than ever, the viability of human life depends on the scientific understanding of global environmental change, and on developing science-based policies to both protect the environment and promote human well-being in a just and sustainable manner. Course mission: enhance your capability to be environmentally informed consumers and citizens based on a sound understanding of the ecological, technological, economic, political, and ethical dimensions of environmental sustainability. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot receive credit for this course if they have successfully completed GUS 0842/0942 or ENST 0842/0942.

Course Attributes: GS, SE, SF, SP, SS

Repeatability: This course may not be repeated for additional credits.

EES 0854. Geology of the National Parks. 3 Credit Hours.

This course is typically offered in Fall.

The primary purpose of the National Park Service is to preserve areas of natural or cultural interest for current and future generations. Quite commonly these areas of interest, such as the Grand Canyon, or Yellowstone National Park, are the result of extreme geologic forces which have shaped the landscape. The goal of this class is to use geologic principles to understand the "science of the scenery" of individual parks. Students will also address key issues within individual parks, such as the competing interests of visitor access vs. land management, the societal need for natural resources, and the preservation of unique or delicate ecosystems. NOTE: (1) This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. (2) Students cannot receive credit for this course if they have successfully completed EES 0954.

Course Attributes: GS, SE, SF, SP, SS

Repeatability: This course may not be repeated for additional credits.

EES 0873. Evil Plots. 4 Credit Hours.

Computer technology and the internet have produced a glut of digital information that can't be communicated without using charts and graphs. But like all forms of human communication, graphs can fib a little or lie outright. There are three basic ways data visualizations can go wrong: (1) The plot can be evil, designed to persuade or mislead rather than inform; (2) the data set may be suspect (too small, biased, or full of errors); or (3) even if the plot and data are okay, they may not support the claims being made. In this class, we will explore the representation and misrepresentation of data, learn the questions to ask about data quality, and how to spot falsehoods and fallacies in the digital age. Examples will be drawn from science, politics, marketing, business and more. Protect yourself by learning to spot evil plots! Students cannot receive credit for this course if they have successfully completed EES 0973.

Course Attributes: GQ

Repeatability: This course may not be repeated for additional credits.

EES 0874. Environmental Life Cycle Analysis: Does Buying "Green" Matter?. 4 Credit Hours.

With increasing societal awareness of environmental sustainability, many industry and business sectors have prioritized the development and application of green technology and/or green processes over the course of a product's life span. Life cycle analysis (LCA) is a scientific methodology that systematically examines both cumulative and potential environmental impacts of a product over its entire life cycle, ranging from the extraction of raw Earth materials to its disposal when all the materials ultimately return to the Earth. LCA can also provide comparative impacts among the different products, and both companies and consumers benefit from the environmental rating systems for their marketing and decision making processes. Through this course, we will learn how LCA model works in detail, using real-world examples, such as paper vs plastic bags, cathode ray tube (CRT) vs liquid crystal display (LCD) technology, as well as electronic wastes.

Course Attributes: GQ, SE, SF, SP, SS

Repeatability: This course may not be repeated for additional credits.

EES 0954. Honors Geology of the National Parks. 3 Credit Hours.

This course is typically offered in Fall.

The primary purpose of the National Park Service is to preserve areas of natural or cultural interest for current and future generations. Quite commonly these areas of interest, such as the Grand Canyon, or Yellowstone National Park, are the result of extreme geologic forces which have shaped the landscape. The goal of this class is to use geologic principles to understand the "science of the scenery" of individual parks. Students will also address key issues within individual parks, such as the competing interests of visitor access vs. land management, the societal need for natural resources, and the preservation of unique or delicate ecosystems. NOTE: (1) This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. (2) Students cannot receive credit for this course if they have successfully completed EES 0854. (3) This is an Honors course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GS, HO, SE, SF, SP, SS

Repeatability: This course may not be repeated for additional credits.

EES 0973. Honors Evil Plots. 4 Credit Hours.

Computer technology and the internet have produced a glut of digital information that can't be communicated without using charts and graphs. But like all forms of human communication, graphs can fib a little or lie outright. There are three basic ways data visualizations can go wrong: (1) The plot can be evil, designed to persuade or mislead rather than inform; (2) the data set may be suspect (too small, biased, or full of errors); or (3) even if the plot and data are okay, they may not support the claims being made. In this class, we will explore the representation and misrepresentation of data, learn the questions to ask about data quality, and how to spot falsehoods and fallacies in the digital age. Examples will be drawn from science, politics, marketing, business and more. Protect yourself by learning to spot evil plots! Students cannot receive credit for this course if they have successfully completed EES 0873. This is an Honors course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GQ, HO

Repeatability: This course may not be repeated for additional credits.

EES 1001. Introductory Geology. 4 Credit Hours.

This course is typically offered in Fall, Summer I and Summer II.

An introduction to the basic principles and processes of geology. Wide range of topics, including rocks and minerals, surface processes, plate tectonics, and the earth's interior. NOTE: This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.

Course Attributes: SA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 0701 to 0702, any MATH course numbered 0800 to 4999 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, STAT 1001 (may be taken concurrently), 'Y' in STT2, STAT 1102 (may be taken concurrently), STAT 1902 (may be taken concurrently), 'Y' in MC3A, 'Y' in MC6A, 'Y' in MATW, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

EES 2001. Physical Geology. 4 Credit Hours.

This course is typically offered in Fall, Spring, and Summer I.

Physical geology provides a working introduction to Earth materials and the major processes that shape our planet. Geology plays an important role in many aspects of our lives from everyday natural resources including soil (food) and water to environmental hazards and natural disasters. This course is intended to prepare geology and environmental science majors for advanced studies, while also providing all students with general knowledge of how our planet operates, allowing them to become better-informed citizens of the world. Upon completion of this course, students will understand the rock cycle, plate tectonics, geohazards, surface processes and environments, natural resources, and the climate system. Laboratory sessions (3 hours per week) provide hands-on experience and focus on the identification of mineral and rock specimens, map skills, and the visualization and interpretation of Earth processes.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 0702, any MATH course numbered 0800 to 4999 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MA01, STAT 1001 (may be taken concurrently), 'Y' in STT2, STAT 1102 (may be taken concurrently), STAT 1902 (may be taken concurrently), 'Y' in MC3A, 'Y' in MC6A, 'Y' in MATW, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

EES 2002. Energy and Environment. 3 Credit Hours.

Energy and Environment examines the scientific principles governing energy technologies and use, and the implications of energy development on our natural resources and environmental quality. The first part of the course will provide an introduction to the basic physical principles behind energy production, existing and emerging energy technologies, and energy use. The second part of the course will provide an understanding of the impacts associated with energy development on land, water and the atmosphere, impact assessment techniques, and interactions among energy, food and water resources. This course will provide an opportunity to become familiar with the future grand challenges in energy development in the context of changing climate and policy scenarios.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering, Science & Technology.

Course Attributes: SE, SF, SS

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (any MATH course numbered 0701 to 0702 (C or higher), any MATH course numbered 0800 to 4999 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MA01, STAT 1001 (may be taken concurrently), 'Y' in STT2, STAT 1102 (may be taken concurrently), STAT 1902 (may be taken concurrently), 'Y' in MC3A, 'Y' in MC6A, 'Y' in MATW, 'Y' in MC3S, 'Y' in CRMA18, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

EES 2011. Mineralogy I. 4 Credit Hours.

This course is typically offered in Fall.

Fundamentals of hand-specimen analysis including crystallography, bonding, physical properties, chemical composition and growth of common minerals.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in EES 2001 and (CHEM 1031 (may be taken concurrently), CHEM 1041 (may be taken concurrently), or CHEM 1951 (may be taken concurrently))

EES 2012. Mineralogy II. 4 Credit Hours.

This course is typically offered in Spring.

Microanalysis by polarized light microscopy, powder x-ray diffractometry and microprobe including site occupancy, crystal growth, and microstructural defects with emphasis on silicates.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in EES 2011.

EES 2021. Sedimentary Environments. 4 Credit Hours.

This course is typically offered in Fall and Spring.

Analysis of sediments, physical and biogenic structures, and strata to assess the dynamics of modern and ancient depositional environments. Laboratory and field exercises emphasize data collection, interpretation, and graphic presentation as a means of reconstructing sediment transport mechanisms and depositional settings. NOTE: Required day-long field trips. (Prior to fall 2016, this course was titled "Facies Models.")

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in EES 2001.

EES 2022. Paleontology and Stratigraphy. 4 Credit Hours.

This course is typically offered in Spring.

This course provides a working introduction to invertebrate paleontology and the principles of bio-, litho-, and allostratigraphy. Emphasis is placed on combining data from the geological and biological records to understand the sedimentary record through time. Students will gain skill in identifying major invertebrate fossil groups and describing their anatomy, paleoecology, and temporal significance; explore how sedimentological factors influence our understanding of evolution as recorded by the fossil record, and vice versa; and construct measured sections and stratigraphic columns and correlate using multiple stratigraphic techniques. Through two multi-day field trips, students will develop and employ field and map skills while investigating elements of earth history and changes in the tectonic setting of eastern North America through geologic time. NOTE: Two multi-day (including weekends) field trips are required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in EES 2021.

EES 2031. Introduction to Field Methods in the Earth and Environmental Sciences. 1 Credit Hour.

This course is typically offered in Fall.

This course offers a half semester (7-week), intensive introduction to various field methods. Techniques covered will provide a background and foundation to prepare students for both future field courses as well as employment in the environmental industry. Students will learn mapping techniques (geologic and topographic), geologic/soil/water sampling techniques, analysis and understanding of well-log/geophysical data, note taking skills, and the use of a compass to determine location as well as use to determine geologic structures. This course will include multiple field trips. This is a required course for the Certificate in Environmental Professional Training.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in EES 2001 and EES 2021.

EES 2032. Environmental Sensors. 1 Credit Hour.

This course is not offered every year.

This two-week intensive course will provide hands-on experience with implementing field-sensor systems to monitor the environment for research and citizen science projects. The students will familiarize with the fundamental operation principles of a variety of passive and active sensors used widely for long-term field measurements of meteorological and hydrological variables, field installation and maintenance, automation of data collection with data loggers, telemetry, and best practices for acquiring and securing data.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in EES 2001.

EES 2051. Introduction to Data Visualization and Analysis for Earth and Environmental Science. 3 Credit Hours.

This course is typically offered in the Fall.

This course provides an introduction to the management, visualization, and analysis of data sets common to Earth and Environmental Science. Microsoft Excel and Matlab will be introduced and then used to analyze example data sets which introduce and reinforce key algebraic, calculus and physics concepts. Student understanding and skill is developed through projects analyzing stream flow, earthquake populations, plate tectonics and hot spot motion, atmospheric CO₂ concentration, and topography.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in EES 2001 and (MATH 1022 (may be taken concurrently), MATH 1031 (may be taken concurrently), MATH 1038 (may be taken concurrently), MATH 1041 (may be taken concurrently), MATH 1042 (may be taken concurrently), MATH 1044 (may be taken concurrently), MATH 1941 (may be taken concurrently), MATH 1942 (may be taken concurrently), MATH 1951 (may be taken concurrently), 'Y' in MC6, 'Y' in MATW, 'Y' in MC6A, or 'Y' in MC6T)

EES 2061. Introduction to Geochemistry. 4 Credit Hours.

This course is typically offered in Fall of odd-numbered years.

Application of chemical principles and quantitative methods to understand and solve various geological problems. Field trips and laboratory exercises will emphasize techniques of obtaining and measuring geological samples. Students will analyze, summarize, and present data in oral and written reports.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in EES 2001 and (CHEM 1031 or CHEM 1951)

EES 2065. Nanogeoscience and Technology. 4 Credit Hours.

This course is typically offered in Fall.

Today, everyone is talking about nanomaterials, even advertisements for consumer products use the prefix "nano" as a keyword for special features. Nanotechnology is one of the most important new technologies of the 21st century. Through this course, history, principles, mechanisms, many exciting phenomena and the processes of nano-scale materials, as well as their applications and environmental impact, will be covered in great detail. The lab component of this course will consist of analyzing nanoparticles in water samples, extracting nanomaterials from consumer products, and monitoring plant growth from soils amended with nanomaterials. Through the course of the lab exercises, students will have hands-on experience on various instruments, including inductively-coupled plasma spectrometry, x-ray diffraction, scanning electron microscopy, and transmission electron microscopy.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering, Science & Technology.

Course Attributes: SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 1032 (may be taken concurrently), CHEM 1952 (may be taken concurrently), or CHEM 1035) and (CHEM 1033 or CHEM 1953)

EES 2067. Introduction to Environmental Toxicology. 3 Credit Hours.

This course covers fundamental concepts of environmental toxicology, including dose-response, exposure routes, biological variation and toxicity phases. Topics include fate and effects of hazardous substances in organisms and the environment, air pollutants, pesticides, insecticides, aquatic toxicity, endocrine disruptors, biomarkers and bioassays, as well as risk assessment.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in EES 2061, (CHEM 1032 (may be taken concurrently) or CHEM 1952 (may be taken concurrently)), and (CHEM 1034 (may be taken concurrently) or CHEM 1954 (may be taken concurrently))

EES 2096. Climate Change: Oceans To Atmosphere. 4 Credit Hours.

This course is typically offered in Spring.

The major topics in Oceanography will be covered in addition to introducing students to meteorology through the study of the Atmospheric circulation system. These topics will give students a better understanding of climate change and forecasting. The course includes a significant writing project.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Environmental Science, Earth & Space Sci with Teachin, Geology, Sec Ed-Science Ed.

Course Attributes: SE, SF, WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in EES 2001.

EES 2097. Process Geomorphology. 4 Credit Hours.

This course is typically offered in Fall.

The course explores key Earth surface processes and landforms by examining the role of tectonic and climatic forces, as well as biota, in landscape evolution. The quantitative approach focuses on modern systems in order to reconstruct their ancient counterparts, including their subsurface expression in paleo-landscapes. Culminates in a term project based on original research of active geomorphic systems.

Course Attributes: SI, WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in EES 2001.

EES 3001. Igneous and Metamorphic Petrology. 4 Credit Hours.

This course is typically offered in Fall.

A comprehensive study of Igneous and Metamorphic rocks in both hand samples and thin sections. Understanding of the chemistry, physical properties, global distribution, origin and identification of Igneous and Metamorphic rocks. Lab work will emphasize mineral and rock identification of both hand and thin sections. Thin section production will be introduced. A small group paper and presentation are required, as are day field trips. Scientific literature will be analyzed to examine current issues relating to the Igneous and Metamorphic research.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in EES 2011.

EES 3011. Remote Sensing and GIS. 4 Credit Hours.

This course is typically offered in Spring.

The focus of this class is on remote sensing technologies and geographic information systems. Remote sensing is a dynamic field; new, high-resolution satellites are coming online almost daily, and there has been an exponential growth in applications of remote sensing data during the past decade, including: mineral exploration, precision agriculture, watershed management, land use classification, military intelligence, and climate monitoring. The demand for college graduates with experience in this field is growing exponentially as well. By the end of this class you won't be a remote sensing expert, but you will have a fundamental understanding of the uses and limitations of remote sensing data for geologic and environmental applications, as well as fundamental geographic information systems skills.

Department Restrictions: Must be enrolled in one of the following Departments: CST: College of Science & Tech, CST:Physics, CST: College of Science & Tech, CST:Biology, CST:Chemistry, CST:Earth & Environmental Sci, CST:Mathematics, CST:Computer & Info Sci, CST:Environmental Sciences, CLA:Geography & Urban Studies, Engineering: Engineering, Engineering: Engineering, Engineering:Civil Engineering, Engineering:Elec Engineering, Engineering:Mech Engineering.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: SF

Repeatability: This course may not be repeated for additional credits.

EES 3015. Drone Shortcourse. 1 Credit Hour.

This course is typically offered in Spring.

Drones are everywhere. This course offers a short introduction to use of drones, otherwise known as unmanned aerial vehicles (UAVs). Students will be taught use of drones in research and other societal applications, basics of flight and operation of drones, and regulations applicable to drone usage. This course does not provide certification to become a drone pilot, but the steps to certification will be reviewed. Flying experience will be provided through labs conducted at the Ambler campus. Students will complete a project involving video or photography using a drone.

Department Restrictions: Must be enrolled in one of the following Departments: Tyler:Architect & Env Design, CST: College of Science & Tech, CST:Physics, CST:Biology, CST:Chemistry, CST:Earth & Environmental Sci, CST:Mathematics, CST:Computer & Info Sci, CST:Environmental Sciences, CLA:Geography & Urban Studies, Engineering:Civil Engineering.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

EES 3021. Groundwater Hydrology. 4 Credit Hours.

This course is typically offered in the Spring.

This course provides an introduction to groundwater geology. Topics include how geology influences groundwater flow and geochemistry, how groundwater and surface water interact, and contamination and remediation issues. Student understanding of groundwater and contaminant movement is developed through a series of homework problems and labs that require basic algebra skills.

Course Attributes: SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in EES 2001 and (MATH 1022 (C or higher), any MATH course numbered 1038 to 4999 (may be taken concurrently), 'Y' in MC6, 'Y' in MC6A, 'Y' in MA04, 'Y' in MATW, 'Y' in CRMA05, or 'Y' in MC6T)

EES 3025. Physical Hydrology. 4 Credit Hours.

This course is typically offered in Fall.

This course examines the physical principles governing the flow of water on and beneath the Earth's surface and the relationship of hydrological processes to other disciplines such as geology, ecology, and atmospheric sciences.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in EES 2001, (MATH 1022 (C or higher), any MATH course numbered 1041 to 4999 (may be taken concurrently), 'Y' in MC6, 'Y' in MA04, 'Y' in MC6A, 'Y' in MATW, or 'Y' in CRMA05), and (PHYS 1061, PHYS 1961, PHYS 2021, or PHYS 2921)

EES 3031. Coastal Plain Sedimentology and Paleontology of the Cretaceous-Paleogene Transition. 2 Credit Hours.

This course is not offered every year.

This course offers a half semester (7-week) examination of the sedimentological and paleontological changes associated with the Cretaceous-Paleogene Boundary in the New Jersey coastal plain. Classroom lectures and laboratory activities on regional geology, sedimentology, and paleofaunas will be interspersed with field modules at the Edelman Fossil Park of Rowan University where students will learn and refine skills in lithologic description and stratigraphic mapping as well as basic paleontological field excavation, mapping, and data collection techniques.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in EES 2011 and EES 2022.

EES 3032. Field and Laboratory Methods in Environmental Geochemistry. 2 Credit Hours.

Students will learn fundamental principles of geochemistry as they apply to environmental problems. Students will learn field sampling techniques and become familiar with the use of laboratory techniques for solid and fluid analysis. Students will prepare field reports synthesizing multiple datasets to explain the processes that are occurring at each site. Field-based methods to discuss include the following: extraction from wells, surface water characterization (sampling and water quality loggers), sediment core sampling, and field analysis techniques such as portable XRF and photoionization detectors. Lab-based methods to discuss include the following: spectrophotometric methods, alkalinity by titration, ion chromatograph, ICP-OES, XRD, and rock/mineral digestion techniques.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in EES 2011.

EES 3042. Coastal Processes and Geomorphology. 4 Credit Hours.

This course is typically offered in Spring.

The course will apply a process geomorphological approach to understanding coastal behavior. Subjects will include the global distribution of coasts, wave and tidal hydraulics, barrier morphodynamics, nearshore and aeolian sediment transport, and morphological signatures of extreme events.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (EES 2021, EES 2042, or EES 2097)

EES 3065. Nanoscience & the Environment. 4 Credit Hours.

This course is typically offered in Fall.

Today, everyone is talking about nanomaterials, even advertisements for consumer products use the prefix "nano" as a keyword for special features. Nanotechnology is one of the most important new technologies of the 21st century. Through this course, history, principles, mechanisms, many exciting phenomena and the processes of nano-scale materials, as well as their applications and environmental impact, will be covered in great detail. The lab component of this course will consist of analyzing nanoparticles in water samples, extracting nanomaterials from consumer products, and monitoring plant growth from soils amended with nanomaterials. Through the course of the lab exercises, students will have hands-on experience on various instruments, including inductively-coupled plasma spectrometry, x-ray diffraction, scanning electron microscopy, and transmission electron microscopy.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering, Science & Technology.

Course Attributes: SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 1032 (may be taken concurrently), CHEM 1952 (may be taken concurrently), or CHEM 1035) and (CHEM 1033 or CHEM 1953)

EES 3082. Individual Study Program I. 1 to 4 Credit Hour.

This course is typically offered in Fall, Spring, and Summer I.

Individual independent study and research under supervision of a member of the Earth & Environmental Science Faculty. A final written report will be submitted to the faculty member. For further information and details, see the undergraduate advisor. NOTE: Student must have a cumulative GPA of 3.25 and have completed at least 30 credits (sophomore or junior standing).

Class Restrictions: Must be enrolled in one of the following Classes: Sophomore 30 to 59 Credits, Junior 60 to 89 Credits.

Repeatability: This course may be repeated for additional credit.

EES 3091. Research Methods. 3 Credit Hours.

This course is typically offered in Spring.

Research Methods is required for all of the TUteach with Teaching majors. It is one of several content courses specially designed to meet the needs of future teachers. Sections meet two hours per week for non-traditional, interactive lectures and two hours per week for lab. The course is cross-listed in Biology, Chemistry, Earth and Environmental Science, and Physics. The goals of the course are (1) to provide students with the tools that scientists use to solve scientific problems; (2) to give students the opportunity to use these tools in a laboratory setting; (3) to make students aware of how scientists communicate with each other through peer-reviewed scientific literature; and (4) to enable students to understand how scientists develop new knowledge and insights, the most important of which are eventually presented in textbooks and taught in conventional science classes. Students design and carry out four independent inquiries, which they write up and present in the manner that is common in the scientific community. The inquiries incorporate mathematics and the various science disciplines, thus the team of instructors teaching this course have expertise in different disciplines and are available to supervise all students as they work on their inquiries in the lab. The combination of Research Methods and the TUteach course "Perspectives on Science and Mathematics" (Philosophy 2196) provides prospective science and mathematics teachers with an in-depth understanding of how the scientific enterprise works. NOTE: EES 3091 is only available for major credit in the Earth and Space Science with Teaching BS program.

College Restrictions: Must be enrolled in one of the following Colleges: Science & Technology.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (SCTC 1289 or SCTC 1389)

EES 3506. Observing and Modeling Climate Change. 3 Credit Hours.

There is no scientific doubt that human activity has been influencing the climate system since the industrial era due to emissions of greenhouse gases and causing a rise in global mean temperature (i.e., global warming). While Earth's climate and temperature has fluctuated naturally in the past, the rate of current warming in response to human activity is unprecedented and is having a large impact on the climate system and living organisms on our planet. We are experiencing the effects of climate change today in the form of melting of sea ice, glaciers, and ice sheets, sea level rise, increases in the intensity of heat waves, change in frequency and intensity of droughts, extreme rainfall events, and wildfires. The results of climate model simulations suggest that the effects of climate change will worsen throughout the 21st century and beyond if we continue to emit greenhouse gases. In this course we will gain a foundational understanding of anthropogenic climate change and explore the evidence directly through hands-on analysis and visualization of real-world observational datasets. After investigating observational evidence, we will build an understanding of climate models, the experiments performed including climate projections, and how to access, analyze, and visualize publicly available model output. Along the way, students will gain experience in the tools that scientists use to analyze and visualize observational datasets and climate model output. While no prior computational knowledge is assumed, students will be introduced to aspects of the Python programming language, the command line interface, and GitHub. Course content and assignments will be centered around the use of Jupyter Notebooks. This course will be hands-on and assignment and project oriented, with in-class periods geared toward learning to analyze and visualize climate datasets.

Department Restrictions: Must be enrolled in one of the following Departments: CST: College of Science & Tech, CST:Physics, CST:Biological, CST:Chemistry, CST:Earth & Environmental Sci, CST:Mathematics, CST:Computer & Info Sci, CLA:Geography & Urban Studies, Engineering: Engineering.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1022, STAT 1001, STAT 1102, STAT 2103, GUS 3161, any MATH course numbered 1041 to 4999 (may be taken concurrently), 'Y' in MC6, 'Y' in MA04, 'Y' in MC6A, 'Y' in MATW, or 'Y' in MC6T)

EES 4031. Appalachian Tectonics. 2 Credit Hours.

This course is not offered every year.

This 2-week intensive course (Summer I) applies classroom and laboratory training from other EES courses to solve geological problems in the field. We will synthesize field observations and measurements from several field localities to understand the formation and erosion of the Appalachian mountains along the eastern coast of the United States. Students should expect to spend a minimum of 4 full days in the field, and on the other days, spend 3 hours in the classroom, and the rest of the day on individual and group work.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in EES 2011 and EES 2021.

EES 4082. Individual Study Program II. 1 to 4 Credit Hour.

This course is typically offered in Fall, Spring, and Summer I.

Individual independent study and research under supervision of a member of the Earth & Environmental Science Faculty. A final written report will be submitted to the faculty member. For further information and details, see the undergraduate advisor. NOTE: Student must have a cumulative GPA of 3.25 and have completed at least 60 credits (junior or senior standing).

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: SI

Repeatability: This course may be repeated for additional credit.

EES 4101. Structural Geology. 4 Credit Hours.

This course is typically offered in Spring.

The purpose of this course is to train students in the concepts and techniques of structural geology. Students will learn how to collect, analyze, and interpret geologic data drawn from a variety of disciplines pertinent to structural geology and present a cohesive argument. Results are presented as maps, reports, and computer models. NOTE: Geology B.S. Capstone.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in EES 2011, EES 2021, and (PHYS 1061, PHYS 2021, or PHYS 2921)

EES 4200. Topics in Geoscience. 1 to 3 Credit Hour.

This course is not offered every year.

This seminar will allow students to study current problems in geology and environmental science. NOTE: 3 credit courses may count as elective credit for Earth and Environmental Science majors. May be taken multiple times (on different topics) with permission of instructor.

Repeatability: This course may be repeated for additional credit.

EES 4210. Topics in Geoscience with Lab. 4 Credit Hours.

This course is not offered every year.

This seminar will allow students to study current problems in geology and environmental science. NOTE: Elective for Earth and Environmental Science majors (Geology and Environmental Science). May be taken multiple times (on different topics) with permission of instructor.

Repeatability: This course may be repeated for additional credit.

EES 4502. Ice and Global Climate. 3 Credit Hours.

We live in a time of rapid global warming and are faced with adverse effects on human society. Ice, in its various forms from snow to ice sheets, plays an important role in the global climate system by, for example, modulating the solar-energy flux and global sea level. Ice also provides a unique archive of past climate history that contributed to our understanding of global warming today. This course will provide an overview of different forms of ice and their role in Earth's climate system, and foundations in physical understanding of how ice behaves at and near Earth's surface. In addition, contemporary techniques in observations of different forms of ice will be explored with examples in processing and interpretation of publicly available datasets.

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PHYS 1061, PHYS 1961, PHYS 2021, or PHYS 2921) and EES 2001.

EES 4589. Field Geology. 2 to 6 Credit Hours.

This course is typically offered in Summer.

The purpose of this course is to train students in the techniques and methodologies of field geology. Students will learn how to collect, analyze, and interpret field data across a variety of geologic disciplines. Results are presented as maps, reports, measured sections, and computer models. NOTE: Students must seek prior permission to take the course elsewhere through the Petition to Take a Course at Another Institution. Course selection must be approved by an EES faculty advisor.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in EES 2011 and EES 2021.

EES 4696. Vertebrate Paleontology and Taphonomy. 3 Credit Hours.

This course is typically offered in Fall of odd years.

This course examines vertebrate fossils and their importance for interpreting and reconstructing terrestrial ecosystems. Students will learn the basics of vertebrate skeletal anatomy, interpret transport and depositional histories of skeletal elements and assemblages, and combine this information with geologic data to reconstruct paleoenvironmental settings and paleocommunity associations. Several class sessions will meet off-campus at local museums; one weekend field trip is required.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in EES 2022.

EES 4796. Soils and Paleosols. 4 Credit Hours.

The course is divided into two parts: modern soils and paleosols. The goals of this course are to teach students the fundamentals of modern soil genesis and classification in order to interpret ancient soils preserved in the rock record (paleosols), and to incorporate models of soil genesis into the traditional geology paradigm. Students will be exposed to a combination of laboratory methods and field work.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in EES 2021 and EES 2022 (may be taken concurrently)

EES 4896. Planetary Geology. 4 Credit Hours.

This writing-intensive course explores the modern and ancient geologic processes on other planets and discusses how studies of other planets can aid us in a better understanding of our Earth. The course will also cover topics such as planetary exploration and astrobiology and includes a lab.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (EES 2061, EES 3001, or EES 3096) and (MATH 1041, MATH 1941, MATH 1042 (may be taken concurrently), MATH 1044 (may be taken concurrently), MATH 1942 (may be taken concurrently), MATH 1951 (may be taken concurrently), any MATH course numbered 2043 to 3080 (D or higher; may be taken concurrently), or 'Y' in MATW)

Economics (ECON)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ECON 0858. The American Economy. 3 Credit Hours.

Should the federal government more forcefully engage health care issues, or are its current obligations a hidden time bomb facing the federal budget? Should we be concerned about the outsourcing of U.S. jobs? Is the minimum wage too low, or will increases in the minimum simply lead to greater unemployment? Students will engage these and other pressing issues, write position papers advocating specific actions that governments or firms should take, and debate these recommendations. While economic theory is not the centerpiece of this course, students will learn enough economic theory to be able to discuss policy in an informed manner. They will also be introduced to important sources of "economic" information, from government web sites to major publications. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for ECON 0858 if they have successfully completed SOC 0858.

Course Attributes: GU

Repeatability: This course may not be repeated for additional credits.

ECON 1001. Introduction to the Economy. 3 Credit Hours.

Discussion of what economics is all about. Provides an overview of how a market economy operates, what it does well, what it may not do so well, and what could be done instead. The concepts of economic analysis are developed and applied to discussing some of the current economic problems the world is facing. NOTE: (1) This course is designated for students who are not business or economics majors. Students planning to take 2000, 3000 or 4000 level economics courses may have to take Economics 1101 or 1102 in addition to Economics 1001. Look at prerequisites for a particular course to see if 1101 or 1102 is specified. (2) This course can be used to satisfy the university Core Individual and Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: IN

Repeatability: This course may not be repeated for additional credits.

ECON 1101. Macroeconomic Principles. 3 Credit Hours.

An introductory course in macroeconomics. Topics include business cycles, inflation, unemployment, banking, monetary and fiscal policy, international economics, and economic growth. NOTE: (1) Economics 1101 and 1102 may be taken in any order. (2) This course can be used to satisfy the university Core Individual and Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: IN

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 0702, SCTC 1021, any course with attribute "QA", any course with attribute "QB", 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in STA1, 'Y' in STA2, 'Y' in MC3A, 'Y' in MC6A, 'Y' in ST1A, 'Y' in ST2A, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

ECON 1102. Microeconomic Principles. 3 Credit Hours.

An introductory course in microeconomics. Topics include the market system, supply and demand, cost, competition, monopoly, oligopoly, factor markets, and public goods. NOTE: (1) Economics 1101 and 1102 may be taken in any order. (2) This course can be used to satisfy the university Core Individual and Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: IN

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 0702, SCTC 1021, any course with attribute "QA", any course with attribute "QB", 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in STA1, 'Y' in STA2, 'Y' in MC3A, 'Y' in MC6A, 'Y' in ST1A, 'Y' in ST2A, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

ECON 1103. Global Economics. 3 Credit Hours.

This course is designed to introduce non-majors to key terms and concepts economists use to analyze questions related to economic growth and development. Global economic issues to be discussed include questions such as persistence of underdevelopment, free trade vs. protectionism, migration, and the role of multinational corporations. NOTE: (1) May not be taken by FSBM students as a substitute for Economics 1101, 1102, 1901, or 1902. (2) This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: IS, SI

Repeatability: This course may not be repeated for additional credits.

ECON 1901. Honors Macroeconomic Principles. 3 Credit Hours.

An introductory course in macroeconomics. Topics include business cycles, inflation, unemployment, banking, monetary and fiscal policy, international economics, and economic growth. NOTE: (1) 1901 is the honors course. It usually requires additional reading and writing assignments. (2) This course can be used to satisfy the university Core Individual and Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, IN

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 0702, any course with attribute "QA", any course with attribute "QB", 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in STA1, 'Y' in STA2, 'Y' in MC3A, 'Y' in MC6A, 'Y' in ST1A, 'Y' in ST2A, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

ECON 1902. Honors Microeconomic Principles. 3 Credit Hours.

An introductory course in microeconomics. Topics include the market system, supply and demand, cost, competition, monopoly, oligopoly, factor markets, and public goods. NOTE: (1) 1902 is the honors course. It usually requires additional reading and writing assignments. (2) This course can be used to satisfy the university Core Individual and Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, IN

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 0702, any course with attribute "QA", any course with attribute "QB", 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in STA1, 'Y' in STA2, 'Y' in MC3A, 'Y' in MC6A, 'Y' in ST1A, 'Y' in ST2A, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

ECON 2000. Special Topics/Non-Majors. 3 Credit Hours.

Topics vary. See academic advisor for a description.

Repeatability: This course may be repeated for additional credit.

ECON 2061. Foundations of Macroeconomic Development. 3 Credit Hours.

This course provides students with the tools to understand current and historic events in the world economy. We will study selected models in economic growth, international trade, and international finance. The theoretical background will then be used as the basis for discussion of international economic policy issues. Note: This course does not count towards the major or minor in Economics.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1102, ECON 1902, or ECON 1103) and (MATH 0702, 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC3A, 'Y' in MC6A, or 'Y' in MC3S)

ECON 2408. Economics of Everyday Choices. 3 Credit Hours.

This course discusses key economic concepts that play an important role in major life choices. Particular emphasis is placed on financial decisions, such as saving for retirement, house and car purchases, and financing college education. These personal financial decisions are placed into their macroeconomic context; topics such as inflation, interest rates, and banking are discussed. Using a calculator and basic mathematical concepts, students learn how to access and evaluate government and private data pertaining to each of the topics of the course. Duplicate Credit Warning: Students will only receive credit for one of these: ECON 2408 or ECON 3408. Note: This course is designed for non-majors and will not count towards the major in Economics or Mathematical Economics. Students majoring in Economics or Mathematical Economics may take this as a non-major elective only.

Repeatability: This course may not be repeated for additional credits.

ECON 2585. Internship. 1 to 12 Credit Hour.

This course is intended to combine work experience with long-term learning goals. Students who have obtained a qualified internship can enroll. Each student will maintain regular contact with the instructor of the course, and will complete a series of written assignments. These written assignments will give progressively more in depth analyses of the place of the internship. The objective is to gain awareness of the purpose of the organization, its function in society, its challenges, and the decisions that it needs to make regarding its long-term goals. The student will report not only on his or her own activities, but also on the long-term goals and challenges of the organization. An internship is both an entry level position for an organization, and an opportunity to explore the needs of that organization, and to begin to think about broader issues, such as those that a leader or president with that organization might address one day.

Repeatability: This course may be repeated for a total of 12 credit.

ECON 3062. Economics of Global Poverty. 3 Credit Hours.

This course will introduce students to the microeconomics foundations of development and the economic lives of the poor in low- and middle-income countries. Topics include measurement of poverty, inequality, and human development.

Course Attributes: SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1102, ECON 1103, or ECON 1902) and (MATH 0702, any course with attribute "QA", any course with attribute "QB", 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in STA1, 'Y' in STA2, 'Y' in MC3A, 'Y' in MC6A, 'Y' in ST1A, 'Y' in ST2A, or 'Y' in MC3S)

ECON 3408. Economics for Life. 3 Credit Hours.

Increasingly, people are expected to make their own personal financial choices. Economics, which is often defined as the study of choice, provides a structure for making these decisions. This course is designed to help a student, regardless of his or her major, to understand what options are available with respect to a given financial choice and how to go about deciding which one is best in terms of that student's preferences. Among the financial choices that may be discussed are: whether to rent or buy a house or apartment, whether to accept a current job offer or wait for a better one, and when and how much to begin setting aside for retirement.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1102 or ECON 1902)

ECON 3501. Intermediate Microeconomic Analysis. 3 Credit Hours.

An intermediate treatment of microeconomic theory and applications. Topics include consumer behavior, production, costs, perfect competition, imperfect competition, factor markets, public goods, and market failure. NOTE: This theory course is designed for economics, finance, and actuarial science majors with analytic skills. It is required for all Economics majors. It is not recommended for non-majors who earned less than B- in Economics 1101 or 1102. Students who have received credit for ECON 3701 may not register for this course.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW) and (ECON 1102 or ECON 1902)

ECON 3502. Intermediate Macroeconomic Analysis. 3 Credit Hours.

An intermediate treatment of macroeconomic theory and policy. Following a discussion of the important macroeconomic sectors, static and dynamic macroeconomic models are developed. Unemployment, inflation, business cycles, monetary and fiscal policy, economic growth, and the balance of payments are then analyzed using these models. NOTE: This theory course is designed for economics, finance, and actuarial science majors with analytic skills. It is required for all Economics majors. Not recommended for non-majors who earned less than B- in Economics 1101 or 1102. Students who have earned credit for ECON 3702 may not register for this course.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW) and (ECON 1102 or ECON 1902)

ECON 3503. Introduction to Econometrics. 3 Credit Hours.

Introduction to the theory and practice of econometrics. Topics include a review of basic statistics, simple regression, multiple regression, dummy variables, autocorrelation, heteroscedasticity, and model specification. Applications in economics are stressed. Problem sets, computer estimation of economic relationships, and a data analysis paper are required. This course is strongly recommended for Economics majors. NOTE: Not recommended for non-majors who earned less than B- in Economics 1101 or 1102.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW), (ECON 1102 or ECON 1902), and (STAT 2103, STAT 2903, MATH 3031, STAT 2101, or MATH 2031)

ECON 3504. Mathematical Economics. 3 Credit Hours.

Elements of set theory, calculus, and matrix algebra are presented and used to analyze mathematical models from economic theory, econometrics, management science, and statistics. This course is strongly recommended for Economics majors.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW), (ECON 1102 or ECON 1902), and (MATH 1031, MATH 1041, MATH 1941, MATH 1038, or 'Y' in MATW)

ECON 3506. Energy, Ecology, and Economy. 3 Credit Hours.

After surveying the elements of energy and ecology, and reviewing the basics of economics, this course investigates the interaction of the three. Each of the major nonrenewable and renewable energy sources is examined in light of its "eco-feasibility." The potential of energy conservation is examined, and the need for energy/environmental/economic (3-E) policy is debated. Some speculations about future 3-E scenarios are offered, as the U.S. and the rest of the world face their energy, ecological, and economic problems.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW) and (ECON 1102 or ECON 1902)

ECON 3507. Health Economics. 3 Credit Hours.

Problems of efficient production and the equitable distribution of health-related services. Policy-oriented material with comprehensive review of standard microeconomic theory in the context of supplier-dependent consumer decisions, third-party payers, and not-for-profit producers. NOTE: Students will receive credit only once for either ECON 3507 or ECON 3597.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1102 or ECON 1902)

ECON 3511. The Economics and Management of Privatization. 3 Credit Hours.

This course introduces students to the new trend of shifting delivery of services and responsibilities from governments and non-profit organizations to the private sector. It includes North American and international experiences. This course provides public economics theoretical models, as well as description and evaluation of experiences in the fields of justice, transportation, education, health, and welfare. The course will further suggest models of the privatization process.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1102 or ECON 1902)

ECON 3512. Public Finance. 3 Credit Hours.

An overview of the economics of the public sector. Topics include the theories of public goods and optimal (efficient and equitable) taxation, public expenditures, revenues, and tax incidence.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW) and (ECON 1102 or ECON 1902)

ECON 3513. Economics of State and Local Governments. 3 Credit Hours.

Economic problems confronting state and local governments. Topics include intergovernmental relationships, the response of state and local governments to problems of urbanization, and the impact of state and local taxes and expenditures.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW) and (ECON 1102 or ECON 1902)

ECON 3514. The Economics of Education and Human Capital. 3 Credit Hours.

This course will focus on an analysis of the market for education in the United States, including both K-12 and higher education. We will discuss how our education system is currently organized (e.g. how schools are funded), and the implications this has for students and the economy as a whole. We will examine and critically evaluate scientific studies related to key questions in the policy debate, such as "How does a smaller class size impact student outcomes?", or "What are the biggest problems with the student loan system?"

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1102 or ECON 1902), (ECON 1101 or ECON 1901), and STAT 2103.

ECON 3519. Game Theory and Strategic Behavior. 3 Credit Hours.

Game theory is a fundamental tool to analyze economic and social interactions. It has been widely used in economics, management science, sociology, political science, computer science, biology, and other areas. In this course, you will study essential concepts in game theory, such as strategic/extensive form and Nash/subgame perfect equilibrium, and master their application to various situations in economics, business, society, and daily life.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1102 or ECON 1902) and (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080, or 'Y' in MATW)

ECON 3522. Economic Theory of Networks. 3 Credit Hours.

This course presents an overview of networks with emphasis on social networks, online and offline. The student will learn the basic mathematical techniques for representing networks as well as techniques from game theory and economics for the analysis of network structure and evolution.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1102 or ECON 1902)

ECON 3525. Urban Economics. 3 Credit Hours.

This course introduces students to the concepts, methods and the core models used by economists to study not only cities, towns and regions and their relationships with each other, but, more generally, the interesting spatial aspects and spatial outcomes of decision-making by households and firms. The course will examine the determinants of the characteristics and structure of urban and regional areas (both intra-urban and inter-urban), and consider the causes and consequences of city, suburban and regional development, growth, and decline. We will discuss how issues related to poverty, housing, transportation and education are closely intertwined with the spatial decisions of households and firms. An important component of this course will be the study of the impact and relationship of local, state and federal government tax, spending, and land-use policies on urban and regional economies.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1102 or ECON 1902)

ECON 3531. History of Economic Theory. 3 Credit Hours.

The development of economic analysis from the pre-classical period to the neo-classical tradition that dominates contemporary mainstream economic thinking; emphasis on the work of Adam Smith, Malthus, Ricardo, the Marginalists, Marx, and Marshall.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW) and (ECON 1102 or ECON 1902)

ECON 3532. Economic History of the United States. 3 Credit Hours.

An overview of the forces that influence economic development and growth. Topics include alternative theories of development, empirical studies of the development process, and the role of non-economic factors in helping or hindering economic progress.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW) and (ECON 1102, ECON 1103, or ECON 1902)

ECON 3535. Public Control of Business: Antitrust. 3 Credit Hours.

An overview of U.S. antitrust policy as applied to monopoly, mergers, price discrimination, tying agreements, and patents. Includes analysis of antitrust issues in law, medicine, and professional sports. The relative merits of government ownership, regulation, and antitrust policy are examined.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW) and (ECON 1102 or ECON 1902)

ECON 3536. Economics of American Industry. 3 Credit Hours.

Examines the competitive and monopolistic features of American industry and their effect on product prices and quality, the distribution of income, the rate of technological progress, and, among others, the efficient utilization of scarce resources, and economic rationale for the antitrust laws.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW) and (ECON 1102 or ECON 1902)

ECON 3537. Comparative Economic Systems. 3 Credit Hours.

The course highlights how two economic models - market and government control - are combined and applied in different societies. Specifics are studied for the following cases: (1) the U.S., with traditionally lowest government involvement in economic activity; (2) West European countries, with both market and socialist oriented institutions; (3) the former Soviet Union and Central European countries, which rejected complete government control and are being transformed into market economies; and (4) China, where the government keeps control of big business and allows economic freedom for small business and agriculture. An important consideration is how various systems promote economic growth and withstand crises.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW) and (ECON 1102, ECON 1103, or ECON 1902)

ECON 3538. Managerial Economics. 3 Credit Hours.

The application of microeconomic principles to business planning and decision-making. Topics include demand estimation, cost analysis, and production planning.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW) and (ECON 1102 or ECON 1902)

ECON 3541. The Economics of Sports. 3 Credit Hours.

This course introduces students to a variety of economic disciplines through the prism of professional and amateur sports. Students confront industrial organization and anti-trust issues involving sports leagues, public finance issues involving the relationship between cities and franchises, and labor issues involving reward systems, unions and discrimination. The course concludes with an analysis of collegiate sports and the NCAA.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW) and (ECON 1102 or ECON 1902)

ECON 3543. Law and Economics. 3 Credit Hours.

This course provides an introduction to the economic analysis of law. The course employs microeconomics to develop a behavioral model of response to legal rules. Topics covered include the common laws of property, contract, and tort as well as an extended discussion of intellectual property.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1102 or ECON 1902)

ECON 3544. Computer-Based Modeling. 3 Credit Hours.

Students access a variety of economic models established on the University computing system. The models are used in problem-solving to reinforce economic concepts and to gain experience in the conduct of applied economics. Evaluating the consequences of government policies using cost/benefit analysis is emphasized. NOTE: No prior experience with computers or computer programming is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW), (ECON 1102 or ECON 1902), and (MATH 1031, MATH 1041, MATH 1941, MATH 1038, STAT 1102, STAT 1902, or 'Y' in MATW)

ECON 3545. Economics of Labor Markets. 3 Credit Hours.

Examines the nature of labor market equilibrium. Topics include fertility and migration, the allocation of time and occupational choice, human capital, and discrimination.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW) and (ECON 1102 or ECON 1902)

ECON 3546. Women in the Economy. 3 Credit Hours.

A course in labor economics with specific application to women in paid and unpaid employment. The course explores alternative economic theories of the labor market and economic approaches to discrimination as well as historic changes in the nature of unpaid and paid work. These theories are then applied to the economic situation of women in the U.S. and other societies.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW) and (ECON 1102 or ECON 1902)

ECON 3547. Economics of Development and Growth. 3 Credit Hours.

The course concentrates on issues of growth and development for a variety of world economies. The issues covered include topics such as scarcity of resources, interaction between market and government control, role of technology and human capital, and inequality and poverty. Specific tools include the measurement of economic growth and standards of living, conduct of macroeconomic policy, models of international trade, and instruments of global capital markets.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW) and (ECON 1102 or ECON 1902)

ECON 3548. Behavioral Economics. 3 Credit Hours.

This upper-level course, provides a solid foundation for understanding the new field of Behavioral Economics. It takes rational choice theory as a point of departure and then presents the findings of Behavioral Economics, explaining how these findings either support or call for a revision to the rational expectations model. The course uses multidisciplinary findings from psychology, experimental economics, neuroscience and evolutionary psychology to enhance our understanding of how humans make economics decisions and how incentives influence those decisions. Not only CLA economic majors, but also other CLA and FSBM students should be interested in this course, as it deals with the basis of all human decision-making. Students who have earned credit in ECON 3696 will not receive additional credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW) and (ECON 1102 or ECON 1902)

ECON 3563. International Trade. 3 Credit Hours.

An examination of the basic theories of international trade, commercial policy, and factor movements. Topics may include the relation between trade and economic growth, global aspects of U.S. trade policy, international trade agreements, and protectionism. NOTE: Not recommended for non-majors who earned less than B- in Economics 1101 or 1102.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW) and (ECON 1102 or ECON 1902)

ECON 3564. International Monetary Economics. 3 Credit Hours.

The analysis of the balance of payments and foreign currency markets. Topics include the international payments system, foreign investment and debt, and exchange rate regimes. NOTE: Not recommended for non-majors who earned less than B- in Economics 1101 or 1102.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW) and (ECON 1102 or ECON 1902)

ECON 3571. Money and Banking. 3 Credit Hours.

This course explores the role of the banking and monetary institutions within a modern developed economy, with an emphasis on the United States. (1) We will analyze financial intermediation and the role of banks in the economic system, place them in historical context, and discuss the economic rationale behind banking regulation. (2) We will study the role of money and the Federal Reserve in the U.S. economic and financial system. (3) We will discuss the instruments and goals of monetary policy.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW) and (ECON 1102 or ECON 1902)

ECON 3572. Owl Fund Seminar I. 3 Credit Hours.

This course provides students with the in-depth training in applied business economics to support the William C. Dunkelberg Owl Fund as part of the economics team. Students provide business conditions forecasts by sector incorporating data from FRED, Bloomberg, etc. including development of visually effective charts. In addition, the economics team is responsible for determining over versus under weighting of sectors based on their macro analysis. Permission of the instructor is required for admission.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101 or ECON 1901) and (ECON 1102 or ECON 1902)

ECON 3580. Special Topics. 3 Credit Hours.

Special topics in current developments in the field of economics.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW) and (ECON 1102 or ECON 1902)

ECON 3581. Co-op Experience in Economics. 3 Credit Hours.

Students undertake a research project that integrates their current work experience with their classroom experience at Temple University. The results are reported in a 10 to 20-page paper prepared under the supervision of a faculty member. NOTE: Fox students should contact the Center for Student Professional Development (CSPD; www.sbm.temple.edu/cspd/; 215-204-2371) for permission to enroll in this course. All other students should contact the Economics Department Coordinator (Ritter Annex 873; 215-204-8880).

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW) and (ECON 1102 or ECON 1902)

ECON 3582. Independent Study. 1 to 6 Credit Hour.

Directed reading and/or writing assignments under supervision of a faculty member.

Repeatability: This course may be repeated for additional credit.

ECON 3596. Energy, Ecology, and Economy. 3 Credit Hours.

After surveying the elements of energy and ecology, and reviewing the basics of economics, this course investigates the interaction of the three. Each of the major nonrenewable and renewable energy sources is examined in light of its "eco-feasibility." The potential of energy conservation is examined, and the need for energy/environmental/economic (3-E) policy is debated. Some speculations about future 3-E scenarios are offered, as the U.S. and the rest of the world face their energy, ecological, and economic problems.

Course Attributes: SE, SF, SP, WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW) and (ECON 1102 or ECON 1902)

ECON 3597. Health Economics. 3 Credit Hours.

Problems of efficient production and the equitable distribution of health-related services. Policy-oriented material with comprehensive review of standard microeconomic theory in the context of supplier-dependent consumer decisions, third-party payers, and not-for-profit producers. NOTE: Students will receive credit only once for either ECON 3507 or ECON 3597.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1102 or ECON 1902)

ECON 3598. Economics Writing Seminar. 3 Credit Hours.

This course fulfills the advanced writing requirement for economics majors in the College of Liberal Arts and the Fox School of Business and Management. Students are expected to demonstrate through a series of writing assignments that they can use the economic techniques learned in previous courses to analyze current economic policy issues.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 3501 or ECON 3701) and (ECON 3502 or ECON 3702)

ECON 3672. Owl Fund Seminar II. 3 Credit Hours.

This course is a continuation of ECON 3572 providing the in-depth training in applied business economics to support the William C. Dunkelberg Owl Fund as part of the economics team. Students in this course will focus on producing attribution analysis reports in support of the portfolio manager of the Owl Fund. Permission of instructor is required for admission.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ECON 3572.

ECON 3682. Independent Study. 1 to 6 Credit Hour.

Directed reading and/or writing assignments under supervision of a faculty member.

Repeatability: This course may be repeated for additional credit.

ECON 3696. Behavioral Economics. 3 Credit Hours.

This upper-level course, provides a solid foundation for understanding the new field of Behavioral Economics. It takes rational choice theory as a point of departure and then presents the findings of Behavioral Economics, explaining how these findings either support or call for a revision to the rational expectations model. The course uses multidisciplinary findings from psychology, experimental economics, neuroscience and evolutionary psychology to enhance our understanding of how humans make economics decisions and how incentives influence those decisions. Not only CLA economic majors, but also other CLA and FSBM students should be interested in this course, as it deals with the basis of all human decision-making.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW) and (ECON 1102 or ECON 1902)

ECON 3697. The Economics of Sports. 3 Credit Hours.

This course introduces students to a variety of economic disciplines through the prism of professional and amateur sports. Students confront industrial organization and anti-trust issues involving sports leagues, public finance issues involving the relationship between cities and franchises, and labor issues involving reward systems, unions and discrimination. The course concludes with an analysis of collegiate sports and the NCAA. Students who have earned credit in ECON 3541 will not receive additional credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW) and (ECON 1102 or ECON 1902)

ECON 3698. Economic Inequality. 3 Credit Hours.

This course studies inequality from the economic perspective. Students learn about and discuss: moral evaluations of inequality in political philosophy; the measurement of economic inequality; the connection of inequality with economic growth; the connection of globalization with inequality both within and across countries; the analyses and policy proposals advanced recently; and finally, the proper role of state institutions and policies in addressing inequality.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1102 or ECON 1902) and (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW)

ECON 3701. Intermediate Microeconomic Analysis with Calculus. 3 Credit Hours.

An intermediate treatment of microeconomic theory and applications that makes frequent use of calculus and other mathematical techniques. Topics include consumer behavior, production, costs, perfect competition, imperfect competition, factor markets, public goods, and market failure. NOTE: This theory course is designed for students with strong analytic skills who have taken a minimum of Economics 1102 and Math 1041. Students who have received credit for ECON 3501 may not earn additional credit by taking this course.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1102 or ECON 1902) and (MATH 1041, MATH 1941, ECON 3504, or 'Y' in MATW)

ECON 3702. Intermediate Macroeconomic Analysis with Calculus. 3 Credit Hours.

An intermediate treatment of macroeconomic theory and applications that makes frequent use of calculus and other mathematical techniques. NOTE: This theory course is designed for students with strong analytic skills who have taken a minimum of Economics 1101/1901, Economics 3501/3701, and Math 1041/1941 or Economics 3504. Students who have earned credit for ECON 3502 may not register for this course.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101 or ECON 1901), (ECON 3501 or ECON 3701), and (MATH 1041, MATH 1941, ECON 3504, or 'Y' in MATW)

ECON 3703. Econometric Theory. 3 Credit Hours.

An introduction to econometric theory. This course covers regression analysis, hypothesis testing, panel data, limited dependent variable models, instrumental variables, causal effects, and derives the properties of each of these estimators in substantial detail. The course also covers an introduction to statistical programming. This course is relatively math-intensive; it is designed for students who have at least taken Statistics 2103.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1102 or ECON 1902) and (STAT 2103, STAT 2903, or MATH 3031)

ECON 3900. Honors Topics in Economics. 3 Credit Hours.

Treatment of a particular topic in economics at the Honors level. NOTE: Topic varies from semester to semester. Honors courses usually require extra reading and a paper.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW) and (ECON 1102 or ECON 1902)

ECON 3999. Honors Thesis I. 1 to 6 Credit Hour.

Students work in an independent study situation to develop an original research project. Permission of the Department Chairperson required for registration.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW) and (ECON 1102 or ECON 1902)

ECON 4021. Economics of Risk, Uncertainty, and Information. 3 Credit Hours.

This course provides an introduction to the issues of risk, uncertainty and information in economics. Students are introduced to the standard model of decision making under uncertainty, the expected utility model. The model is applied to theories of decision-making in financial and insurance markets and the design of contracts.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 3501 or ECON 3701) and (MATH 1041, MATH 1941, ECON 3504, or 'Y' in MATW)

ECON 4071. Monetary Theory and Policy. 3 Credit Hours.

This course discusses advanced topics in Monetary Economics and Banking. We will first cover an essential list of theories and techniques in monetary economics. We will then explore topics such as the choice of monetary policy rules versus discretion, the liquidity effect of open market operations and the role of the credit channel of monetary policy. All these theories and techniques emphasize the interactions between macroeconomic phenomena and individuals' decisions. Students who have earned credit in ECON 3505 will not earn additional credit for this course.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 3501 and ECON 3571)

ECON 4999. Honors Thesis II. 1 to 6 Credit Hour.

Students continue working on the original original research project developed in ECON 3999. Permission of the Department Chairperson required for registration.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101 or ECON 1901) and (ECON 1102 or ECON 1902)

Education (EDUC)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

EDUC 0806. It's Bigger Than Hip-hop: Exploring the Evolution of Race and Identity through Hip-hop. 3 Credit Hours.

Hip-hop is no longer a subculture where members of marginalized groups are rapping and DJing, break dancing, and participating in the activity of graffiti. No, Hip-hop has evolved into a worldwide phenomenon. Not only do Hip-hop artists such as Jay-Z perform to sold out crowds at Madison Square Garden, but they also headline such mega-events as the Global Citizen Festival in South Africa. Hip-hop is now a global force, ubiquitous with mainstream culture. In this class, we will explore, analyze, and critique the beliefs, practices and behaviors associated with Hip-hop in the context of the conditions of systemic racial oppression and marginalization. Further, the course content will reflect a historical, sociological, and psychological perspective of U.S. culture. Students will follow Hip-hop from its early days in New York City, to the dark and gritty environments that produced the sounds of Hip-hop in the 1990s, to the "bling-bling" era of the early 2000s, and now to contemporary Hip-hop that influences fashion, urbanization, and the mainstream lexicon. Models of racial identity development and race-related psychological impact will be used to explore the development of the group and personal identities for those who are part of Hip-hop culture. At the end of the course, students will be able to critically examine the extent to which Hip-hop has helped form a new cultural identity in the 21st century.

Course Attributes: GD

Repeatability: This course may not be repeated for additional credits.

EDUC 0809. Race and Diversity in Children's and Young Adult Books: Reading Between the Lines. 3 Credit Hours.

The purpose of this course is to develop and explore multiple understandings of race and diversity through reading and examining literature that is intended for children and adolescents. We will explore a wide range of historically popular and current picture-books, chapter books, graphic novels and young adult fiction that features characters from traditionally underrepresented racial groups. You will read stories from varied genres, gain an understanding of approaches to content analysis and examine responses readers have to stories. Through critical reading, we will explore the role of literature in identity development and will identify and carefully consider broader ideological beliefs about race and culture raised by the texts. This course will help you discuss issues of race, an important ability for all citizens in a diverse democracy, as well as to read critically and to employ textual data in your writing, two significant abilities needed for success in college across majors.

Course Attributes: GD

Repeatability: This course may not be repeated for additional credits.

EDUC 0815. Language in Society. 3 Credit Hours.

How did language come about? How many languages are there in the world? How do people co-exist in countries where there are two or more languages? How do babies develop language? Should all immigrants take a language test when applying for citizenship? Should English become an official language of the United States? In this course we will address these and many other questions, taking linguistic facts as a point of departure and considering their implications for our society. Through discussions and hands-on projects, students will learn how to collect, analyze, and interpret language data and how to make informed decisions about language and education policies as voters and community members. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and the Individual & Society (IN) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0815/0915, Asian Studies 0815, Chinese 0815, CSCD 0815, EDUC 0915, English 0815, Italian 0815, PSY 0815, Russian 0815, or Spanish 0815.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

EDUC 0817. Youth Cultures. 3 Credit Hours.

Do you listen to hip hop, spend all your time in Second Life, dress up like a cartoon character and go to anime fairs, or go skateboarding every day with your friends? Then you're part of the phenomenon called youth culture. Often related to gender, race, class and socio-economic circumstances, youth cultures enable young people to try on identities as they work their way to a clearer sense of self. Empowered by new technology tools and with the luxury of infinite virtual space, young people today can explore identities in ways not available to previous generations. Students in this class will investigate several youth cultures, looking closely at what it means to belong. They will also come to appreciate how the media and marketing construct youth identities and define youth cultures around the world. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and the Individual & Society (IN) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed ANTH 0817, Education 0917 or SOC 0817.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

EDUC 0819. Tweens and Teens. 3 Credit Hours.

Exuberance, excitement, social expansion, risk-taking, experimentation, breaking away, testing limits. Anxiety, peer pressure, competition, parental pressure, work and school, drugs and alcohol, test scores. These are some of the challenges that make adolescence one of the most intriguing and disturbing stages of life. But adolescence is only one stage on a continuum of human development that begins in infancy and extends into old age. At each stage, we have hurdles to climb over, tasks to complete, experiences to absorb, lessons to learn. Yet in contemporary society the extended period between childhood and adulthood seems to capture all the attention. Why? This class on human development takes a close look at one of the most confusing, exciting, and critical phases of development, the pre-teen and teen years. Using literature, TV and film, as well as articles and books from the field of human development, the course will explore how children grow into teenagers, how they survive the challenges of adolescence, and how they become productive adults. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and the Individual & Society (IN) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed Education 0919.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

EDUC 0823. Kids in Crisis: When Schools Don't Work. 3 Credit Hours.

This course is designed to teach students how to think about race and diversity through the lens of three social problems in schools. Social problems are part of modern society. They represent a gap between what we would like society to be like and the lived reality for individuals in the society. Race and diversity are implicated in the framing of these three issues as social problems and in devising solutions that move us towards a more equitable society. Devising solutions to social problems and participating in their implementation is an important role for citizens in a democracy. In order to do so we need to understand the role of race and diversity in modern American society and in our own lived experience. This General Education course will examine three pressing social problems in American society that play out in our schools--segregation and racial isolation in schools, school violence, and dropout. Questions that will guide our exploration of these social problems include: Can schools "solve" social problems? How do schools and teachers participate in the social construction of race? How does a student's race influence his or her experiences in American schools? Note: A student may not take both Kids in Crisis to fulfill the Race and Diversity requirement AND Kids, Community and Controversy to fulfill the Human Behavior requirement.

Course Attributes: GD, SI

Repeatability: This course may not be repeated for additional credits.

EDUC 0865. Albums and Algorithms. 4 Credit Hours.

Music is a constant, from Hip-hop to country to Gospel. We can play it on our phones, computers, and turntables. You have access to music from the 1700s, 1920s and 2020s. In this class we will explore lyrics, beats, music history, and the health and wealth of artists and the music industry using tools from statistics and data analysis. This course helps students explore and consider potential explanations for different phenomena they might observe while learning about music, such as how Hip-hop record sales have changed throughout the last 25 years. The purpose of this course is to: (a) show how statistics and data analysis are inherently creative and visual, (b) expose students to how statistics and data function in their everyday lives, (c) explore how research questions are formed, and (d) explain how data are collected/managed, analyzed, and presented visually and in written form. By exploring changes in lyrics over time we can describe how rap's language has evolved, or looking at artists' royalties from various media we can better understand the chances of a new artist being able to survive. This course will provide a basic overview of quantitative measurement and associated quantitative concepts and will explore the ways in which certain data analytic techniques and associated quantitative models could be used to explore problems in the music industry. Finally, and most importantly, this course will help students to become more fluent in their understanding of and communication about data by moving away from data and statistics as content that is highly theoretical and move towards a content that has real-world application.

Course Attributes: GQ

Repeatability: This course may not be repeated for additional credits.

EDUC 0915. Honors Language in Society. 3 Credit Hours.

How did language come about? How many languages are there in the world? How do people co-exist in countries where there are two or more languages? How do babies develop language? Should all immigrants take a language test when applying for citizenship? Should English become an official language of the United States? In this course we will address these and many other questions, taking linguistic facts as a point of departure and considering their implications for our society. Through discussions and hands-on projects, students will learn how to collect, analyze, and interpret language data and how to make informed decisions about language and education policies as voters and community members. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0815/0915, Asian Studies 0815, Chinese 0815, CSCD 0815, EDUC 0815, English 0815, Italian 0815, PSY 0815, Russian 0815, or Spanish 0815.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GB, HO

Repeatability: This course may not be repeated for additional credits.

EDUC 0917. Honors Youth Cultures. 3 Credit Hours.

Some young people dye their hair red and go to punk concerts, listen to hip hop, spend all their time in Second Life, dress up like cartoon characters and go to anime fairs, or skateboard every day. They're part of the phenomenon called youth culture. Often related to gender, race, class and socio-economic circumstances, youth cultures enable young people to find new communities and try on different identities as they work their way to a clearer sense of self. Students in this class will investigate several youth cultures, looking closely at why people join and what it means to belong. They will also conduct independent, original research on a youth culture of their choice and draw their own conclusions about how youth cultures interact with mainstream society. (This is an Honors course.) NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and the Individual & Society (IN) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed ANTH 0817, ASST 0817, Education 0817 or SOC 0817.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GB, HO

Repeatability: This course may not be repeated for additional credits.

EDUC 0919. Honors Tweens and Teens. 3 Credit Hours.

Exuberance, risk-taking, experimentation, breaking away, testing limits. Anxiety, peer pressure, competition, parental pressure, work and school, drugs and alcohol. These are some of the challenges that make adolescence one of the most intriguing and disturbing stages of life. But adolescence is only one stage on a continuum of human development that begins in infancy and extends into old age. At each stage, we have hurdles to climb over, tasks to complete, experiences to absorb, lessons to learn. This honors class on human development takes a close look at one of the most confusing, exciting, and critical phases of development, the pre-teen and teen years. Working individually and collaboratively, students will learn theoretical frameworks for interpreting their own experience and that of their peers. They will view media representations of adolescence and draw conclusions about how the media influence adolescents. Students will conduct original research on teen phenomenon and draw their own conclusions about whether identity is innate or a product of our environments. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and the Individual & Society (IN) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed Education 0819.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GB, HO

Repeatability: This course may not be repeated for additional credits.

EDUC 1001. Diversity and Inclusion: Reflective Paper. 0 Credit Hours.

This reflective paper is designed to help students conceptualize how the coursework of the Diversity and Inclusion certificate applies to their area of study and desired career. Students will reflect on each course individually, as well as how their cumulative skills will transfer to employment or further schooling after graduating. Student learning of the Diversity and Inclusion coursework is chiefly evaluated through this reflective paper; students must attain at least 16 of 20 possible points on the final reflective paper to be awarded a certificate in Diversity and Inclusion.

Repeatability: This course may be repeated for additional credit.

EDUC 1002. College of Education and Human Development First Year Seminar. 1 Credit Hour.

College of Education and Human Development (CEHD) First Year Seminar is a one-credit seminar that introduces students to the opportunities and resources available, both university-wide and within the CEHD. This interactive course is designed to help students transition successfully to academic and student life at Temple University. It emphasizes resources available to help students take responsibility for their academic and career goals and better understand how to navigate the Temple University system. Students will explore campus resources and opportunities; their skills, interests, and goals; and will learn about the history of Temple University and the mission of the CEHD.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Repeatability: This course may not be repeated for additional credits.

EDUC 1016. Mathematics for Educators. 4 Credit Hours.

This course is intended for undergraduate students seeking Pennsylvania teaching certification in early childhood education, middle grades, secondary education, foreign language education, music, or art education. In alignment with mathematics competencies required for admission into a teacher education program, the course will develop deep, connected understandings of content included in the Geometry, Measurement and Data, Expressions and Equations, and Operations and Algebraic Thinking. Researchers have shown that students learn mathematical concepts more productively when they are given opportunities to struggle with solving problems, to communicate and share their ideas with each other, and to interact with different representations of mathematical objects, especially representations that are concrete and visual. In accordance with this research, we will work in a student-centered and inquiry-based class that provides you opportunities to learn cooperatively and work with concrete and virtual manipulatives. You will not only learn how these instructional techniques and materials can be used in the classroom, but also get a first-hand experience with these as you participate as a learner in this class. In addition to a focus on mathematical content, you will have opportunities to become familiar with research on how students learn mathematics and to consider ways in which this knowledge can be integrated into your future teaching. In summary, you will have opportunities to develop knowledge, understandings, and skills useful for teaching elementary mathematics.

Repeatability: This course may not be repeated for additional credits.

EDUC 1017. Algebra and Algebraic Thinking for Educators. 4 Credit Hours.

This course will focus on key algebraic concepts, including polynomial, rational, and algebraic expressions, equations, and inequalities. Students engage in problem solving to build conceptual understandings of algebraic thinking, variables, and functions. Emphasis on transitions from arithmetic to algebra and links between data analysis and algebra.

Repeatability: This course may not be repeated for additional credits.

EDUC 1087. Pract International Educ. 1 to 12 Credit Hour.

Repeatability: This course may be repeated for additional credit.

EDUC 1176. Ed Sch & Indiv in US Soc. 3 Credit Hours.

Course Attributes: AC

Repeatability: This course may not be repeated for additional credits.

EDUC 1196. Education and Schooling in America. 3 Credit Hours.

The purpose of this writing intensive educational foundations course is to examine selected historical, philosophical and social issues that impact education in the United States. This course will examine the trends in educational studies as well as the political forces at work in the schools. The social and academic goals of education, the current conditions of the American educational systems, and the teaching profession will be addressed. This course presents an interdisciplinary analysis of education and schooling in the United States, examining how education policy has been shaped in the U.S., what important roles certain individuals, institutions and social groups have played in this process, how education policies have had differential impact on various groups. Enables students to study and critically evaluate schools as a significant social institution within the framework of American values and institutions. NOTE: This course can be used to satisfy a university Core American Culture (AC) and Writing Intensive (WI) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AC, WI

Repeatability: This course may not be repeated for additional credits.

EDUC 1255. Inclusive Education for a Diverse Society. 3 Credit Hours.

In Inclusive Education for a Diverse Society, students explore the role of culture in education in the United States. They learn about different definitions of culture and how culture is influenced by social, economic and political factors. Culture is viewed as dynamic and evolving and a major influence on the curriculum, policies and practices of schools. In addition, students learn about the close relationship between culture and learning and how teachers and education professionals are seeking to create positive learning environments for all students. Real situations are debated and discussed, and students are encouraged to contribute their own experiences and individual interpretations of events and strategies to the discussion.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

EDUC 1322. The Developing Individual across the Life Span. 3 Credit Hours.

This course provides an overview of the factors that have an impact on physical, cognitive and psychosocial development. Students study developmental theories and concepts and how they relate to patterns of change over the lifespan. Both typical and atypical development will be considered. Course work emphasizes the impact on educational practice.

Repeatability: This course may not be repeated for additional credits.

EDUC 2002. College of Education and Human Development Transfer Seminar: Planning for Success. 1 Credit Hour.

The College of Education and Human Development (CEHD) Transfer Seminar is a one-credit seminar that provides transfer students support during the transition to Temple University. The seminar introduces students to the opportunities and resources available, both university-wide and within the CEHD. This interactive course is designed to help students transition successfully to academic and student life at Temple University. It emphasizes resources available to help students take responsibility for their academic and career goals and better understand how to navigate the Temple University system. Students will explore campus resources and opportunities; their skills, interests, and goals; and will learn about the history of Temple University and the mission of the CEHD.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Repeatability: This course may not be repeated for additional credits.

EDUC 2082. Undergraduate Independent Study. 1 to 3 Credit Hour.

Students will have an opportunity to pursue special topics in their content area or to develop an in-depth project designed to meet personal and program objectives.

Repeatability: This course may be repeated for additional credit.

EDUC 2087. School-Based Community Service. 1 to 3 Credit Hour.

This course provides pre-service teachers and non-education majors with an opportunity to engage with local elementary and high schools in the surrounding community. This effort is focused on addressing the early literacy needs of K-4th graders where the gap in performance often begins and on the needs of 9th grade students in a project-based learning school. Similar to service learning, students in this course will serve as assistants or tutors and make a weekly visit to either two elementary schools located adjacent to main campus or one high school located in North Philadelphia. The course instructor will provide students with strategies for how to provide assistance to individuals and small groups of students. This variable-credit course presents an opportunity for meaningful on-going community engagement through the practical application of academic, behavioral, and creative support in kindergarten through fourth grade classrooms or 9th grade classrooms. Students will spend between 2 to 5 hours per week in the field depending on the number of credits selected for this course.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may be repeated for additional credit.

EDUC 2103. Socio-cultural Foundations of Education in the United States. 3 Credit Hours.

This course will help students place their work with students in a broader social, political and economic context. It will introduce students to the history of education in the United States and to many of the issues that shape our schools and the ways children, parents, and teachers experience them. The course will focus particularly on the role of schooling in a democracy and the many demands Americans have placed - historically and currently - on the schools. It will also help students understand how issues of class, race, and gender are manifest in classrooms. Finally, it will provide students with an overview of the challenges facing urban schools and contemporary issues in school reform. Teachers will leave this course with a more robust understanding of the state of American education today, and how they as individuals and members of a profession can most effectively and ethically make a difference.

Repeatability: This course may not be repeated for additional credits.

EDUC 2109. Adolescent Development for Educators. 3 Credit Hours.

This course is designed to present information that would help prospective and practicing educators understand the minds and behaviors of middle and high school students. Emerging abilities in adolescents present both wonderful opportunities and challenges for teachers and parents. To understand how to connect with, manage and instruct adolescents, educators need to understand how adolescents think, what motivates them, and what they are capable of understanding. This course should prepare educators to correctly anticipate the likely consequences of their actions directed toward adolescents. NOTE: Background clearances required.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

EDUC 2179. Knowing and Learning in Mathematics and Science. 3 Credit Hours.

This course focuses on issues of what it means to learn and know science and mathematics. What are the standards for knowing we will use? How are knowing and learning structured and how does what we know change and develop? For the science and mathematics educator, what are the tensions between general, cross-disciplinary characterizations of knowing (e.g. intelligence) and the specifics of coming to understand powerful ideas in mathematics and science? What are the links between knowing and developing in learning theory, and the content and evolution of scientific ideas? Also, current issues and tensions in education will be discussed, especially as it relates to mathematics and science instruction.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SCTC 1289 (may be taken concurrently) or SCTC 1389 (may be taken concurrently))

EDUC 2205. Curriculum Instruction and Technology in Education. 3 Credit Hours.

"Curriculum, Instruction and Technology in Education" is one of the first in a series of courses designed to enable future teachers to develop skills of effective practice by engaging in and responding to authentic educational experiences. Students will observe authentic interactions among people in school environments. Students will develop learning objectives, and plan, deliver, and evaluate instruction in a simulated teaching/learning environment. The recording of simulated teaching and learning experiences is a primary component of the course. The recordings serve the dual purpose of allowing students to reflect and self-evaluate and providing the basis for peer-evaluation and instructor-student conferences. The development of several teaching skills, self-evaluation and reflection will create the opportunity for a lifetime of professional growth.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

EDUC 2211. English for Foreign Students. 3 Credit Hours.

The focus of this course is on English skills needed for instructional purposes. The course offers students opportunities to develop communicative skills necessary for successful teaching and information about teaching in U.S. institutions of higher education (e.g., syllabi, instructional formats, and legal issues, such as sexual harassment and plagiarism). NOTE: This course is for ITA students.

Repeatability: This course may not be repeated for additional credits.

EDUC 2212. English for Academic Purposes. 2 Credit Hours.

The purpose of this course is to improve graduate students' academic English and intercultural competence, necessary for successful participation in an academic environment. Students will work on developing their academic English skills through individual presentations and group discussions. NOTE: This course serves as the graduate school requirement for new international graduate students.

Repeatability: This course may not be repeated for additional credits.

EDUC 2214. Curriculum and Supervised Teaching K-12. 3 Credit Hours.

The primary intent of the course is to provide prospective teachers with an opportunity to study teaching practice in an urban public school context by working directly with experienced teachers. The course is organized as a series of seminars and in-school experiences in which students, through inquiry and critical reflection, construct their own understanding of teaching. Specific experiences enable students to develop personal perspectives about how teaching professionals think in action and use professional knowledge in situations of practice. NOTE: A field-based course generally taken in the senior year.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in EDUC 2287 (may be taken concurrently)

EDUC 2224. Service Learning. 2 to 3 Credit Hours.

A course that helps students investigate what it means to be a community member and a teacher in a diverse, democratic society. The course combines reading, discussion, action in the community, and reflection in the context of addressing real community needs. In addition, students will begin to develop skills needed as a teacher to use service learning with his or her own students. In this course you will engage in literacy and numeracy activities with very young children in local head-start programs, while learning about the communities in which these program exist. NOTE: Students will work in community organizations or after school programs. Students should not register for a class immediately following EDUC 2224 (0224). Students should not sign up for EDUC 2289 (0225) at the same time as EDUC 2224 (0224).

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

EDUC 2255. Effective Use of Instructional Technology in Classrooms. 3 Credit Hours.

This course focuses on using technology to develop N-12 classroom applications to ensure effective teaching. Students are expected to begin to integrate technology into their teaching strategies. Students will develop technology competencies using modern technology to achieve this goal. Additional technology tools and software will be examined and reviewed for possible use in the N-12 classroom. Extensive internet work will be required.

Repeatability: This course may not be repeated for additional credits.

EDUC 2272. Instructional Practices in Middle Level Classrooms. 3 Credit Hours.

An in-depth exploration of most effective research-based diagnosis and instrumental practices for the contemporary middle level classrooms. Emphasis is upon a curriculum which recognizes the unique qualities of middle level learners.

Repeatability: This course may not be repeated for additional credits.

EDUC 2287. Practicum. 3 Credit Hours.

A first hand opportunity to explore teaching as a profession. Organized visits to elementary, middle, and high schools are combined with assigned readings and seminars. Critical inquiry and reflection will allow for one's essential personal commitment for success in teaching.

Repeatability: This course may be repeated for additional credit.

EDUC 2289. Field Experience: Managing the Contemporary Classroom. 3 Credit Hours.

Education 2289 introduces students to best practices in managing instruction and behavior in contemporary classrooms and to the principles that underlie those practices. Overall, the goal of the course is to ensure that students can identify and articulate the rationale for classroom routines and practices upon which effective instruction depends. This course requires students to spend two hours each week observing classes in an area school. NOTE: Students who are seeking certification in Special Education should enroll in EDUC 2489 (0226).

Repeatability: This course may be repeated for additional credit.

EDUC 2296. Effective Teaching: Theory and Practice. 3 Credit Hours.

EDUC 2296 introduces students to a selection of strategies - some theoretical, some practical - for improving student performance. Course assignments and activities derive from two assumptions - namely, that good planning contributes to good instruction and good instruction contributes to student learning.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

EDUC 2306. Assessment and Evaluation. 3 Credit Hours.

Students will learn how to develop and use a variety of evaluation methods to monitor student academic achievement and teaching effectiveness. Special emphasis will be placed on relating evaluations to curriculum and instruction. Students will learn about standardized tests and other diagnostic tools frequently encountered and/or used by classroom teachers. Particular attention will be given to adapting assessments to meet the needs of all students. Students will plan, construct, administer, and analyze data for a diagnostic evaluation of achievement for a content unit. Contemporary issues related to testing, grading, evaluation, and accountability will be addressed.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Repeatability: This course may not be repeated for additional credits.

EDUC 2489. Field Experience: Special Education. 3 Credit Hours.

This course is designed to teach basic techniques for managing your classroom. While emphasis is placed on applied behavior analysis, other approaches will also be discussed. In addition, there will be a section on autistic spectrum disorders.

Repeatability: This course may be repeated for additional credit.

EDUC 2900. Honors Special Topics in Education. 3 Credit Hours.

A special topics course, used for materials and approaches to Education. NOTE: Course content varies each semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

EDUC 2903. Honors Socio-Cultural Foundations of Education in the United States. 3 Credit Hours.

This course will help students place their work with students in a broader social, political and economic context. It will introduce students to the history of education in the United States and to many of the issues that shape our schools and the ways children, parents, and teachers experience them. The course will focus particularly on the role of schooling in a democracy and the many demands Americans have placed - historically and currently - on the schools. It will also help students understand how issues of class, race, and gender are manifest in classrooms. Finally, it will provide students with an overview of the challenges facing urban schools and contemporary issues in school reform. Teachers will leave this course with a more robust understanding of the state of American education today, and how they as individuals and members of a profession can most effectively and ethically make a difference.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

EDUC 3332. Professional Seminar in Human Development and Community Engagement I. 1 Credit Hour.

Many students want to make a difference in children's lives in other ways besides being a teacher. There are several hundred charitable and educational foundations and agencies in the greater metro Philadelphia area alone. State, federal, and local governments also often have child-focused initiatives. The programs, policies, and practices of these agencies and governments could benefit from employees who understand the factors that impede or facilitate the cognitive, social, and physical development of children, particularly in urban communities. This course provides an orientation to the HDCE major and exposure to a variety of career options and organizations that are relevant to HDCE. It aims to help students develop a sense of their future career path and understand their role within a collective impact framework.

Repeatability: This course may not be repeated for additional credits.

EDUC 3333. Professional Seminar in Human Development and Community Engagement II. 1 Credit Hour.

Many students want to make a difference in children's lives in other ways besides being a teacher. There are several hundred charitable and educational foundations and agencies in the greater metro Philadelphia area alone. State, federal, and local governments also often have child-focused initiatives. The programs, policies, and practices of these agencies and governments could benefit from employees who understand the factors that impede or facilitate the cognitive, social, and physical development of children, particularly in urban communities. This course provides an orientation to the HDCE major and exposure to a variety of career options and organizations that are relevant to HDCE. It aims to help students develop a sense of their future career path and to understand both the needs and resources in the North Philadelphia area.

Repeatability: This course may not be repeated for additional credits.

EDUC 3900. Honors Special Topics in Education. 3 Credit Hours.

A special topics course, used for materials and approaches to Education. NOTE: Course content varies each semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

EDUC 4038. Assessment of Curr & Instr. 3 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

EDUC 4091. Capstone Project: Minor in Education. 3 Credit Hours.

"Capstone Project: Minor in Education" is the culminating experience for the minor degree in education. This required independent study is an opportunity for students to synthesize and apply the range of learning across their education coursework in an inquiry project. Students will be required to demonstrate increased knowledge and skills in practice, research, and evaluation. In coordination with the instructor, students will develop a project around an issue in education they studied during their minor degree coursework. Students will independently investigate this question and produce a written response. In the course of their research, students will conduct observations and interview and interact with stakeholders in schools, community centers, and other educational settings.

Field of Study Restrictions: Must be enrolled in one of the following Minors: Education.

Repeatability: This course may not be repeated for additional credits.

EDUC 4111. Classroom and Conflict Management in Grades 4 through 12. 3 Credit Hours.

One of the National Education Goals is the creation of safe and constructive learning environments. Educators are increasingly aware of the need to build community in classrooms and schools in order to help students have such environments. A key component of that is conflict resolution education. This course introduces students to the broad field of conflict resolution education (including classroom management, social and emotional learning, anti-bullying programs, peer mediation, negotiation processes, expressive arts, restorative justice programs, and bias/diversity/cultural awareness programs). AOD 2115 provides students with examples of programs, gives them an opportunity to interact with experts in the field, and encourages them to consider how they can support and utilize these programs as teachers and administrators. Particular emphasis will be placed on understanding how to design and implement conflict resolution and social emotional learning programs that address the developmental needs of adolescents and the middle school environment.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

EDUC 4185. Community Internship and Seminar. 1 to 12 Credit Hour.

This internship in applied development provides a learning experience that unites prior coursework with professional organizational settings and the community as a whole, while also guiding students as they transition into their own professional lives. Students will have dual responsibility: to provide the best service possible to your agency/school/company (you will be, in some sense, an ambassador for Temple and for the program), and to participate in the internship seminar. Students will continue at the site they completed their practicum course. Having developed relationships and acquainting themselves with the organization, students can seamlessly transition into an internship at the same site.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Human Develop Commnty Engagemn.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in EDUC 4187.

EDUC 4187. Practicum in Applied Development. 3 Credit Hours.

This course will give undergraduate students the opportunity to integrate and apply theory and coursework within a community organization working with children or other vulnerable populations. Students will be required to demonstrate increased knowledge and skills in practice, research, and evaluation across multi-level systems. Students will experience a practicum placement under the immediate supervision of a professional who functions as the student's Site Supervisor, and the overall supervision of the Practicum Instructor. The practicum will involve activities such as observing the members within the organization and conducting background research about the organization. Additionally, practicum students will meet five times during the course of the semester to share observations and experiences gained from the practicum placement.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Human Develop Commnty Engagemn.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in EDUC 3332 and EDUC 3333.

EDUC 4288. Student Teaching in Elementary/Special Education. 9 to 11 Credit Hours.

Practicum for full-time students and education majors who have completed all other program requirements. NOTE: There is a \$50 fee associated with all sections and numbers of student/supervised teaching. Student Teaching Applications are now online at www.temple.edu/education/studentteaching/index.html. Obtain your advisor's signature and return the completed application to the CITE Department advisor, 359 Ritter Hall.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: EDUC 4801.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: minimum GPA of 3 in: courses numbered 0700 to 4999.

EDUC 4333. Effectiveness of Interventions for Children (Zero through 8th Grade). 3 Credit Hours.

This course is designed to describe and promote critical thinking about interventions that have been created to address various societal problems faced by children such as racial gaps in academic achievement, drug use among adolescents, and childhood diseases. Students taking this course will already have taken the following courses: (a) child development (that explain age trends in outcomes such as achievement and the factors that cause these outcomes), (b) research methods (that explain the differences between studies that provide interpretable data and studies that do not), and (c) statistics for decision-making. Students will use information from these prior courses to help evaluate specific interventions such as Head Start. Hopefully, students will not only develop a certain amount of expertise about existing interventions, but will also develop a good sense of how to create new interventions that might be effective, and how to use a framework to evaluate other interventions that were not examined in this course. This knowledge will prove valuable during the required internship in the HDCE major where a major paper focuses on the effectiveness of the agency or program in which the internship takes place.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (EPSY 2325 (may be taken concurrently) or 'Y' in CREY01), (AOD 2201 or 'Y' in CRAO01), and (ECED 2101 or 'Y' in CREA01)

EDUC 4388. TUTEACH Apprentice Teaching. 4 Credit Hours.

The purpose of Apprentice Teaching is to offer TUTEACH students a culminating experience that provides them with the tools needed for their first teaching jobs. Apprentice teachers maintain their role as teacher for the equivalent of two six-week grading periods. Apprentice Teaching students are required to teach two sections of a science, math, or computer science class in a public middle or high school. They remain on the school campus a minimum of four hours per day. Students are evaluated throughout Apprentice Teaching, including two evaluations (formative and summative) on the PA Department of Education (PDE) 430 Form. To pass this assessment, students must receive a satisfactory rating in each of the 4 categories resulting in a minimum total of at least 4 points on the final summative rating. Apprentice Teaching reinforces and augments teaching strategies that students have developed through their coursework and field experiences. The program also attempts to fill in any gaps in students' professional development. In particular, Apprentice Teaching focuses on classroom management and time management strategies, parent/teacher communication strategies, school culture and school dynamics that make up an effective middle school and high school system, legal and logistical issues in teaching, the final portfolio, and state certification requirements. TUTEACH apprentice teachers explore professional development opportunities beyond the classroom, including attending conferences, subscribing to education journals, joining professional organizations, and conducting presentations in educational settings. The goal of Apprentice Teaching is to provide the experiences, information, and coaching that will enable students to be successful teachers who are leaders in their schools and communities.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: TUTEACH.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: EDUC 4802.

Repeatability: This course may not be repeated for additional credits.

EDUC 4389. Field Experience. 1 to 6 Credit Hour.

The goal of the field experience course is to allow students to apply what they have learned in Secondary Education courses in a school. Students will observe, assist, tutor, and/or instruct in schools or an education-related setting.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may be repeated for additional credit.

EDUC 4441. Discourse Practices in Diverse Communities. 3 Credit Hours.

From private businesses to public service, the institutions of today's society are composed of diverse groups of participants whose communication practices reflect their varied backgrounds, traditions, and practices of social relations. Combining discourse analytic and sociolinguistic perspectives, this course will advance students' understandings of the ways people from different cultural backgrounds think, communicate, and behave based on the value systems, worldviews, and narratives that ground them. Students will be asked to read challenging texts, engage in class discussions and exercises, reflect on a variety of media clips, and critically contemplate multiple perspectives on communication. The concepts that we will cover include: the nature of signs; linguistic relativity and the relationship between language and thought; multilingualism; the difference between linguistic and communicative competence; standard language and dialects such as African American Vernacular English; and the connections between language and power, race, class, and gender.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

EDUC 4488. Student Teaching in Elementary/Special Education/Early Childhood Education. 9 to 11 Credit Hours.

Students are admitted to student teaching only after their records and potential for success have been reviewed by the program faculty. Students will work under the guidance of cooperating teachers and Temple supervisors. NOTE: There is a \$50 fee associated with all sections and numbers of student/supervised teaching. Student Teaching Applications are now online at www.temple.edu/education/studentteaching/index.html. Obtain your advisor's signature and return the completed application to the CITE Department advisor, 359 Ritter Hall.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: EDUC 4801.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: minimum GPA of 3 in: courses numbered 0700 to 4999.

EDUC 4588. Student Teaching in Elementary Education/Early Childhood Education. 9 to 11 Credit Hours.

Involves a school placement where students demonstrate their knowledge of and competence in early childhood teaching, birth through 3rd grade (N-3). Students work with a certified cooperating teacher and are supervised by a Temple University faculty member. NOTE: All coursework must be completed before taking this course. There is a \$50 fee associated with all sections and numbers of student/supervised teaching. Student Teaching Applications are now online at www.temple.edu/education/studentteaching/index.html. Obtain your advisor's signature and return the completed application to the CITE Department advisor, 359 Ritter Hall.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: EDUC 4801.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: minimum GPA of 3 in: courses numbered 0700 to 4999.

EDUC 4688. Student Teaching in Secondary Education. 9 to 11 Credit Hours.

Students are admitted only after they give evidence of appropriate professional maturity and the potential for success. NOTE: All coursework must be completed before taking this course. There is a \$50 fee associated with all sections and numbers of student/supervised teaching. Student Teaching Applications are now online at www.temple.edu/education/studentteaching/index.html. Obtain your advisor's signature and return the completed application to the CITE Department advisor, 359 Ritter Hall.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: EDUC 4801.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: minimum GPA of 3 in: courses numbered 0700 to 4999.

EDUC 4788. Student Teaching in Secondary Education/Career Technical Education. 3 to 9 Credit Hours.

Involves a full-time school placement where students demonstrate their knowledge of and competence in teaching discipline-specific subject matter to students in grades 7-12, and in some cases, K-12. Students work with a certified cooperating teacher and are supervised by a Temple University faculty member. NOTE: All coursework must be completed before taking this course. Student Teaching Applications are now online at www.temple.edu/education/studentteaching/index.html. Obtain your advisor's signature and return the completed application to the CITE Department advisor, 359 Ritter Hall.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: EDUC 4801.

Repeatability: This course may be repeated for additional credit.

EDUC 4801. Senior Seminar and Performance Assessment. 3 Credit Hours.

Students will be involved in experiences that prepare them for making the transition from college to the practice setting, and engage in activities that foster professionalism in school and community settings. The senior performance assessment, which is a requirement for teacher certification students, is also a part of the course. NOTE: This is a required course for all teacher certification candidates, which is taken during the student teaching semester.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: minimum GPA of 3 in: courses numbered 0700 to 4999.

EDUC 4802. TUteach Apprentice Teaching Seminar. 3 Credit Hours.

Students will be involved in experiences that prepare them for making the transition from college to the practice setting and engage in activities that foster professionalism in school and community settings. The senior performance assessment (SPA), which is a requirement for teacher certification students, is also a part of the course. NOTE: This is a required course for all teacher certification candidates, which is taken during the apprentice teaching semester.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: TUteach.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: EDUC 4388.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MGSE 4189.

EDUC 4941. Honors Discourse Practices in Diverse Communities. 3 Credit Hours.

Even when we speak the same language, we often miscommunicate with friends, co-workers, family members, and neighbors. Add to that scenario a group of people who speak different languages or language varies, and the challenge of communicating effectively becomes more acute. But that's the reality of America today. Simply put, intercultural awareness and communication skills are now a necessary part of life for most people in most aspects of their lives. This course is designed to help students identify how to become better communicators in a wide range of cross-cultural situations. Through readings, discussion, hands-on activities, and 'real world' projects, students will: increase understanding of their own cultural backgrounds and communication style(s); explore different world views, ideologies, and behaviors; acquire knowledge, skills and attitudes that increase intercultural competence; and learn creative ways to address (and possibly avoid) miscommunication in cross-cultural contexts.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, SI

Repeatability: This course may not be repeated for additional credits.

EDUC A000. Elective. 0 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

Educational Administration (EDAD)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

EDAD 0855. Why care about College: Higher Education in American Life. 3 Credit Hours.

You have decided to go to college. But why? What role will college and in particular Temple University play in your life? Reflect on this important question by looking at the relationship between higher education and American society. What do colleges and universities contribute to our lives? They are, of course, places for teaching and learning. They are also research centers, sports and entertainment venues, sources of community pride and profit, major employers, settings for coming-of-age rituals (parties, wild times, courtship, etc.), and institutions that create lifetime identities and loyalties. Learn how higher education is shaped by the larger society and how, in turn, it has shaped that society. Become better prepared for the world in which you have chosen to live for the next few years. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed American Studies 0855 or English 0855.

Course Attributes: GU

Repeatability: This course may not be repeated for additional credits.

EDAD 0955. Honors Why care about College: Higher Education in American Life. 3 Credit Hours.

You have decided to go to college. But why? What role will college and in particular Temple University play in your life? Reflect on this important question by looking at the relationship between higher education and American society. What do colleges and universities contribute to our lives? They are, of course, places for teaching and learning. They are also research centers, sports and entertainment venues, sources of community pride and profit, major employers, settings for coming-of-age rituals (parties, wild times, courtship, etc.) and institutions that create lifetime identities and loyalties. Learn how higher education is shaped by the larger society and how, in turn, it has shaped that society. Become better prepared for the world in which you have chosen to live for the next few years. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed American Studies 0855, English 0855 or EDAD 0855.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GU, HO

Repeatability: This course may not be repeated for additional credits.

EDAD 3027. Research-Based Practices. 3 Credit Hours.

This course is a comprehensive examination of middle schools and the middle school movement. Topics to be studied are: the history, philosophy, and curriculum of middle schools; characteristics of effective middle schools; team organizations; recent influences (debates of effective vs. cognitive); advisories; transition programs; flexible/block scheduling; and the essential characteristics of middle level teachers.

Repeatability: This course may not be repeated for additional credits.

Educational Psychology (EPSY)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

EPSY 2325. Statistics for Decision Making. 3 Credit Hours.

How can organizations choose the best options for new programs they want to start? How should a non-profit decide which services to keep providing and which ones to drop? How can an after-school program figure out which activities are helping kids and which ones need to be improved? How can a museum improve attendance by reaching out to the right audiences? Data-driven decision-making is a set of skills for gathering high-quality information and understanding that information in order to make effective decisions about programs. The course includes an introduction to choosing surveys and measures, ethically gathering high-quality data, visualizing the data, and basics of data analyses that will be most useful to future practitioners and leaders in non-profit, healthcare, and educational settings. Effective communication--of the data gathering process, analysis, results, and implications--to stakeholders is stressed throughout the course.

Repeatability: This course may not be repeated for additional credits.

Electrical Engineering (ECE)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ECE 0822. Investing for the Future. 4 Credit Hours.

This class will teach you about seemingly complicated financial topics in a very comprehensible manner that will help you make informed financial decisions to ensure a secure financial future. We begin with identification of common financial problems among the "young, fabulous and broke" and how to avoid them. After thinking about life and financial priorities, we address why thinking about retirement now must be at the top of your list. We examine how to compute your retirement needs and how to get there, primarily with a focus on investing in common stock. You will learn how to think smart about big ticket purchases such as cars, housing, and graduate/professional education. Finally we will make sure you understand how to create a safety net to protect your future. NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed FIN 0822, FIN 0922 or RMI 0822.

Course Attributes: GQ

Repeatability: This course may not be repeated for additional credits.

ECE 0832. Digital World and Everyday Life. 3 Credit Hours.

Every career is being shaped by digital technology. Buzzwords like Cryptocurrency, Artificial Intelligence, Smart Grid, Big Data, The Cloud, Internet of Things, 5G, and Augmented Reality appear in news articles every day. How do all these technologies fit into your daily life and your future career? This class will help you to understand the current state of digital technology and give you the foundation to understand future technological innovations including understanding the fourth industrial revolution, a.k.a. "Industry 4.0". You will gain foundational knowledge such as how computers work, how they communicate with each other, and how people program computers. You will apply this foundational knowledge to more advanced topics such as the topics at the start of the course description. Lastly, the course will describe the ethical considerations of these changes and what role policy should play. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and a Science & Technology Second Level (SB) requirement for students under Core.

Department Restrictions: May not be enrolled in one of the following Departments: CST:Computer & Info Sci, Engineering:Elec Engineering.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Computer & Information Science, Electrical Engineering.

Course Attributes: GS

Repeatability: This course may not be repeated for additional credits.

ECE 1012. Introduction to Electrical Engineering. 2 to 3 Credit Hours.

This course introduces basic concepts in Electrical and Computer Engineering, and demonstrates them in the context of real applications. Course topics include basics of DC and AC circuits, transistor, diode and operational amplifier circuits, digital logic gates and power supply operation. Students assemble and test a robot car or mouse as part of the class project.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 1022 to 4999, 'Y' in MC6, 'Y' in MC6A, 'Y' in MATW, 'Y' in MC6T, or 'Y' in METW)

ECE 1014. Evolution of Modern Electronic Systems. 3 Credit Hours.

Introduction to modern electronic systems such as telephone networks, television, radio, radar, and computers. Key discoveries such as the vacuum tube, transistor, and laser are covered. The fundamental operating principles are presented in a non-mathematical and historic context. The evolution of these technologies is presented in terms of the need for communication systems and their impact on society. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement.

Course Attributes: SB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any course with attribute "SA" or any course with attribute "GS")

ECE 1022. Technology and You. 3 Credit Hours.

The practitioners of science are scientists. However, we never refer to the practitioners of technology as technologists; rather, they are always referred to as engineers. Therefore understanding the process of engineering is to understand the process of technological development. The engineer of today is either making an old technology better or developing a new technology. As will be illustrated in the readings, engineering is a human endeavor that has existed since the dawn of human kind. To understand engineering and its roots is to understand and appreciate one of humanity's greatest assets. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement.

Course Attributes: SB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any course with attribute "SA" or any course with attribute "GS")

ECE 1111. Engineering Computation I. 4 Credit Hours.

This course will cover the essentials of computer program design, development, testing, and debugging for engineers. In addition to fundamentals such as loops, branching, and subroutines, the course will discuss memory management, pointers, file and data I/O, compilers and linkers, objects, data structures, algorithms, and variable scope. Students will become familiar with scientific and technical computing in the context of solving engineering design challenges. The course will be programming intensive, and students will be expected to code both in and out of class.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1041, MATH 1941, MATH 1038, 'Y' in MATW, or 'Y' in METW), (MATH 1042, MATH 1942, 'Y' in MATW, or 'Y' in METW), ENGR 1102, PHYS 1062, ENGR 2011 (may be taken concurrently), and ENGR 2013 (may be taken concurrently)

ECE 1112. Electrical Applications. 2 Credit Hours.

This course introduces basic concepts in Electrical and Computer Engineering, and demonstrates them in the context of real applications. Course topics include basics of DC and AC circuits, transistor, diode and operational amplifier circuits, digital logic gates and power supply operation.

Co-requisites: ECE 1113.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 1022 to 4999, 'Y' in MC6, 'Y' in MC6A, 'Y' in MATW, 'Y' in MC6T, or 'Y' in METW)

ECE 1113. Electrical Applications Laboratory. 1 Credit Hour.

Laboratory for ECE 1112 (0007): Electrical Applications. This is a hands-on lab based on the material covered in ECE 1112.

Co-requisites: ECE 1112.

Repeatability: This course may not be repeated for additional credits.

ECE 2105. Introduction to Cyber Physical Security. 3 Credit Hours.

This is an introductory course to build foundational knowledge in Cyber Physical Security. While Cyber Security (CS) is to ensure security when we use globally interconnected digital network, Cyber Physical Security (CPS) is to ensure the security of critical, real-time, automated and distributed cyber physical infrastructures and facilities that we depend our livelihood on such as water, power (electrical), energy (oil, nuclear), communication, transportation, manufacturing, the emerging world of Internet-of-Things (IoT). This course starts with high level knowledge areas in CS foundations and principles. The course then expands to knowledge areas in Industrial Control System (ICS), embedded systems, mobile technology, wireless sensor networks, and hardware and firmware security, highlighting various architectures, devices, network, operations, processes, and their vulnerability and potential resilient solutions. Case studies such as an actual attack on power grids are used to analyze the incident and its responses. In some cases, tools are used to demonstrate the CPS applications.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor Sci in Engineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ENGR 1101.

ECE 2112. Electrical Devices & Systems I. 3 Credit Hours.

The purpose of this course is to teach non-Electrical Engineering major students the basics of Electrical circuits and systems, such as: voltage and current, electrical elements (resistors, inductors, capacitors), Kirchoff current and voltage Laws, parallel and series connections, time domain vs. frequency domain analysis, AC power, three phase systems, electrical machines, operational amplifiers, semiconductor diodes and transistors.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PHYS 1062 or PHYS 1022) and (MATH 1042 (may be taken concurrently), MATH 1942 (may be taken concurrently), MATH 1031 (may be taken concurrently), 'Y' in MATW, or 'Y' in METW)

ECE 2113. Electrical Devices & Systems I Lab. 1 Credit Hour.

The purpose of this course is to teach non-Electrical Engineering major students the basics of Electrical circuits and systems in a laboratory environment and to reinforce the theoretical concepts of ECE 2112 by using experimentation.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ECE 2112 (may be taken concurrently)

ECE 2122. Electrical Devices and Systems II. 4 Credit Hours.

Students will study circuit analysis using frequency domain techniques, Laplace Transforms, Operational amplifiers, elements of semiconductor devices, electronic circuits, and logic circuits. Students will work on practical applications relating primarily to the mechanical engineering discipline. The laboratory portion of this course allows students to undertake practical applications of the principles discussed in the lecture. NOTE: This course is for Mechanical Engineering majors only.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in ECE 2112 (D- or higher) and (MATH 1042, MATH 1942, 'Y' in MATW, or 'Y' in METW)

ECE 2142. Engineering Principles for Building Science. 4 Credit Hours.

The engineering design approach centers around principles that apply across disciplines, especially those focused on those studying structures. Every architectural student should have an instinctive understanding of fundamental and traditional concepts in the engineering approach to solving problems in making creative design decisions within physical constraints and requirements. Students will learn properties of structures and materials in context of building science and apply their knowledge to solve open ended problems with focus on intelligently choosing methods rather than arriving at exact solutions. Students will become familiar with emerging technologies while relating them to fundamental concepts. The course is design project based with topics including: Vectors, Physical Modeling of Forces, Free Body Diagrams, Structure Analysis, Perspective, Camera/Projector Optics, Introduction to Sensors, Networks and Smart Buildings.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1031, any MATH course numbered 1032 to 4999, 'Y' in MATW, or 'Y' in METW)

ECE 2312. Electrical Engineering Science I. 3 Credit Hours.

Electric circuit fundamentals including DC and transient circuit analysis are covered in the course. Topics include independent and dependent sources, circuit elements such as resistors, inductors, capacitors and operational amplifiers, linearity, source transformation, Thevenin and Norton equivalent circuits, as well as the analysis and design of first and second order circuits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (MATH 1042 (may be taken concurrently), MATH 1942 (may be taken concurrently), MATH 1951 (C or higher; may be taken concurrently), any MATH course numbered 2043 to 3080 (may be taken concurrently), 'Y' in MA07, 'Y' in MATW, or 'Y' in METW), PHYS 1062 (may be taken concurrently), and ECE 2313 (may be taken concurrently)

ECE 2313. Electrical Engineering Science I Lab. 1 Credit Hour.

This laboratory is concerned with the analysis and design of first and second order circuits with direct current (DC) power sources. This laboratory complements ECE 2312: Electrical Engineering Science I. Topics include independent and dependent sources, circuit elements such as resistors, inductors, capacitors, and operational amplifiers. We also investigate the concept of linearity and source transformation, Thevenin equivalent circuits, and Norton Equivalent circuits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ECE 2312 (may be taken concurrently)

ECE 2322. Electrical Engineering Science II. 3 Credit Hours.

This course is concerned with the analysis of alternate current (AC) circuits. Sinusoidal steady-state analysis, AC power analysis, magnetically coupled circuits, and frequency responses are covered. Laplace transforms are introduced and are used to solve first, second and higher order differential equations. The use of Laplace transforms for circuit analysis is studied and applied.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in ECE 2312, ECE 2323 (may be taken concurrently), and (MATH 1042 (C or higher; may be taken concurrently), 'Y' in MATW, 'Y' in CRMA09, or 'Y' in METW)

ECE 2323. Electrical Engineering Science II Lab. 1 Credit Hour.

This course provides hands-on experience of the principles discussed in ECE 2322. Specifically students will gain practical experience on the use of various electrical equipment and their applications for measuring alternating current quantities.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ECE 2322 (may be taken concurrently)

ECE 2332. Principles of Electric Circuits. 4 Credit Hours.

Electric circuit fundamentals including DC and AC circuit analysis are covered in the course. Topics include circuit elements such as resistors, inductors, capacitors, voltage and current sources, and operational amplifiers; methods of circuit analysis, such as superposition theorem, Thevenin and Norton equivalent circuits, as well as the analysis of first and second order circuits. Sinusoidal steady-state analysis, AC power analysis, magnetically coupled circuits, and frequency responses are covered. Laplace transforms are introduced and are used to solve first, second and higher order differential equations.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1041, MATH 1941, MATH 1038, 'Y' in MATW, or 'Y' in METW) and (MATH 1042 (may be taken concurrently), MATH 1942 (may be taken concurrently), 'Y' in MATW, or 'Y' in METW)

ECE 2333. Principles of Electric Circuits Lab. 1 Credit Hour.

This is a hands-on laboratory course for electric circuit fundamentals including DC and AC circuits. Experiments for this laboratory course will be based on the course material covered in ECE 2332. Topics include series and parallel circuits in DC and AC, frequency response, transient response, and AC sinusoidal response.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ECE 2332.

ECE 2342. Circuits and Electronics I. 5 Credit Hours.

This course is the first in a three-course sequence intended to provide students with foundational knowledge and skills in electrical and computer engineering. In this first course, students will analyze and design DC and AC circuits with linear components such as resistors, inductors, and capacitors. Operational amplifiers will also be studied. Analysis techniques include Kirchoff's voltage and current laws, phasors methods, complex impedance, AC power, Thevenin and Norton equivalent models. Students will explore course concepts in integrated laboratory experiments which include design projects.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1041, MATH 1941, MATH 1038, 'Y' in MATW, or 'Y' in METW), (MATH 1042, MATH 1942, 'Y' in MATW, or 'Y' in METW), ENGR 1102, PHYS 1062, ENGR 2011 (may be taken concurrently), and ENGR 2013 (may be taken concurrently)

ECE 2352. Circuits and Electronics II. 5 Credit Hours.

This course is the second in a three-course sequence intended to provide students with foundational knowledge and skills in electrical and computer engineering. In this second course, students will build on concepts learned in Circuits and Electronics I. They will analyze and design DC and AC circuits containing non-linear devices such as diodes, bipolar junction transistors, and field-effect transistors. Analysis techniques include modeling diodes, transistors, and operational amplifiers. Biasing, frequency response, and amplifier design will also be studied. Students will explore course concepts in integrated laboratory experiments which include design projects.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ECE 2342, ENGR 2011, and ENGR 2013.

ECE 2612. Digital Circuit Design. 3 Credit Hours.

This course considers binary number systems, codes, truth tables and the fundamental operation of digital logic circuits. The implementation of combination and sequential digital logic is by a hardware description language in Verilog behavioral synthesis. Complex digital logic and state machine analysis and design are implemented in simulation and programmable gate array hardware.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECE 2312, ECE 2332 (may be taken concurrently), or PHYS 1062), ECE 2613 (may be taken concurrently), and ECE 1111.

ECE 2613. Digital Circuit Design Laboratory. 1 Credit Hour.

Laboratory for ECE 2612: Digital Circuit Design. This course provides hands-on experience in digital circuits, gates, flip-flops etc.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ECE 2612 (may be taken concurrently)

ECE 2922. Honors Electrical Engineering Science II. 3 Credit Hours.

Topics in this course include: sinusoidal analysis, power measurements, three-phase circuits, complex frequency and network functions, resonance, scaling, frequency response, two-port networks, Fourier series and transforms. This Honors course will be challenging and held to a high standard.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in ECE 2312 (C or higher), ECE 2923 (may be taken concurrently), and MATH 1942.

ECE 2923. Honors Electrical Engineering Science II Lab. 1 Credit Hour.

Topics in this course include: sinusoidal analysis, power measurements, three-phase circuits, complex frequency and network functions, resonance, scaling, frequency response, two-port networks, Fourier series and transforms. This Honors course will be challenging and held to a high standard.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ECE 2922 (may be taken concurrently)

ECE 3082. Independent Study in Electrical Engineering. 1 to 3 Credit Hour.

With the department chair's approval, students may complete a regular course during semesters the course is not offered in order to meet prerequisite or graduation requirements. An instructor supervises the student.

Repeatability: This course may be repeated for additional credit.

ECE 3091. Independent Research in Electrical Engineering. 1 to 3 Credit Hour.

Project assigned with the approval of the department chair and conducted under the supervision of a faculty sponsor.

Repeatability: This course may be repeated for additional credit.

ECE 3185. Electrical and Computer Engineering Summer Internship Experience. 1 to 3 Credit Hour.

This course is for an approved, full-time, full-summer (ten weeks or more) work experience in industry or a government agency. The full-time work experience must be carried out during the summer between a full, regular spring semester and full, regular fall semester. The summer employment must entail rigorous engineering analysis at a level comparable to an approved technical elective course in the BS EE program. Work experience in industry, governmental agencies or educational institutions is arranged through the Director of Career Services in the College of Engineering. The course is for one semester of work experience. Letter from supervisor and report by student are required.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may be repeated for additional credit.

ECE 3312. Microelectronics I. 3 Credit Hours.

Students study ideal and non ideal operational amplifier circuits, diodes in nonlinear circuit applications, bipolar junction transistors, field-effect transistors (JFETs), metal oxide semiconductor field effect transistors (MOSFETs), biasing techniques, gain and bandwidth, the design of amplifiers, and transistors as loads.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (ECE 2322 or ECE 2332) and ECE 3313 (D- or higher; may be taken concurrently)

ECE 3313. Microelectronics I Laboratory. 1 Credit Hour.

Electrical devices and circuits laboratory to be taken concurrently with Electrical Engineering 3312.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in ECE 3312 (D- or higher; may be taken concurrently) and (ECE 2323, ECE 2333, or ECE 2113)

ECE 3412. Classical Control Systems. 3 Credit Hours.

Students will learn the basic theory of analog (classical) control systems. The concept of what constitutes a system is learned as well as how to analyze a system by using input-output pairs. The importance of a transfer function and how it characterizes the behavior of a linear time invariant system will be studied. What a feedback system is and how it may change the behavior of a system is learned. Finally, students will learn how to analyze and design linear time invariant control systems using both time domain and frequency domain techniques.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- (except where noted) in ECE 3512 (C- or higher) and (MATH 2041, MATH 2941, MATH 3041, MATH 3941, or 'Y' in METW)

ECE 3413. Classical Control Laboratory. 1 Credit Hour.

Experimentation on selected topics in ECE 3412: Classical Control Systems.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in ECE 3412 (may be taken concurrently)

ECE 3432. Robotic Control using Robotic Operating System (ROS). 3 Credit Hours.

This course covers the steps of building a robot capable of autonomous movement and remote control from start to finish. It is to educate the beginning robot builder and hopefully inspire creativity so that you can design, build, and modify your own robots with the use of the Robotic Operating System (ROS). The skills and concepts taught in this course are presented from an interdisciplinary approach which merges practices in arts and technology. Essential elements of this course are 1) understanding how ROS is used in robotic control, 2) motor drive and sensor integration, 3) Linux-based microcontroller interface, 4) basics of Python programming language, and 5) controlling the robot using control algorithms, signal and image processing, and cloud computing.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECE 1111 or CIS 1057)

ECE 3512. Signals: Continuous and Discrete. 4 Credit Hours.

This course covers continuous time signal models, convolution, and superposition integral and impulse response. Students also study Fourier series and periodic signals, Parseval's theorem, energy spectral density, Fourier transform and filters, discrete time signals, difference equations, discrete Fourier transform, and discrete convolution.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECE 2322 or ECE 2332) and ENGR 2011.

ECE 3516. Signals and Systems. 5 Credit Hours.

This course is the third in a three-course sequence intended to provide students with foundational knowledge and skills in electrical and computer engineering. In this third course, students will build on concepts learned in Circuits and Electronics I and II to analyze and design signals and systems. Analysis techniques include impulse response, convolution, Fourier series, Fourier transforms, and Laplace transforms. Students will also study discrete-time signals, difference equations, and discrete-time Fourier transform. Students will explore course concepts in integrated laboratory experiments which include design projects.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ECE 2352 and (MATH 2041, MATH 2941, or 'Y' in METW)

ECE 3522. Stochastic Processes in Signals and Systems. 3 Credit Hours.

To provide the student with an understanding about probability, random variables and random processes and their applications to linear systems. Therefore, the student will learn about the various aspects of probability such as distribution and density functions, conditional probability and various types of random processes such as stationary and nonstationary, ergodic and random processes, the autocorrelation and crosscorrelation, power spectral density, white noise and frequency domain analysis of random signals and their evaluation in linear systems analysis.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ECE 3512.

ECE 3612. Processor Systems. 3 Credit Hours.

The course focuses on the Atmel 8-bit processor hardware/software architecture through both assembly language programming and C language and its hardware system implementation using the Atmel 324PB microcontroller. Emphasis will be on both C and assembly languages and how they interact with I/O ports and memory. Additional topics include memory addressing modes, stack operations, arithmetic computations, logic operations, subroutine calls, input/output (I/O) interfacing, interrupts, timers, pulse width modulation, A/D conversion, stepper motor control and if time allows I2C protocol. The hybrid flipped/lecture material is supplemented by coordinated homework augmented with videos and in class assignments in both microcontroller simulations and hardware assignments using Atmel Studio 7.0 and the AVR 324PB microcontroller.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- (except where noted) in ECE 2612 (C- or higher), ECE 2613, and ECE 3613 (may be taken concurrently)

ECE 3613. Processor Systems Laboratory. 1 Credit Hour.

This Junior ECE course is the corresponding laboratory for ECE 3612 Processor Systems. The laboratory assignments utilize Atmel AVR microcontroller simulations using Atmel Studio 6.1 and hardware experiments with the Atmel 169P Butterfly microcontroller. Labs will cover reading and writing to memory, stack operations, LED's on I/O ports, PWM for servo motor control, timers and counters.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in ECE 3612 (may be taken concurrently)

ECE 3614. Printed Circuit Board Design. 3 Credit Hours.

The course introduces students to manufacturing and soldering techniques used in the design of Printed Circuit Boards (PCBs). The design of PCBs will center around using the KiCad Electronic Design Automation (EDA) tool. KiCad will be used to design 1-and 2-layer PCBs from electronic schematic capture followed by the board layout and track routing techniques. Students will gain hands-on experience in the manufacturing process by populating and soldering components to the PCB. Students will learn industry standard design and measurement techniques allowing them to construct PCBs that use both Surface Mounted Devices (SMD) and Plated Thru-Hole (PTH) components.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in ECE 3612 (may be taken concurrently) and ECE 3613 (may be taken concurrently)

ECE 3622. Embedded System Design. 3 Credit Hours.

This course and co-requisite laboratory considers embedded systems in digital process control and digital signal processing using the Verilog hardware description language and behavioral synthesis using the programmable gate array. Topics include: the controller-datapath construct, nested modules, soft core processing elements, fixed and floating point arithmetic calculations in programmable hardware, interfacing to hard core peripherals and soft core microprocessors.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in ECE 3612, ECE 3613, and ECE 3623 (may be taken concurrently)

ECE 3623. Embedded System Design Laboratory. 1 Credit Hour.

Laboratory for ECE 3622 (0245): Embedded System Design.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in ECE 3622 (may be taken concurrently)

ECE 3712. Introduction to Electromagnetic Fields and Waves. 3 Credit Hours.

Engineering applications of electromagnetic field theory including Coulomb's Law, Gauss' Law and Faraday's Law and applications of Poisson's equations with boundary values, Magnetic flux and the use of Gauss' and Ampere's Laws. The course will also consider transmission lines, the development of Maxwell's equations and the transmission of plane waves in free space and uniform, homogenous, isotropic media.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in PHYS 1062, (ECE 2322 or ECE 2332), and (ENGR 2011 or MATH 2101)

ECE 3722. Electromagnetic Wave Propagation. 3 Credit Hours.

This course considers the application of the time-harmonic Maxwell's equations to electromagnetic wave propagation, transmission lines, wave guides, antenna, and methods for numerical analysis. Matlab and computer aided design software is used for simulation of electromagnetic wave propagation in engineering applications.

Co-requisites: ECE 3723.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in ECE 3712.

ECE 3723. Electromagnetic Wave Propagation Laboratory. 1 Credit Hour.

Laboratory for ECE 3722 (0222): Electromagnetic Wave Propagation.

Co-requisites: ECE 3722.

Repeatability: This course may not be repeated for additional credits.

ECE 3732. Electromechanical Energy Systems. 3 Credit Hours.

Fundamentals of electromechanical energy conversion, electromechanical devices, and systems. Energy state functions, force-energy relationships, basic transducers, and introduction to AC and DC machines. DC motors and generators, synchronous motors and generators, induction motors, and transformers.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in ECE 3733 (D- or higher; may be taken concurrently), (ECE 2322, ECE 2332, or ECE 2112), and (ECE 2323, ECE 2333, or ECE 2113)

ECE 3733. Electromechanical Energy Systems Laboratory. 1 Credit Hour.

This course provides hands-on experience on various types of electrical machines, such as DC and AC motors and generators, and transformers. Experiments include operation of transformers, motors and generators, control of motor speed, and loading of generators. Computer data acquisition system is utilized for interface.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in ECE 3732 (D- or higher; may be taken concurrently) and (ECE 2333, ECE 2323, or ECE 2113)

ECE 3822. Engineering Computation II. 3 Credit Hours.

The primary goal for this course is to teach engineers how to solve problems of scale using a variety of computer tools. The three main goals of this course are: (1) introduce students to the hierarchy of software tools (e.g., scripting languages, interpreted languages, compiled languages) used to solve engineering problems; (2) introduce the basics of Python, a scripting language that is a dominant tool in engineering; and (3) introduce Java, object-oriented design, and a number of Java-related software tools that automate testing, documentation and cross-compilation into web applications. A common thread throughout these topics is the decomposition of large-scale problems into smaller problems that can be solved using reusable modules. Good software engineering practices will be stressed throughout the course. The latter part of the course will involve developing a significant computer simulation of a real-world engineering system that involves real data and utilizes both Python and Java.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CIS 1057 or ECE 1111) and ENGR 2011.

ECE 3824. Engineering Computation III. 3 Credit Hours.

Electrical and computer engineers are increasingly interacting with the Internet as part of the technology development process. This requires a complex set of software skills that includes knowledge of operating systems and cloud computing, web programming and graphical user programming. Engineers today are also expected to participate in large software development projects that use integrated development environment tools to interact with Internet-based code repositories and agile development methodologies. In this project-based course, students will learn how to (1) work in a cloud-based environment using the Linux operating system, (2) develop complex software systems using object-oriented design in C++, (3) program using interpretive languages such as Python, (4) develop user interfaces and Internet-aware software using Python, and (5) manage complex software projects using contemporary tools such as GitHub and Taiga.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECE 1111 or CIS 1057)

ECE 3912. Honors Signals: Continuous and Discrete. 4 Credit Hours.

This course covers continuous time signal models, convolution, and superposition integral and impulse response. Students also study Fourier series and periodic signals, Parseval's theorem, energy spectral density, Fourier transform and filters, discrete time signals, difference equations, Z transforms, and discrete convolution. This honors course will be very challenging.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECE 2322 or ECE 2332)

ECE 3914. Honors Microprocessor Systems. 3 Credit Hours.

Students study finite-state machines in process control, assembly language programming of the Intel i186EX 16-bit microprocessor and its hardware system implementation. Additional topics include: dynamic RAM read/write and DMA access, hardware interrupts, I/O port addressing, peripheral interface design, microprocessor addressing modes, op codes, and arithmetic computation. A stimulating and challenging Honors course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in ECE 2612, ECE 2613 (D- or higher), (ECE 2922 or ECE 2332), and ECE 3915 (D- or higher; may be taken concurrently)

ECE 3915. Honors Microprocessor Systems Lab. 1 Credit Hour.

This course is the hardware and software laboratory in microprocessor systems.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in ECE 3914 (may be taken concurrently)

ECE 3916. Honors Signals and Systems. 5 Credit Hours.

This course is the third in a three-course sequence intended to provide students with foundational knowledge and skills in electrical and computer engineering. In this third course, students will build on concepts learned in Circuits and Electronics I and II to analyze and design signals and systems. Analysis techniques include impulse response, convolution, Fourier series, Fourier transforms, and Laplace transforms. Students will also study discrete-time signals, difference equations, and discrete-time Fourier transform. Students will explore course concepts in integrated laboratory experiments which include design projects. This honors course will require students to complete a more in-depth design for these projects.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ECE 2352 and (MATH 2041, MATH 2941, or 'Y' in METW)

ECE 4110. Special Topics. 1 to 4 Credit Hour.

Topics vary by semester. See the course schedule for the specific topic each semester.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Civil Engineering, Electrical Engineering, Engineering, Mechanical Engineering.

Repeatability: This course may be repeated for additional credit.

ECE 4176. Senior Design Project I: ECE. 3 Credit Hours.

This is the designated discipline-specific design course for the BSEE program which will be taken in the senior year. It is the first course of a two-semester senior design sequence intended for electrical engineering majors. Students will develop and practice skills and techniques for managing and executing engineering design projects within a team. The goals for this course will be for each team to build a prototype, measure system performance, and communicate results to peers, sponsors, and faculty. At completion of ECE 4176, students will have the flexibility to continue with the same topic or choose a completely new topic in the follow-on course ENGR 4296: Capstone Senior Design Project. Project requirements for ENGR 4296 will be adjusted depending on whether students elected to continue with the same topic or choose a new topic.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- (except where noted) in (ECE 3612 or ECE 3914), (ECE 3613 or ECE 3915), (ECE 3412, ECE 3522, ECE 3622, ECE 3712, or ECE 3822), and (ECE 3512 (C- or higher), ECE 3912 (C- or higher), ECE 3516 (C- or higher), or ECE 3916 (C- or higher))

ECE 4312. Microelectronics II. 3 Credit Hours.

This course emphasizes solving software design problems as well as advanced study of electronic devices and their application to linear, non-linear, and digital circuits. Further topics include: transistors, FET's filters, oscillators, amplifiers, A/D, D/A, some integrated circuits, and VLSI systems.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in ECE 3312.

ECE 4322. VLSI Systems Design. 3 Credit Hours.

This course introduces the hierarchical design methodology of VLSI and the study of basic logic elements and design methods in MOS and CMOS, as well as the physics of MOS devices and the fabrication process. Design rules and computation of circuit parameters from layout, and system level design are further topics.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ECE 3312.

ECE 4412. Modern Control Theory. 3 Credit Hours.

Analysis and design of control systems using state variable techniques, including discrete and continuous state variable analysis, linear vector spaces, eigenvalues, eigenvectors, controllability, observability, stability, state feedback design, and observer design.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in ECE 3412.

ECE 4422. Digital Control Systems. 3 Credit Hours.

Subjects for this course include: discrete data and digital control systems, signal conversions and processing, the Z transform and state variable techniques applied to digital control system, time and frequency domain analysis techniques, stability of digital control systems, etc. The students are required to design and implement a digital control system in groups and are assigned with different tasks.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in ECE 3412.

ECE 4442. Introduction to Engineering Optimization. 3 Credit Hours.

Optimization aims at maximizing or minimizing an objective in the presence of complicating constraints. This course will cover fundamental concepts and methods in optimization and their applications in engineering systems. The focus will be on linear and nonlinear systems of equations, unconstrained optimization, equality-constrained optimization, and inequality-constrained optimization, with applications in engineering systems. Topics include formulation of nonlinear optimization problems, optimality conditions for convex optimization, review of classical optimization techniques, and illustrative examples from various fields of engineering. The goal is to maintain a balance between theory, numerical computation, problem setup for solution by optimization software, and applications to engineering systems.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 2041, MATH 2941, MATH 3041, MATH 3941, or 'Y' in METW) and ENGR 2011.

ECE 4512. Digital Communication Systems. 3 Credit Hours.

This course and co-requisite laboratory considers techniques of digital signaling and data communication with amplitude, frequency and phase modulation and demodulation in the presence of noise using MATLAB/Simulink simulation. Topics include: the optimum correlation receiver in baseband and bandpass systems, binary and multiple level signaling, time and frequency division multiplexing, error detection and correction, analog-to-digital conversion and traditional analog amplitude and frequency modulation.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in ECE 3522 and ECE 4513 (may be taken concurrently)

ECE 4513. Digital Communication Systems Laboratory. 1 Credit Hour.

Laboratory for Electrical Engineering 4512: Digital Communication Systems.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in ECE 4512 (may be taken concurrently)

ECE 4522. Digital Signal Processing. 3 Credit Hours.

Course topics include: Discrete-time signals and systems, Random signals, Sampling process, Digital processing of analog signals, Discrete-time Fourier Transforms (DTFT), Filter types and characteristics, Filter design, Finite Impulse Response (FIR) systems, linear phase FIR filters, Infinite Impulse Response (IIR) systems, Discrete Fourier Transforms (DFT), Fast Fourier Transform (FFT), Circular convolution, Transfer functions, and Applications of digital signal processing.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in ECE 3522.

ECE 4526. Introduction to Computer Intrusion and Detection of Cyber Physical Security. 3 Credit Hours.

This is an introductory course to computer and system intrusion and detection techniques for cyber physical security (CPS). Students will learn hardware/firmware security and hardware reverse engineering, gaining theoretical and practical knowledge to analyze critical security vulnerabilities of Industrial Control Systems (ICS), in wired and wireless environment - the backbones of any cyber physical systems. Students will learn case studies from actual ICS attacks and run hands-on exercises and tools of being all the 'hats' - red, blue, and white.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor Sci in Engineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in ECE 4532.

ECE 4527. Introduction to Machine Learning and Pattern Recognition. 3 Credit Hours.

Pattern recognition theory and practice is concerned with the design, analysis, and development of methods for the classification or description of patterns, objects, signals, and processes. At the heart of this discipline is our ability to infer the statistical behavior of data from limited data sets, and to assign data to classes based on generalized notions of distances in a probabilistic space. Many commercial applications of pattern recognition exist today, including voice recognition, fingerprint classification, and retinal scanners. Recent developments in statistical modeling using deep learning have accelerated the growth of pattern recognition applications. The objective of this course is to introduce fundamental methods of pattern recognition, both statistical and neural, with examples from several application areas.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECE 3512 or ECE 3912) and ECE 3522.

ECE 4528. Introduction to Cryptography for Cyber Physical Security. 3 Credit Hours.

This is an introductory course to the theory and practice of cryptography used in security for cyber physical systems or Cyber Physical Security (CPS). Cyber physical systems are built upon Industrial Control Systems (ICS) and have a unique set of challenges with the need to support security in three key operations: real-time protection, SCADA (supervisory control and data acquisition), and engineering access (event log). The course starts with cryptography foundations and principles. The course then covers various cryptographic primitives, algorithms, intrusion attacks, security protocols, crypto devices and hardware, government standards, and case studies, specific for CPS needs.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor Sci in Engineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in ECE 4532.

ECE 4532. Data and Computer Communication. 3 Credit Hours.

This course considers wired and wireless data transmission, communication networks and protocols, error detection and correction coding, spread spectrum modulation and demodulation. Topics include protocol architectures, flow and error control, multiplexing, code division multiple access 4G LTE cellular systems and embedded Ethernet.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in ECE 3522 (D- or higher) and (CIS 1057 or ECE 1111)

ECE 4542. Telecommunications Engineering. 3 Credit Hours.

This course considers digital data communication with complex modulation and error detection and correction in the presence of noise using MATLAB/Simulink simulation. Topics include: quadrature amplitude and continuous phase modulation, frequency hopping and spread spectrum modulation, linear, block, cyclic, convolutional and CRC codes, fading and multipath interference, Doppler shift in mobile environments and the performance of cellular and wireless communication systems.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in ECE 4512.

ECE 4574. Introduction to Cisco Certificate Preparation. 3 Credit Hours.

This course introduces/prepares students to become certified as a Cisco Certified Entry Network Technician (CCENT). CCENT-certified professionals have the knowledge and skill to install, operate, and troubleshoot a small enterprise branch network, including basic network security. The course includes a hands-on lab equipped with Cisco networking equipment, access to the powerful Cisco Packet Tracer networking simulation software, as well as access to the online courses at Cisco Networking Academy. Students who complete the online curricula will receive a discount voucher to reduce the cost of the CCENT exam. Students who wish to prepare to become certified in the Cisco Certified Networking Associate program may take other follow-up courses.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ECE 4532 (may be taken concurrently)

ECE 4612. Advanced Processor Systems. 3 Credit Hours.

This course focuses on Verilog hardware description language and its applications to digital hardware system design including CPU and memory, as well as synchronous and asynchronous events and multitasking in the design of computational and data communication processors. The course will also consider computer-aided-design software and simulators, and hardware description language compilers.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in ECE 3612 and ECE 3613.

ECE 4712. Power System Analysis. 3 Credit Hours.

This course introduces the modern power systems and its changing landscape. Topics include the basics of power generation, transmission and distribution, power flow, economic dispatch, transient and stability analysis, short circuit analysis, and HVDC systems.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECE 2322 or ECE 2332)

ECE 4722. Power Electronics. 3 Credit Hours.

This course introduces the basics of power electronic circuits and their applications in modern power systems. Topics include converters and inverters, and their applications in power systems. Course material covers DC-DC converters in buck and boost topologies, and their analysis; AC-DC rectification and control; DC-AC inverters and their applications in voltage and frequency control; three-phase inverters and HVDC transmission. This course will use Matlab/Simulink simulation for student projects and homework.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((ECE 2332 and ECE 2333), (ECE 2112 and ECE 2113), or (ECE 2322 and ECE 2323))

ECE 4822. Engineering Computation IV. 3 Credit Hours.

In this course, students will study the implementation of parallel processing algorithms on graphics processing units (GPUs). This course has three main components: an overview of processor architectures, a study of parallel algorithms and hands-on experience with programming Nvidia GPUs using popular software libraries such as CUDA. Students will be expected to program in C/C++ and Python and have experience with the Linux operating system.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECE 3822 or CIS 2168)

Electrical Engineering Technology (EET)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

EET 2104. Introduction to Electrical Circuits. 4 Credit Hours.

This course considers electrical and physical characteristics of resistance, inductance, and capacitance, analysis of DC and AC circuits, operational amplifiers, elements of semiconductor devices, electronic circuits, and logic circuits. Students will also study electrical measurements. A laboratory is included.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in PHYS 1022.

EET 2112. Elements of Electrical Engineering Technology I (DC Circuits). 4 Credit Hours.

A non-calculus approach to DC circuits, node and mesh analysis, superposition and Thevenin's Theorem, as well as power, electromechanical systems and transient analysis. The laboratory portion of this course allows students to undertake practical applications of the principles discussed in the lecture. NOTE: Offered at Lehigh Carbon County College campus only.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in PHYS 1022.

EET 2122. Elements of Electrical Engineering Technology II (AC Circuits). 4 Credit Hours.

Circuit analysis of alternating current circuits. Examine RC, RL, and RLC circuits as well as resonance and time response of reactive circuits and transformers. The laboratory portion of this course requires students to build basic circuits and check circuit operation with oscilloscopes. Further checks on circuit performance are done with computer software simulations of circuits covered in the lecture. NOTE: Offered at Lehigh Carbon County College campus only.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in EET 2112.

EET 3276. Digital Logic Circuits. 4 Credit Hours.

This course covers: number systems, codes, and truth tables; logical hardware devices such as gates, inverters, tristate logic, flip-flops, and latches; digital circuits such as arithmetic units, comparators, code converters, ripple and ring counters, and shift registers; and design of combinational and sequential digital circuits. XILINX will be used. A laboratory is included.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in EET 2112.

EET 3277. Microcomputer Systems. 4 Credit Hours.

Topics in this course include: finite-state machines in process control; assembly language programming of the WDC 65816 16 bit microprocessor and its hardware system implementation; dynamic RAM read/write and DMA access; hardware interrupts; I/O port addressing and peripheral interface design; microprocessor addressing modes; op codes; and arithmetic computation. A laboratory is included.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in EET 3276.

EET 3278. Digital Logic Circuits & Microprocessors. 4 Credit Hours.

This course is the study of basic circuits common to digital logic circuits such as gates, flip-flops, counters, and arithmetic circuits. Also included are mathematical concepts such as Boolean algebra. Students also study finite-state machines in process control, assembly language programming of the WDC 65816 16 bit microprocessor and its hardware system implementation. Additional topics include: dynamic RAM read/write and DMA access, hardware interrupts, I/O port addressing, peripheral interface design, microprocessor addressing modes, op codes, and arithmetic computation. The lab runs concurrently with the lecture and provides students an opportunity to learn and prove digital and microprocessor concepts by experimentation. NOTE: Offered at Lehigh Carbon County College campus only.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in EET 2112.

Elementary Education (ELED)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ELED 3287. Practicum: Teaching Elementary Children N-6. 2 to 3 Credit Hours.

Practicum experience supervised by college personnel at educational centers designed to provide students with experience in working with elementary school children and other school personnel. NOTE: Students must not register for any other classes before 1 p.m. on Tuesdays.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: ENEE 3297.

Repeatability: This course may be repeated for additional credit.

ELED 3387. Practicum: Teaching Math/Science to Elementary Children N-6. 2 to 3 Credit Hours.

Practicum experience supervised by university personnel at educational centers designed to provide students with experience in working with elementary school children and other school personnel; focuses on math/science. NOTE: Students must not register for any other classes before 1 p.m. on Tuesdays.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: MAEE 3141, SCEE 3151.

Repeatability: This course may be repeated for additional credit.

Engineering (ENGR)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ENGR 1001. College of Engineering First Year Seminar. 1 Credit Hour.

This course will focus on helping first-year engineering students develop the skills needed to effectively transition to college life in their engineering program at Temple University. The course is designed to provide students with an introduction to valuable and functional time management skills, goal setting, study and test-taking strategies and career and professional development skills necessary for success in engineering. The course will also focus on student engagement by introducing students to experiential education, student professional organizations, research opportunities, and other social activities within the College of Engineering and Temple community. NOTE: Registration for this course is restricted to first year students enrolled in the College of Engineering.

Class Restrictions: Must be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Repeatability: This course may not be repeated for additional credits.

ENGR 1101. Introduction to Engineering & Engineering Technology. 3 Credit Hours.

Provides an understanding of the study and practice associated with bioengineering, civil, electrical, mechanical engineering and technology disciplines. Understand the importance of good communications and teamwork skills in a successful engineering and technology career. Understand the basics of problem solving and design. Discipline-specific labs.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Repeatability: This course may not be repeated for additional credits.

ENGR 1102. Introduction to Engineering Problem Solving. 3 Credit Hours.

This course is designed to introduce students to important computational skills and tools that will provide the basis for future work and study in engineering. The overall theme of the course will focus on the role of the computer in engineering problem solving and analysis. Students will learn the fundamentals of algorithmic thinking, program design, program development, debugging, and critical analysis of the suitability of different techniques for different problems. Applications to problems in engineering analysis with topics selected from the engineering degree programs offered.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ENGR 1101 or ENGR 1901)

ENGR 1103. Introduction to Mathematical Modeling for Engineers. 4 Credit Hours.

This course will provide an overview of the salient math topics most heavily used in the core sophomore-level engineering courses. These include algebraic manipulation of engineering equations, trigonometry, vectors and complex numbers, sinusoids and harmonic signals, systems of equations and matrices, differentiation, integration and differential equations. All math topics will be presented within the context of an engineering application, and reinforced through extensive examples of their use in the core engineering courses.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MATH 1021, 'Y' in MC5, 'Y' in MC6, 'Y' in MC6A, 'Y' in CRMA04, or 'Y' in MC6T)

ENGR 1117. Engineering Graphics. 2 Credit Hours.

Computer-aided geometrical construction, solids modeling, charts, orthographic and isometric drawings, dimensioning, auxiliary views, sectioning, geometric tolerancing, and elementary drafting problems.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Repeatability: This course may not be repeated for additional credits.

ENGR 1185. Internship Experience I. 1 to 4 Credit Hour.

Work experience in industry, governmental agencies, or educational institutions is arranged through the Director of Career Services in the College of Engineering. The course is for one semester of work experience. Letter from supervisor and report by student are required.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may be repeated for additional credit.

ENGR 1901. Honors Introduction to Engineering. 3 Credit Hours.

Provides a high level understanding of the study and practice associated with bioengineering, civil, electrical, mechanical engineering and technology disciplines. Understand the importance of good communication and teamwork skills in a very successful engineering and technology career. Understand the fundamentals of problem solving and design. Discipline-specific labs.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

ENGR 2011. Engineering Analysis & Applications. 3 Credit Hours.

This course introduces applications of linear algebra for solving engineering problems from theoretical, analytical, and computer-based perspectives. Topics include linear matrix equations with engineering applications, vector and matrix operations, rank and determinant, matrix inversion, linear independence, eigenvalues and eigenvectors, rectangular and polar representations of complex numbers, and complex number algebra. Engineering applications of various concepts are emphasized. Modern appropriate software tools will be utilized to aid in solving these mathematical problems.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1042, MATH 1942, 'Y' in MATW, 'Y' in CRMA09, or 'Y' in METW), ENGR 1102, and ENGR 2013 (may be taken concurrently)

ENGR 2013. Engineering Analysis and Applications Lab. 1 Credit Hour.

This is a supplementary computer laboratory course for ENGR 2011 Engineering Analysis and Applications. Modern appropriate software tools will be utilized to aid in solving mathematical problems studied in ENGR 2011.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1042, MATH 1942, 'Y' in MATW, or 'Y' in METW), ENGR 1102, and ENGR 2011 (may be taken concurrently)

ENGR 2101. Professional Development Seminar for Engineers. 1 Credit Hour.

The purpose of this course is to help prepare students for engineering internship, research, Co-Op, and job search processes and experiences. Guided by the National Association of Colleges and Employers (NACE) career readiness and competencies framework the course will help students gain, refine, and demonstrate requisite skills necessary for a successful transition into the professional work environment.

Repeatability: This course may not be repeated for additional credits.

ENGR 2181. Co-Op Work Experience I. 3 Credit Hours.

Each is a prerequisite to the course that follows. Full time work experience in industry, governmental agencies, or educational institutions is arranged through the co-op coordinator of the College of Engineering (15 weeks, 40 hours/week). Students are considered as academically full-time during work periods.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may be repeated for additional credit.

ENGR 2185. Internship Experience II. 1 to 4 Credit Hour.

Work experience in industry, governmental agencies, or educational institutions is arranged through the Director of Career Services in the College of Engineering. The course is for one semester of work experience. Letter from supervisor and report by student are required.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of D- in ENGR 1185.

ENGR 2196. Technical Communication. 3 Credit Hours.

Technical Communication prepares students for their capstone Senior Design project and professional communication as engineers. This course emphasizes technical research and source evaluation, audience-specific writing, accuracy, and clarity. Responsible engineering is a core component, particularly current events, the impact of engineering, and ethical decision-making. Students are encouraged to explore areas of personal interest for the term paper, which can be used as a writing sample or draft for later publication.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1042 (may be taken concurrently), MATH 1942 (may be taken concurrently), MATH 1031 (may be taken concurrently), 'Y' in MATW, or 'Y' in METW) and (PHYS 1061 (may be taken concurrently), PHYS 2021 (may be taken concurrently), PHYS 2921 (may be taken concurrently), or PHYS 1021 (may be taken concurrently))

ENGR 2331. Engineering Statics. 3 Credit Hours.

You will learn fundamental concepts that are used in every engineering discipline: vector mechanics of concentrated and distributed forces, moments, Free Body Diagrams, static analyses of trusses, frames and machines, internal forces and moments, frictional systems, centroids, and moments of inertia.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1042 (may be taken concurrently), MATH 1942 (may be taken concurrently), MATH 1031, 'Y' in MATW, or 'Y' in METW) and (PHYS 1061, PHYS 2021, PHYS 2921, or PHYS 1021)

ENGR 2332. Engineering Dynamics. 3 Credit Hours.

A vector approach to the study of the rectilinear and curvilinear motion of particles and rigid bodies as described by rectangular, polar, and path coordinates and the study of the forces that produce such motion as described through the application of Newton's second law of motion, work-energy relationships, and impulse and momentum principles, including rigid body rotation and relative motion.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ENGR 2331 or ENGR 2931)

ENGR 2333. Mechanics of Solids. 3 Credit Hours.

Classical approach to axial stress and strain, torsion, bending, combined stress, biaxial stress, deflection of beams and frames, elastic strain energy, pressure vessels, column stability, and buckling.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ENGR 2331 or ENGR 2931)

ENGR 2334. Engineering Statics/Dynamics. 3 Credit Hours.

Vector mechanics of force and moment systems in two and three dimensions, free body diagrams and the static equilibrium of structures, centroids, area and mass of the rectilinear and curvilinear motion of particles as described by rectangular, polar and path coordinates and the study of the forces that produce such motion using Newton's second law of motion, work-energy relationships, and impulse-momentum techniques. An overview of rigid body rotation is presented.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1041, MATH 1941, MATH 1038, 'Y' in MATW, or 'Y' in METW) and (PHYS 1021 or PHYS 1061)

ENGR 2335. Mechanics I. 3 Credit Hours.

A vector mechanics study of STATICS: free body diagrams, equilibrium, resultant force/couple systems, reaction forces and couples on 2-D and 3-D systems, member forces in trusses; and DYNAMICS: kinematics and kinetics of particles.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (MATH 1042 (may be taken concurrently), MATH 1942 (C or higher; may be taken concurrently), MATH 1951 (C or higher; may be taken concurrently), any MATH course numbered 2043 to 3080 (may be taken concurrently), 'Y' in MA07, 'Y' in MATW, 'Y' in CRMA11, or 'Y' in METW) and (PHYS 1061 (may be taken concurrently), PHYS 2021 (may be taken concurrently), PHYS 2921 (may be taken concurrently), PHYS 1062 (may be taken concurrently), PHYS 2022 (may be taken concurrently), PHYS 2922 (may be taken concurrently), any PHYS course numbered 2101 to 2701 (may be taken concurrently), any PHYS course numbered 3101 to 3701 (may be taken concurrently), or any PHYS course numbered 4101 to 4796 (may be taken concurrently))

ENGR 2336. Mechanics II. 3 Credit Hours.

A vector mechanics study of STATICS: centroids, moments of inertia, shearing force and bending moment diagrams, frictional systems; and DYNAMICS: the rectilinear and curvilinear motion, rigid bodies as described by rectangular, polar and path coordinates and the study of the forces that produce such motion as described through the application of Newton's second law of motion, work-energy relationships, and impulse and momentum principles, including rigid body rotation and relative motion.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in ENGR 2335.

ENGR 2900. Honors Special Topics. 3 Credit Hours.

Variable Honors offerings on special topics that are not part of the standard roster of courses. Check with the College of Engineering office for details on Special Topics courses.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

ENGR 2931. Honors Engineering Statics. 3 Credit Hours.

Vector mechanics of force and moment systems in two and three dimensions, freebody diagrams and the static equilibrium of structures, centroids, moments of inertia, frictional systems, shearing force, and bending moment diagrams. This honors class will be held to high standards.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1041, MATH 1941, MATH 1038, 'Y' in MATW, or 'Y' in METW) and (PHYS 1061, PHYS 2021, or PHYS 2921)

ENGR 2933. Honors Mechanics of Solids. 3 Credit Hours.

Classical approach to axial stress and strain, torsion, bending, combined stress, biaxial stress, deflections of beams and frames, elastic strain energy, pressure vessels, column stability, and buckling. Very challenging honors course.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ENGR 2931.

ENGR 2996. Honors Technical Communication. 3 Credit Hours.

This course prepares engineering and other STEM honors students for the technical writing and related communications they will generate in subsequent courses and professionally. (The growing interdisciplinarity of engineering projects has prompted this invitation to other STEM majors. But note that this course teaches communication topics generically - not specialized terminologies, document types, or writing styles.) Writing skills emphasized in the course include finding and properly using technical research sources, responding to the needs of diverse audiences, ensuring accuracy and clarity, and automating documents for efficient maintainability. Students are encouraged to put extra effort into their self-designed main paper to increase its value as a professional writing sample and perhaps even for publication. The course also readies students for responsible professional practice by having them analyze relevant news developments, project impacts, and ethical challenges.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1042 (may be taken concurrently), MATH 1942 (may be taken concurrently), MATH 1031 (may be taken concurrently), 'Y' in MATW, or 'Y' in METW) and (PHYS 1021 (may be taken concurrently), PHYS 1061 (may be taken concurrently), PHYS 1961 (may be taken concurrently), PHYS 2021 (may be taken concurrently), PHYS 2921 (may be taken concurrently), CHEM 1031 (may be taken concurrently), CHEM 1035 (may be taken concurrently), or CHEM 1951 (may be taken concurrently))

ENGR 3001. Engineering Economics. 3 Credit Hours.

The objectives of the course are to apply economic theory to design, planning and execution of engineering problems and projects. This course focuses on modern economic theories such as behavioral economics and random theory to provide engineering students with the decision-making skills necessary to evaluate the economic feasibility of investment projects. As the capital outlays may be significant and affect the productive potential of a firm over the long term, it is important to understand the time value of money and how it may be impacted by parameters such as climate change. The course emphasizes on measurements of economic worth, after tax cash flow analysis, replacement analysis, and supplemental analysis; including break even, sensitivity, and risk analysis. A final project consisting of evaluating a real-world investment project is performed and submitted as a report and presented at the end of the course.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Repeatability: This course may not be repeated for additional credits.

ENGR 3033. Entrepreneurial Engineering. 3 Credit Hours.

The course is specifically designed to introduce students to the ideas and concepts of entrepreneurship; to help students recognize the entrepreneurial potential within themselves and others in their environment; link the entrepreneur's spirit with the engineer's mind and discipline; give the students the understanding of the opportunities and challenges facing any entrepreneur from the start up through running and growing a business; and create an understanding of the role of technology in developing the students' understanding of all the different opportunity paths that are available in today's economic and global environment. Students will develop an awareness of how to detect, understand, and develop product and/or service opportunities; understand and master the different business, legal, regulatory and human challenges that confront any business every day; understand the basic accounting, marketing, sales, negotiating, communication, intellectual property and analytical tools of business and how to apply them; understand how to decipher and learn from case studies; and learn the importance of and the creation of a business plan and how to use it to raise money and/or support for their business venture.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Repeatability: This course may not be repeated for additional credits.

ENGR 3077. Simulation of Linear and Nonlinear Engineering Systems. 3 Credit Hours.

A first course on the theory and engineering applications of mathematical modeling of linear and nonlinear systems. Building mathematical models from essential laws, the role of assumptions, development of governing equations, dimensional analysis, solutions of fundamental equations, computer programming using Maple, simulation, effect of parameter estimation, forecasting, graphical systems analysis, model verification, and validation.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 2043 (may be taken concurrently) or 'Y' in METW)

ENGR 3117. Computer-Aided Design (CAD). 3 Credit Hours.

Introduction to Computer-Aided Design (CAD) using the state of the art ANSYS finite element program. The focus is to train students to perform advanced two- and three- dimensional solid modeling/stress analysis using ANSYS finite element software for solving and designing complex mechanical structures. It is expected that before taking this course, students have fundamental understanding of statics, dynamics, and solid mechanics concepts. Design projects will be given where students will have to design, analyze, and manufacture structural designs.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (ENGR 1117 (D- or higher) or MEE 1117 (D- or higher)), (ENGR 2333, ENGR 2933, or BIOE 3312), and (MEE 3011 (D- or higher) or Complete the following: (ENGR 2332 or BIOE 2312), (MATH 2101, ENGR 2011, or MEE 2011), and (MATH 2041, MATH 2941, MATH 3041, MATH 3941, or 'Y' in METW))

ENGR 3181. Co-Op Work Experience II. 3 Credit Hours.

Each is a prerequisite to the course that follows. Full time work experience in industry, governmental agencies, or educational institutions is arranged through the co-op coordinator of the College of Engineering (15 weeks, 40 hours/week). Students are considered as academically full-time during work periods.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of D- in ENGR 2181.

ENGR 3185. Internship Experience III. 1 to 4 Credit Hour.

Work experience in industry, governmental agencies, or educational institutions is arranged through the Director of Career Services in the College of Engineering. The course is for one semester of work experience. Letter from supervisor and report by student are required.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of D- in ENGR 2185.

ENGR 3201. Material Science for Engineers. 3 Credit Hours.

Atomic and molecular structures, bonding and interatomic forces, thermodynamics and kinetics of solid reactions, mechanical, electronic, and magnetic properties of solids.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PHYS 1062, PHYS 2022, or PHYS 2922), (CHEM 1031, CHEM 1035, or CHEM 1951), and (ENGR 2333 (may be taken concurrently) or ENGR 2933 (may be taken concurrently))

ENGR 3281. Co-op Experience I. 3 Credit Hours.

Students will research Co-op opportunities, receive the Director's approval for the specific Co-op, set up interviews, and obtain a position and work a minimum thirty-five hours a week during the 14-week term for the three credit hours in a professional environment related to the careers they might have an interest. Students are responsible for preparing themselves for the professional experience in consultation with the Director of the Co-op program. There will be a number of sources to choose from, including approved opportunities maintained on file in the Director's office, student generated or discovered opportunities for which student must receive prior approval and opportunities with established commercial, engineering and professional organizations approved by the Director. Students may take Co-op experiences with different entities but are encouraged to repeat professional experiences with the same organization.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may be repeated for additional credit.

ENGR 3334. Mechanical Systems. 3 Credit Hours.

This course considers the fundamentals of mechanics including statics, dynamics, materials, thermodynamics and fluid mechanics and their application to systems of beams, pulleys, gear trains, levers exhibiting vibration, heat conduction, convection and expansion and fluid flow.

Department Restrictions: Must be enrolled in one of the following Departments: Engineering:Elec Engineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in PHYS 1062 and (MATH 2043 or 'Y' in METW)

ENGR 3381. Co-op Experience II. 3 Credit Hours.

Students will research Co-op opportunities, receive the Director's approval for the specific Co-op, set up interviews, and obtain a position and work a minimum thirty-five hours a week during the 14-week term for the three credit hours in a professional environment related to the careers they might have an interest. Students are responsible for preparing themselves for the professional experience in consultation with the Director of the Co-op program. There will be a number of sources to choose from, including approved opportunities maintained on file in the Director's office, student generated or discovered opportunities for which student must receive prior approval and opportunities with established commercial, engineering and professional organizations approved by the Director. Students may take Co-op experiences with different entities but are encouraged to repeat professional experiences with the same organization.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of D- in minimum GPA of 2.5 in: ENGR 3281.

ENGR 3553. Mechanics of Fluids. 3 Credit Hours.

General physical properties of fluids. Fluid statics and pressure measurements. Kinematics of fluid motion. Conservation laws in control volume and differential forms with applications. Bernoulli's equation and irrotation flow. Viscous flow in pipes and flow measurements. Boundary layer concepts. Numerical methods. Design project.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ENGR 2332 or BIOE 3312), (MATH 3041 (may be taken concurrently), MATH 3941 (may be taken concurrently), MATH 2041 (may be taken concurrently), MATH 2941 (may be taken concurrently), or 'Y' in METW), and (MATH 2043, MATH 2943, or 'Y' in METW)

ENGR 3571. Classical and Statistical Thermodynamics. 3 Credit Hours.

The study of the concepts, theory, and application of energy and entropy from a classical and statistical viewpoint. NOTE: Special Authorization for Non-Majors. Open to all engineering majors.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PHYS 1062, PHYS 1962, PHYS 2022, or PHYS 2922), (MATH 1042, MATH 1942, 'Y' in MATW, or 'Y' in METW), and (CHEM 1031, CHEM 1035, CHEM 1041, or CHEM 1951)

ENGR 3953. Honors Mechanics of Fluids. 3 Credit Hours.

General physical properties of fluids. Fluid statics and pressure measurements. Kinematics of fluid motion. Conservation laws in control volume and differential forms with applications. Bernoulli's equation and irrotation flow. Viscous flow in pipes and flow measurements. Boundary layer concepts. Numerical methods. Design project. This honors course will be held to high standards.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ENGR 2332 or BIOE 3312), (MATH 3041 (may be taken concurrently), MATH 3941 (may be taken concurrently), MATH 2041 (may be taken concurrently), MATH 2941 (may be taken concurrently), or 'Y' in METW), and (MATH 2043, MATH 2943, or 'Y' in METW)

ENGR 3982. Honors Independent Study. 1 to 4 Credit Hour.

A challenging opportunity to either 1) study an honors course which is not offered during the semester, or 2) study specialized topics not covered in currently available honors courses. High standards are expected of the student by an honors faculty who will supervise.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

ENGR 4040. Special Topics. 1 to 4 Credit Hour.

A course designed to present new and emerging areas of engineering. The course may also be used to present areas not normally taught in the College. Course requirements vary with the topic and instructor. Offered as needed or as appropriate.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Repeatability: This course may be repeated for additional credit.

ENGR 4101. Fundamentals of Engineering (FE) Examination Review. 1 Credit Hour.

This course will give students the practical and theoretical knowledge to help pass the FE examination. The course provides a comprehensive review of basic science and engineering, theories and applications, advanced topics in civil and mechanical engineering. Problem solving and test taking strategies will be an integral part of the course. The course will provide additional assessment for ABET.

Repeatability: This course may not be repeated for additional credits.

ENGR 4116. Spacecraft Systems Engineering. 3 Credit Hours.

This course will introduce the systems engineering concept through satellite applications. The goals of this course are to introduce: a) systems engineering concepts, b) satellite subsystems, c) astrodynamics, and d) intellectual property. Topics covered will include space environment, dynamics of spacecraft, celestial mechanics, mission analysis, attitude control, systems engineering, and patents.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in (MATH 3041, MATH 3941, MATH 2041, MATH 2941, or 'Y' in METW)

ENGR 4121. Design of Experiments. 3 Credit Hours.

The practice of modern science and engineering is synonymous with the ability to plan, design and conduct experiments efficiently and effectively, and analyze the resulting data to obtain objective conclusions in applications ranging from new product design and development to phenomenological/basic science studies. In this course we will focus primarily on methodological and design issues in planning experiments rather than on statistical analysis of the data. Nevertheless, we will briefly review various statistical analysis approaches required for fully designed experiment. Case studies involving single factor experiments, factorial designs, manipulation checks, etc. will be used to develop hands on skills for designing your own experiments. The course will have a focus on engineering approach to design of experiments with a particular emphasis on problem definition, system identification, data collection, statistical analysis, and hypothesis testing. For the final project, you will prepare a fellowship or grant (e.g. NSF GRFP or AHA Predoctoral) application ready for submission to a funding agency.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

ENGR 4169. Engineering Seminar. 1 Credit Hour.

Preparation for entering the professional world of engineering. Includes job placement, professional registration, ethics, professional societies, case studies, and guest speakers.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ENGR 2196 (may be taken concurrently) or ENGR 2996 (may be taken concurrently))

ENGR 4171. Senior Design Project I for Industrial and Systems Engineering. 2 Credit Hours.

This is the first course of a two-semester senior design sequence intended for industrial and systems engineering majors. Students will develop and practice skills and techniques for managing and executing engineering design projects. This includes problem identification, planning of the project, formulation of design specifications, the development and evaluation of alternative conceptual designs, the development of detailed designs and specification of manufacturing processes, prototyping of manufacturing processes, and analysis and documentation of results. At completion, students will present their design process and final design in several formats: oral presentations, poster presentations, web pages, and reports.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Industrial + Sys Engineering.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in ISE 3102, ISE 3103, ISE 4104, CEE 3048 (D- or higher), and ENGR 4169 (D- or higher)

ENGR 4172. Senior Design Project I for Engineering. 2 Credit Hours.

This is the first course of a two-semester senior design sequence intended for engineering majors. Students will develop and practice skills and techniques for managing and executing engineering design projects. This includes problem identification, planning of the project, formulation of design specifications, the development and evaluation of alternative conceptual designs, the development of detailed designs and specification of manufacturing processes, prototyping of manufacturing processes, and analysis and documentation of results. At completion, students will present their design process and final design in several formats: oral presentations, poster presentations, web pages, and reports.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Engineering.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- (except where noted) in (ECE 2332 (C- or higher) or ECE 2112 (C- or higher)), (ECE 3732, ECE 3722, ECE 3622, or ENGR 3553), and ENGR 4169.

ENGR 4173. Senior Design Project I for Environmental Engineering. 2 Credit Hours.

This is the first course of a two-semester senior design sequence intended for environmental engineering majors. Students will develop and practice skills and techniques for managing and executing engineering design projects. This includes problem identification, planning of the project, formulation of design specifications, the development and evaluation of alternative conceptual designs, the development of detailed designs and specification of manufacturing processes, prototyping of manufacturing processes, and analysis and documentation of results. At completion, students will present their design process and final design in several formats: oral presentations, poster presentations, web pages, and reports.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Environmental Engineering.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in CEE 3712, CEE 3715, CEE 3717, (CEE 3727 or CEE 4631), CEE 4721, and ENGR 4169 (D- or higher)

ENGR 4174. Senior Design Project I for Bioengineering. 2 Credit Hours.

This is the first course of a two-semester senior design sequence intended for bioengineering majors. Students will develop and practice skills and techniques for managing and executing engineering design projects. This includes problem identification, planning of the project, formulation of design specifications, the development and evaluation of alternative conceptual designs, the development of detailed designs and specification of manufacturing processes, prototyping of manufacturing processes, and analysis and documentation of results. At completion, students will present their design process and final design in several formats: oral presentations, poster presentations, web pages, and reports.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in BIOE 3001 (may be taken concurrently), BIOE 3101, BIOE 3102 (may be taken concurrently), BIOE 3201, and ENGR 4169 (D- or higher)

ENGR 4175. Senior Design Project I for Civil Engineering. 2 Credit Hours.

This is the first course of a two-semester senior design sequence intended for civil engineering majors. Students will develop and practice skills and techniques for managing and executing engineering design projects. This includes problem identification, planning of the project, formulation of design specifications, the development and evaluation of alternative conceptual designs, the development of detailed designs and specification of manufacturing processes, prototyping of manufacturing processes, and analysis and documentation of results. At completion, students will present their design process and final design in several formats: oral presentations, poster presentations, web pages, and reports.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Civil Engineering.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in CEE 3331, CEE 3332, ((CEE 3411 (D- or higher) and CEE 3412 (D- or higher)) or CEE 3711), ENGR 3553, ENGR 3571, and ENGR 4169 (D- or higher)

ENGR 4176. Senior Design Project I for Electrical Engineering. 2 Credit Hours.

This is the first course of a two-semester senior design sequence intended for electrical engineering majors. Students will develop and practice skills and techniques for managing and executing engineering design projects. This includes problem identification, planning of the project, formulation of design specifications, the development and evaluation of alternative conceptual designs, the development of detailed designs and specification of manufacturing processes, prototyping of manufacturing processes, and analysis and documentation of results. At completion, students will present their design process and final design in several formats: oral presentations, poster presentations, web pages, and reports.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Electrical Engineering.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- (except where noted) in (ECE 3412 or CIS 1068), ECE 3512 (C- or higher), ECE 3522, ECE 3612, (ECE 3712 or ECE 3622), and ENGR 4169 (C- or higher)

ENGR 4177. Senior Design Project I for Mechanical Engineering. 2 Credit Hours.

This is the first course of a two-semester senior design sequence intended for mechanical engineering majors. Students will develop and practice skills and techniques for managing and executing engineering design projects. This includes problem identification, planning of the project, formulation of design specifications, the development and evaluation of alternative conceptual designs, the development of detailed designs and specification of manufacturing processes, prototyping of manufacturing processes, and analysis and documentation of results. At completion, students will present their design process and final design in several formats: oral presentations, poster presentations, web pages, and reports.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Mechanical Engineering.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- (except where noted) in ECE 2112, (ENGR 3553 (C- or higher) or ENGR 3953 (C- or higher)), ENGR 3571 (C- or higher), ENGR 4169, MEE 3301, and (ENGR 3117 (may be taken concurrently) or MEE 3117 (may be taken concurrently))

ENGR 4181. Co-Op Work Experience III. 1 Credit Hour.

Each is a prerequisite to the course that follows. Full time work experience in industry, governmental agencies, or educational institutions is arranged through the co-op coordinator of the College of Engineering (15 weeks, 40 hours/week). Students are considered as academically full-time during work periods.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of D- in ENGR 3181.

ENGR 4182. Independent Study in Engineering. 1 to 5 Credit Hour.

Arranged each semester, please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

ENGR 4185. Internship Experience IV. 1 to 4 Credit Hour.

Work experience in industry, governmental agencies, or educational institutions is arranged through the Director of Career Services in the College of Engineering. The course is for one semester of work experience. Letter from supervisor and report by student are required.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of D- in ENGR 3185.

ENGR 4201. Micro- to Nano-sized Machines. 3 Credit Hours.

This course begins with a vision of the present and futuristic nano-machines and micro-factories, as well as a brief review of the crystal structure and types of materials most commonly used to make them. The advantages of shrinking bulk machines to microscopic-to-nanoscale sizes are discussed. The course quantifies 'scaling laws' for various physical properties, and their impact on design and microfabrication considerations. Microfabrication methods are discussed in detail, ranging from hard and soft lithography, to 3d printing. The course classifies various types of actuators and sensors based on thermal, electric, electronic, magnetic, optical, and chemical energy conversion principles; this is followed by their design and microfabrication. The course is supplemented by physical and video demonstrations.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in (ENGR 3201 or ENGT 3201)

ENGR 4281. Co-Op Work Experience IV. 1 Credit Hour.

Full time work experience in industry, governmental agencies, or educational institutions is arranged through the co-op coordinator of the College of Engineering (15 weeks, 40 hours/week). Students are considered as academically full-time during work periods.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of D- in ENGR 4181.

ENGR 4296. Capstone Senior Design Project. 3 Credit Hours.

In this college-wide capstone design project, College of Engineering seniors, either individually or in (possibly cross-disciplinary) teams, will devise an engineered solution to a well-defined, approved, problem statement selected by the team in the prior semester. The wide variety of projects which may be undertaken include, for example: industry-sponsored case studies, or a student's entrepreneurial-invention idea, or the development of new instrumentation for a faculty's lab; furthermore, the team may choose to continue, refine, or extend a prior-semester's project. The student (or student team) will identify the relevant stakeholders for their engineered solution, create a prototype and/or a comprehensive analysis of their solution, and document their design in a report which meets the needs of the project's stakeholders. The semester will culminate in the college-wide Capstone Design Poster event, with industry sponsors and industrial advisory boards in attendance.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in (BIOE 3402, CEE 4446, CEE 4447, ECE 4176, ISE 4176, or MEE 4177)

ENGR 4314. Continuum Mechanics. 3 Credit Hours.

Tensors, Kinematics of Continuum, Stress, Integral Formulations, the Elastic Solid, and the Newtonian Fluid.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 2041, MATH 2941, MATH 3041, MATH 3941, or 'Y' in METW), (MATH 2043, MATH 2943, or 'Y' in METW), and (ENGR 2333 or ENGR 2933)

ENGR 4334. Advanced Dynamical Systems. 3 Credit Hours.

This course focuses on the algebraic and differential equations governing the static and dynamic 3D motion of 3D bodies, including vectors, vector differentiation, and dyads. The equations of motion for multibody systems will be derived using Newton-Euler, Lagrange, and Kane's methods. Computational tools for 3D force and motion analysis will be used to simulate physical systems.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MEE 3011.

ENGR 4576. Computational Fluid Dynamics. 3 Credit Hours.

Computational Fluid Dynamics (CFD) simulations are an essential element of thermal and fluid engineering design. In this course, students will be introduced to various numerical methods for computing heat transfer and fluid flows. Fundamental topics include discretization, explicit and implicit schemes, finite differencing, and finite volume formulations. Important aspects of industry applications of CFD will also be covered, including grid generation, flow visualization, and turbulence modeling. MATLAB programming and the use of commercially available software will be emphasized.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- (except where noted) in (ENGR 3553 (C- or higher) or ENGR 3953 (C- or higher)), (ENGR 3117 (may be taken concurrently) or MEE 3117 (may be taken concurrently)), and MEE 4572 (may be taken concurrently)

ENGR 4577. Nanotechnology Solutions for a Sustainable Urban Environment. 3 Credit Hours.

The course will introduce students to the revolutionary field of nanotechnology, where emphasis will be placed on using nanomaterials to the betterment of a sustainable urban environment. Students will be introduced to the remarkable transformation that the mechanical, optical, electrical, and thermal material properties undergo as their dimensions are reduced to the nanoscale. They will also understand the major nanomaterial fabrication techniques such as nanoscale lithography and self-assembly. In addition, students will be introduced to techniques which characterize materials on the nanoscale. The second half of the course will be devoted to applications and potential applications of nanotechnology which will advance urban sustainability. Applications in water purification, transportation, energy and biomedicine will be presented to the students through series of expert lectureships offered by Temple University faculty utilizing nanomaterials in their research laboratories. Students will also carry out laboratory modules devoted to the use of nanomaterials for these applications.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

ENGR 4996. Honors Capstone Senior Design Project. 3 Credit Hours.

In this college-wide capstone design project, College of Engineering seniors, either individually or in (possibly cross-disciplinary) teams, will devise an engineered solution to a well-defined, approved, problem statement selected by the team in the prior semester. The wide variety of projects which may be undertaken include, for example: industry-sponsored case studies, or a student's entrepreneurial-invention idea, or the development of new instrumentation for a faculty's lab; furthermore, the team may choose to continue, refine, or extend a prior-semester's project. The student (or student team) will identify the relevant stakeholders for their engineered solution, create a prototype and/or a comprehensive analysis of their solution, and document their design in a report which meets the needs of the project's stakeholders. The semester will culminate in the college-wide Capstone Design Poster event, with industry sponsors and industrial advisory boards in attendance. For those on the Honors Scholar track, the final report produced in this course may also be submitted as the Honors Scholar Project so long as it meets the Honors Scholar project requirements.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in (BIOE 3402, CEE 4446, CEE 4447, ECE 4176, ISE 4176, or MEE 4177)

Engineering (General) (ENGG)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ENGG 3385. Diamond Peer Teachers - Internship I. 1 Credit Hour.

The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

Repeatability: This course may be repeated for additional credit.

ENGG 3386. Diamond Peer Teachers - Internship II. 1 Credit Hour.

The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

Repeatability: This course may be repeated for additional credit.

Engineering Technology (ENGT)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ENGT 2322. Applied Strength of Materials. 3 Credit Hours.

Investigation of the elastic behavior of materials through the study of normal stress, strain, shear, and deformation under centric loading, flexural stress, shear, and deformation under transverse and eccentric loading, torsional stress, combined stress, stress concentration, and the stability of columns.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ENGT 2331 or ENGR 2331)

ENGT 2331. Applied Engineering Statics. 3 Credit Hours.

Provides an understanding and application of principles of equilibrium of particles and rigid bodies that are subjected to concentrated and distributed forces using vector mechanics. Subjects covered include vector mathematics, force and moment systems in two dimensions, free body diagrams and the static equilibrium of structures, centroids, moments of inertia, frictional systems, shearing force, and bending moment diagrams.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (MATH 1031 (may be taken concurrently), MATH 1042 (D- or higher; may be taken concurrently), 'Y' in MATW, or 'Y' in METW) and (PHYS 1021 or PHYS 1061)

ENGT 2521. Applied Fluid Mechanics. 3 Credit Hours.

Fluid properties, fluid statics, fluid flow concepts, dynamic similitude, fluid resistance, ideal flow, compressible flow, pneumatic and hydraulic applications.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ENGT 2331 or ENGR 2331)

ENGT 3182. Independent Study in Engineering Technology. 1 to 5 Credit Hour.

Students may complete a regular course during semesters in which the course is not offered to meet prerequisite or graduation requirements. An instructor is assigned to supervise the student.

Repeatability: This course may be repeated for additional credit.

ENGT 3201. Applied Materials Technology. 3 Credit Hours.

Atomic and molecular structures, bonding and interatomic forces, thermodynamics and kinetics of solid state reactions, mechanical and electronic properties.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 1031 or CHEM 1035), (PHYS 1022, PHYS 1062, or PHYS 1962), and (ENGT 2322 (may be taken concurrently) or ENGR 2333 (may be taken concurrently))

ENGT 3323. Applied Dynamics. 3 Credit Hours.

A non-vector approach to the kinematics and kinetics of a particle employing the methods of force-mass acceleration, work-energy, and impulse momentum. Kinematics of rigid bodies in general plane motion using methods of force-mass acceleration and work-energy.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (ENGT 2331 or ENGR 2331) and (MATH 1031, MATH 1042 (D- or higher), MATH 1942 (D- or higher), 'Y' in MATW, or 'Y' in METW)

ENGT 3532. Thermodynamics. 3 Credit Hours.

Properties of a substance, work and heat interaction, first law of thermodynamics, carnot cycle, entropy, ideal gases, irreversibility, and efficiency. NOTE: Special Authorization for Non-Technology Majors. Approved for ENGT, MET, CMT, ENVT.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Civil & Construction Eng Tech, Construction Mgt Tech, Engineering Technology, Mechanical Engineering Tech.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (MATH 1031, MATH 1042 (D- or higher), 'Y' in MATW, or 'Y' in METW) and (PHYS 1022 or PHYS 1062)

ENGT 3651. Manufacturing Control Systems. 3 Credit Hours.

A survey course covering pneumatic and hydraulic controls, programmable controllers, digital circuits, electro-mechanical servos and industrial instrumentation, and transducers. Laboratory.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in ECE 2112.

ENGT 3652. CAD/CAM/CNC. 3 Credit Hours.

Solids modeling, geometric tolerancing, welds, threads, dimensions, numerical control simulation, and post processing. Basic components of NC systems, coordinate systems, motion control, programming languages, CNC and DNC, laboratory and demonstrations.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in (ENGR 1117 or MEE 1117)

ENGT 4040. Special Topics. 1 to 5 Credit Hour.

A course designed to present new and emerging areas of engineering technology. The course may also be used to present areas not normally taught in the college. Course requirements vary with the topic and instructor. Offered as needed or as appropriate.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Repeatability: This course may be repeated for additional credit.

ENGT 4119. Professional Seminar. 1 Credit Hour.

Preparation for entering the working and professional worlds of engineering and the job market. Includes preparation of résumés, interviewing techniques, securing and holding a job, advancement, professional registration, ethics, and professional societies.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

ENGT 4129. Professional and Industrial Seminar. 3 Credit Hours.

Preparation for entering the working and professional worlds of engineering and the job market. Includes preparation of résumés, interviewing techniques, professional registration, and ethics. There will also be presentations by engineers from the local business community on technical topics of current interest in engineering.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

ENGT 4196. Capstone Project. 3 Credit Hours.

Team-oriented engineering technology capstone projects of various types. Topics proposed and presented by students in the initial stage of the semester. At completion, the project is demonstrated during an oral presentation. Project results are submitted in a final report. Offered Fall, Spring, and Summer.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Engineering Technology.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in ENGT 4119.

ENGT 4261. Engineering Technology Project II. 3 Credit Hours.

Team-oriented engineering system design problems of various types. Topics proposed and orally presented by students in the initial stage of the course sequence. At completion, the project is demonstrated during an oral presentation and a final written report.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in (ENGT 4161 or ENGT 4196)

ENGT 4278. Cardiac Devices. 3 Credit Hours.

Intended for electrical engineering, biology, and bioengineering students. No course prerequisites. This course will cover cardiac anatomy and physiology, the hearts electrical system in health and disease, cardiac ecg rhythm interpretation, design and function of ecg monitoring devices, pacemakers and external and implanted defibrillators, and arrhythmia detection algorithms. The course will include observation of pacemaker implants, and troubleshooting in a pacemaker follow-up clinic. The course will prepare students to take the Heart Rhythm Society Allied Professional Pacemaker Certification examination. It is intended to put students in a competitive advantage for getting jobs in the expanding pacemaker and other medical electronics device industries.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 1022 to 4999, 'Y' in MC6, 'Y' in MC6A, 'Y' in MATW, 'Y' in MC6T, or 'Y' in METW) and any PHYS course numbered 1021 to 4999.

ENGT 4342. Machine Elements. 3 Credit Hours.

Survey of the design and application fundamentals underlying the sound selection and use of common machine elements such as shafts, bearings, clutches, brakes, gears, chain and belt drives, etc. Term design project.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- (except where noted) in (ENGR 1117 or MEE 1117), (ENGT 2322 or ENGR 2333 (C- or higher)), and (ENGT 3323 or ENGR 2332 (C- or higher))

ENGT 4532. Heating, Ventilating, and Air Conditioning. 3 Credit Hours.

Establishment of design requirements for environmental comfort conditioning. Heating, heat pumps, humidity control, cooling, ventilation, integrated systems, controls and instrumentation, computer-aided design. Design project.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in (ENGT 2521 and ENGT 3532)

ENGT 4641. Production Tooling. 3 Credit Hours.

Fundamentals of the design of work-holders and of tooling for inspection and gauging, welding and joining processes, and punch presses. A weekly practicum covers applications of fundamentals to typical tool design problems.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- (except where noted) in ENGR 1117, (ENGR 2333 (C- or higher) or ENGT 2322 (C- or higher)), and ENGT 3652.

ENGT 4642. Quality Control. 3 Credit Hours.

Fundamental engineering methods for product and process quality assurance and control. Standard statistical tools are used for quality control methods used in industry. Acceptance sampling, statistical process control, quality measurement, and quality management topics are covered.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in (STAT 2101 or STAT 2103)

ENGT 4643. Fundamentals of Manufacturing. 3 Credit Hours.

A course designed to present new and emerging areas of engineering technology. This course covers fundamental manufacturing processes under the classification of processing operations and the assembly operations, and the basic parameters involved in these processes. This course combines lectures and intensive lab activities with a design project component.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in ENGT 4342.

English (ENG)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ENG 0701. Introduction to Academic Discourse. 4 Credit Hours.

English 0701 focuses on writing within a single theme, working on ungraded multiple drafts for assignments, developing skills in summary and textual support presented in appropriate context. Students create a portfolio of their work, including at least four sequenced assignments that culminate in a final project that pulls together critical and literary texts. Multiple individual conferences with the instructor. NOTE: Students placed in English 0701 must earn a final grade of C- or higher in order to be eligible to enroll in English 0802 or English 0812. Students cannot receive credit for this course if they have successfully completed any of the following courses: English 0711, 1001, 1002, 1011, 1012, 0040, 0041, C050, C051, or R050.

Repeatability: This course may not be repeated for additional credits.

ENG 0711. Introduction to Academic Discourse ESL. 4 Credit Hours.

The guidelines for English 0701 are followed in this course, but in the ESL writing classroom there are cross-cultural implications both of what it means to do academic work and also what it means to share historical and cultural knowledge. Oral participation is encouraged as a way of developing fluency and enhancing comfort with participation in American academic settings. Classes are smaller than in English 0701, and teachers spend extended time in tutorial conferences with students. NOTE: English 0711 is designed to accommodate the needs of the ESL learner. Students placed in English 0711 must earn a final grade of C- or higher in order to be eligible to enroll in English 0802 or English 0812. Students cannot receive credit for this course if they have successfully completed any of the following courses: English 0701, 1001, 1002, 1011, 1012, 0040, 0041, C050, C051, or R050.

Repeatability: This course may not be repeated for additional credits.

ENG 0802. Analytical Reading and Writing. 4 Credit Hours.

Duplicate Courses: This course may not be taken for credit by students who have successfully completed English 0812, 0902, 1002, 1012, 1022, 1977, 1978, C050, C051, H090, or R050. English 0802 takes a broader perspective than 0701 (formerly 0040), requiring students to explore a single theme from the point of multiple disciplines. Early in the semester, English 0802 students work on research and the evaluation of sources, moving through a sequence of papers that develop argumentation and the synthesis of materials. Library research is required, and sessions with librarians are part of the course. Individual and small group conferences will be held during the semester. Evaluation is predicated on a passing final portfolio of at least four assignments that are developed through multiple revisions. NOTE: English 0802 is a prerequisite for IH 0851/0852 (formerly Intellectual Heritage 1196 and 1297), any writing intensive courses, and any course in the College of Liberal Arts numbered 2000-4999.

Course Attributes: GW

Repeatability: This course may not be repeated for additional credits.

ENG 0812. Analytical Reading and Writing: ESL. 4 Credit Hours.

Duplicate Courses: English 0812 may not be taken for credit by students who have successfully completed English 0802, 0902, 1002, 1012, 1022, 1977, 1978, C050, C051, H090, or R050. English 0812 is designed to accommodate the needs of the ESL learner. The guidelines for English 0802 are followed in this course, but in the ESL writing classroom there are cross-cultural implications both of what it means to do academic work and also what it means to share historical and cultural knowledge. Oral participation is encouraged as a way of developing fluency and enhancing comfort with participation in American academic settings. NOTE: English 0812 is a prerequisite for IH 0851/0852 (formerly Intellectual Heritage 1196 and 1297), any writing intensive courses and any courses in the College of Liberal Arts numbered 2000-4999. Classes are smaller than in English 0802, and teachers spend extended time in tutorial conferences with students.

Course Attributes: GW

Repeatability: This course may not be repeated for additional credits.

ENG 0815. Language in Society. 3 Credit Hours.

How did language come about? How many languages are there in the world? How do people co-exist in countries where there are two or more languages? How do babies develop language? Should all immigrants take a language test when applying for citizenship? Should English become an official language of the United States? In this course we will address these and many other questions, taking linguistic facts as a point of departure and considering their implications for our society. Through discussions and hands-on projects, students will learn how to collect, analyze, and interpret language data and how to make informed decisions about language and education policies as voters and community members. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0815/0915, Asian Studies 0815, Chinese 0815, CSCD 0815, EDUC 0815/0915, Italian 0815, PSY 0815, Russian 0815, or Spanish 0815.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

ENG 0822. Shakespeare in the Movies. 3 Credit Hours.

This course examines film adaptations, one major way that a canonical author - William Shakespeare - remains relevant and appealing to artists and audiences today. Students study several major plays and various film adaptations, including their cultural, social, and historical contexts, and learn to use appropriate technical terms for discussing drama and film. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd. Students cannot receive credit for this course if they have successfully completed English 0922.

Course Attributes: GA

Repeatability: This course may not be repeated for additional credits.

ENG 0824. The Quest for Utopia. 3 Credit Hours.

The concept of utopia - a better or more just society - has existed for centuries, but utopia has never been achieved. In fact, both imaginary and historical utopias often devolve into dystopia - a worse or unjust society. This course examines utopia and dystopia in literature, philosophy and history, focusing on relationships between individual and community. NOTE: This course fulfills the Human Behavior (GB) GenEd requirement. Students cannot receive credit for this course if they have successfully completed English 0924.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

ENG 0826. Creative Acts. 4 Credit Hours.

This course focuses on the art of writing, finding one's voice, and writing for different genres. In a small classroom setting, you will work with the faculty member and other students to improve your writing through work-shopping. Other readings will allow you to develop your craft. By the end of the semester, you will produce a portfolio of your work. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed English 0926.

Course Attributes: GA

Repeatability: This course may not be repeated for additional credits.

ENG 0834. Representing Race. 3 Credit Hours.

From classical Greeks and Romans, who saw themselves under siege by the "barbarian hordes," to contemporary America and its war on "Islamic extremism," from "The Birth of a Nation" to "Alien Nation," Western societies have repeatedly represented some group of people as threats to civilization. This course will examine a wide range of representations of non-Western people and cultures in film, literature, scientific and legal writings, popular culture and artistic expression. What is behind this impulse to divide the world into "us" and "them"? How is it bound up with our understanding of race and racial difference? And what happens when the "barbarian hordes" talk back? NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed African American Studies 0834, Africology & African American Studies 0834, Anthropology 0834/0934, Asian Studies 0834, English 0934, or History 0834.

Course Attributes: GD, SI

Repeatability: This course may not be repeated for additional credits.

ENG 0837. Eating Cultures. 3 Credit Hours.

You are what you eat, they say, but what, precisely, determines our eating habits and what, exactly, do they say about us? How do these habits influence our relations with others in our communities and beyond? Eating is an activity common to all human beings, but how do the particularities and meanings attributed to this activity vary across different times and places? Using literature, visual media, cookbooks, food-based art, and advertisements as our starting point, we will examine how food perception, production, preparation, consumption, exchange, and representation structure individual and communal identities, as well as relations among individuals and communities around the globe. Our focus on this most basic of needs will allow us to analyze how food conveys and limits self-expression and creates relationships as well as delimits boundaries between individuals and groups. Materials will be drawn from a wide range of disciplines including, but not limited to, literary and gender studies, psychology, anthropology, history, sociology, and economics. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed Spanish 0837 or Spanish 0937.

Course Attributes: GB, SI

Repeatability: This course may not be repeated for additional credits.

ENG 0849. Dissent in America. 3 Credit Hours.

Throughout American history individuals and groups of people, have marched to the beat of a different drummer, and raised their voices in strident protest. Study the story and development of dissent in America. How has dissent shaped American society? In addition to studying the historical antecedents of dissent students will have first-hand experience visiting and studying a present-day dissent organization in the Philadelphia area to investigate connections between the history of dissent and the process of making dissenting opinion heard today. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for English 0849/0949 if they have successfully completed History 0849/0949 or SOC 0849.

Course Attributes: GU, SI

Repeatability: This course may not be repeated for additional credits.

ENG 0855. Why care about College: Higher Education in American Life. 3 Credit Hours.

You have decided to go to college. But why? What role will college and in particular Temple University play in your life? Reflect on this important question by looking at the relationship between higher education and American society. What do colleges and universities contribute to our lives? They are, of course, places for teaching and learning. They are also research centers, sports and entertainment venues, sources of community pride and profit, major employers, settings for coming-of-age rituals (parties, wild times, courtship, etc.), and institutions that create lifetime identities and loyalties. Learn how higher education is shaped by the larger society and how, in turn, it has shaped that society. Become better prepared for the world in which you have chosen to live for the next few years. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed AMST 0855 or EDAD 0855.

Course Attributes: GU

Repeatability: This course may not be repeated for additional credits.

ENG 0857. The Detective Novel. 3 Credit Hours.

The detective novel remains the most popular of literary forms since its American origins in Edgar Allan Poe. The form has spread to virtually every part of the world, taking on different perspectives in the different societies where it has prospered. Our course analyzes the global travels of this prolific literary genre, paying particular attention to the manner in which its formula of crime-detection-resolution has evolved from its classic phase in the Sherlock Holmes mysteries, to its hard-boiled phase in the 1940's US, to the transformation of the private detective working outside the formal apparatus of the law into the police detective working within the law in places as different as Sweden, Holland, Nigeria, and India. We will read bestselling detective novels by figures such as Emile Gaboriau, Poe, Arthur Conan Doyle, Wilkie Collins, Agatha Christie, Raymond Chandler, Jorge Borges (Argentina), Vikram Chandra (India), Henning Mankell (Sweden), Janwillem van de Wetering (Holland), Kole Omotosho (Nigeria), and Soji Shimada (Japan). We will pay special attention to the conventions of the form and analyze its evolution as it travels the world. In exploring its global travels, we will attend to a number of issues, including: the changing definition of crime; the evolving representation of the criminal; the changing methods for "solving" the crime; the ideology of justice; the conflicts between community and individuality; and the varying social and national anxieties that the form reveals. **DUPLICATE CREDIT WARNING:** Students who have received credit for Asian Studies 0857 or Critical Languages 0857 will not receive additional credits for this course.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

ENG 0868. World Society in Literature & Film. 3 Credit Hours.

Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindi, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. **NOTE:** This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

ENG 0902. Honors Writing About Literature. 4 Credit Hours.

This course centers on a specific theme or topic. Reading assignments may include various literary modes, forms, and genres, as well as historical, technological, and social context. Students will read extensively, conduct original research, write multiple drafts of major writing assignments, participate in class discussion, and give feedback to peers. This course focuses on the same critical competencies as English 0802: Analytical Reading and Writing. **Duplicate Credit Warning:** This course was previously titled Honors Literature/Reading/Writing and may not be taken for credit by students who have successfully completed English 0802 or equivalent.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GW, HO

Repeatability: This course may not be repeated for additional credits.

ENG 0922. Honors Shakespeare in the Movies. 3 Credit Hours.

This course examines film adaptations, one major way that a canonical author - William Shakespeare - remains relevant and appealing to artists and audiences today. Students study several major plays and various film adaptations, including their cultural, social, and historical contexts, and learn to use appropriate technical terms for discussing drama and film. **NOTE:** This course fulfills the Arts (GA) requirement for students under GenEd. Students cannot receive credit for this course if they have successfully completed English 0822.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GA, HO

Repeatability: This course may not be repeated for additional credits.

ENG 0924. Honors: The Quest for Utopia. 3 Credit Hours.

The concept of utopia - a better or more just society - has existed for centuries, but utopia has never been achieved. In fact, both imaginary and historical utopias often devolve into dystopia - a worse or unjust society. This course examines utopia and dystopia in literature, philosophy and history, focusing on relationships between individual and community. NOTE: This course fulfills the Human Behavior (GB) GenEd requirement. Students cannot receive credit for this course if they have successfully completed English 0824.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GB, HO

Repeatability: This course may not be repeated for additional credits.

ENG 0926. Honors Creative Acts. 4 Credit Hours.

This course focuses on the art of writing, finding one's voice, and writing for different genres. In a small classroom setting, you will work with the faculty member and other students to improve your writing through work-shopping. Other readings will allow you to develop your craft. By the end of the semester, you will produce a portfolio of your work. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed English 0826.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GA, HO

Repeatability: This course may not be repeated for additional credits.

ENG 0934. Honors Representing Race. 3 Credit Hours.

From classical Greeks and Romans, who saw themselves under siege by the "barbarian hordes," to contemporary America and its war on "Islamic extremism," from "The Birth of a Nation" to "Alien Nation," Western societies have repeatedly represented some group of people as threats to civilization. This course will examine a wide range of representations of non-Western people and cultures in film, literature, scientific and legal writings, popular culture and artistic expression. What is behind this impulse to divide the world into "us" and "them"? How is it bound up with our understanding of race and racial difference? And what happens when the "barbarian hordes" talk back? NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed African American Studies 0834, Africology & African American Studies 0834, Anthropology 0834/0934, Asian Studies 0834, English 0834, or History 0834.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GD, HO, SI

Repeatability: This course may not be repeated for additional credits.

ENG 0949. Honors Dissent in America. 3 Credit Hours.

Throughout American history individuals and groups of people, have marched to the beat of a different drummer, and raised their voices in strident protest. Study the story and development of dissent in America. How has dissent shaped American society? In addition to studying the historical antecedents of dissent students will have first-hand experience visiting and studying a present-day dissent organization in the Philadelphia area to investigate connections between the history of dissent and the process of making dissenting opinion heard today. (This is an Honors course.) NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for English 0849/0949 if they have successfully completed History 0849/0949 or SOC 0849.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GU, HO, SI

Repeatability: This course may not be repeated for additional credits.

ENG 0968. Honors World Society in Literature & Film. 3 Credit Hours.

Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindi, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. (This is an Honors course.) NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GG, HO

Repeatability: This course may not be repeated for additional credits.

ENG 0973. Honors Women in Modern Bengali Film. 3 Credit Hours.

We will discuss the work of contemporary Bengali film directors, as also that of a few non-Bengali directors of parallel and diasporic cinema, with a particular focus on culturally constructed roles for women in the Indian social context. The several films that we view in class, to analyze women's movements out of such prescribed spaces into more liberating ones, will focus on assault; incest as taboo; the predicaments of the subaltern, the prostitute, and the widow; and the more recent issue of immigration. How do questions we raise in our course intersect with current international discussions of the treatment of women and class in film? Is the work done by women's activist groups changing entrenched perceptions of gender worldwide and, thus, representations of women in film? What is the impact of significant events in Indian colonial and postcolonial history on women? How do key concepts addressed by major Western thinkers such as Karl Marx and Sigmund Freud affect depictions of women in cinema? You will look up websites on cinema and do group oral presentations to engage directly with these questions. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GG, HO

Repeatability: This course may not be repeated for additional credits.

ENG 0975. Honors Transnational Cinema. 3 Credit Hours.

As he recently commented on the sad state of globalized affairs in which "the cosmopolitanism of international filmmaking is matched by the parochialism of American film culture," New York Times film critic A.O. Scott asked, "The whole world is watching, why aren't Americans?" This course will use Scott's question as a point of departure to investigate the ostensible reasons why Americans, or in our case, Philadelphians, aren't watching "transnational cinema" - international films that gain distribution outside of their country of production, and that depict transnational movements of people, capital, and social values. Are transnational films playing at a theatre near you? Perhaps they are, but if not, why not? Which "foreign films" are allowed to cross the border into our country? How, when, and where do we get to "see the world" and why does that matter in today's globalized, interconnected world? Learn "how to see the world" - not as a one-dimensional quaint or exotic representation of the "other" - but instead through the ways in which these films engage critical contemporary issues of nation, transnation, and globalization in an increasingly interconnected transnational public sphere. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GA, HO

Repeatability: This course may not be repeated for additional credits.

ENG 1009. Discovering English. 1 Credit Hour.

Designed for freshmen, sophomores, new transfer students, and those who have not declared a major, this course is an introduction to the English major at Temple. It offers an overview of the field of English Studies and the various options, resources, and opportunities available to majors, with an emphasis on academic and professional planning.

Repeatability: This course may not be repeated for additional credits.

ENG 1801. Career Seminar. 1 Credit Hour.

This course is designed to provide students with the resources and support to help them make informed decisions about career development. The course aims to provide its members the opportunity to meet faculty members representing the diversity of the major, professionals from the city who were English majors, and recent graduates who can talk about what the major has done for them and how they use it. Thus, one of the primary goals of this course is for English majors to learn how to become professionals and to assess a range of career opportunities. Because there is significant overlap in course content, students will receive credit for only one of these courses: CLA 1002, CJ 1002, ENG 1801, HIST 1012, NSCI 1002, POLS 1002, PSY 1002, SOC 1002.

Repeatability: This course may not be repeated for additional credits.

ENG 2000. Special Topics. 3 Credit Hours.

Each section of this course explores a carefully defined theme, topic, or type of literature or writing, such as Asian-American literature, editing and publishing a literary magazine, etc. NOTE: Variable content; consult the Undergraduate English Office or English web page for details.

Repeatability: This course may be repeated for additional credit.

ENG 2001. Interpreting Literature. 3 Credit Hours.

This introductory course is designed for English majors, English minors, and any student interested in interpreting poetry, fiction, and drama. Students will learn to identify and name aspects of literary form, to describe relationships among literary texts, and to write original arguments about the meaning and value of specific literary works. In addition to their role in academic study, these analytic and writing skills are useful in many employment and creative contexts today.

Repeatability: This course may not be repeated for additional credits.

ENG 2003. Creative Writing: Poetry. 3 Credit Hours.

Workshop in which students read and discuss one another's material and develop skills as both writers and readers. Students may read selected contemporary American poets, but the main texts will be those produced by members of the class.

Note: This course may be taken a maximum of two times for credit, and all attempts will be factored into a student's cumulative GPA.

Note: This course is not designated writing intensive.

Repeatability: This course may be repeated for a total of 6 credit.

ENG 2004. Creative Writing: Fiction. 3 Credit Hours.

Workshop in which students read and discuss one another's material and develop skills as both writers and readers. Students may read selected contemporary American works of fiction, but the main texts will be those produced by members of the class. Beginning writers welcome, but thorough grounding in the conventions of grammar, spelling, and punctuation is essential.

Note: This course may be taken a maximum of two times for credit, and all attempts will be factored into a student's cumulative GPA.

Note: This course is not designated writing intensive.

Repeatability: This course may be repeated for a total of 6 credit.

ENG 2005. Creative Writing: Plays. 3 Credit Hours.

Workshop in which students read and discuss one another's material and develop skills as both writers and readers. Students may consider dramatic and stylistic problems in selected contemporary American plays, but the main texts will be those produced by members of the class.

Note: This course may be taken a maximum of two times for credit, and all attempts will be factored into a student's cumulative GPA.

Note: This course is not designated writing intensive.

Repeatability: This course may be repeated for a total of 6 credit.

ENG 2006. Non-Fiction Writing. 3 Credit Hours.

This course introduces students to the demands of writing articles and stories drawn from observation, reflection, and analysis for a public audience. Genres highlighted in the course may include personal essays, lyric essays, research-based reportage, and various hybrid forms that make up the current practice of creative non-fiction. This course was previously offered as ENG 2496 and ENG 2006 under the title "Introduction to Non-Fiction". Students who have taken prior iterations of this course will not earn additional credit.

Repeatability: This course may not be repeated for additional credits.

ENG 2007. Writing for Business and Industry. 3 Credit Hours.

Meets the writing needs of people in business and industry and students who plan professional careers. Extensive practice in various forms of writing appropriate to all levels of management, including reports, proposals, memoranda, and letters. Instruction in research techniques and the writing of a formal researched report on a business topic. Job applications, letters of inquiry, and resumé. Students who have earned credit for English 2596 will not earn additional credit for this course.

Repeatability: This course may not be repeated for additional credits.

ENG 2008. Technical Writing. 3 Credit Hours.

For students in engineering and related fields. Covers style, organization, and mechanics of technical papers, with emphasis on special problems that face the technical writer: analyses and descriptions of objects and processes, reports, proposals, business correspondence, and research papers. Students write a number of short reports and one long research paper. By the end of the course, professional standards of accuracy in mechanics and presentation are expected. Some impromptu writing exercises. Note: Students who have earned credit in ENG 2696 or SCTC 2396 will not earn additional credit for this course.

Repeatability: This course may not be repeated for additional credits.

ENG 2009. Writing the Research Essay. 3 Credit Hours.

Designed to improve writing skills in general and teach students to use library and online resources, conduct research, and organize and present the acquired information effectively. Readings may be assigned, but class and conference time are devoted principally to analysis and discussion of research and writing problems. Students write a total of approximately 5000 words in essays and exercises related to a research project. Students who have earned credit for English 2796 will not earn additional credit for English 2009.

Repeatability: This course may not be repeated for additional credits.

ENG 2012. Literature and Criticism. 3 Credit Hours.

This course will study some of the main approaches and theories used to interpret texts. Readings will include literature, exemplary criticism, and theory.

Repeatability: This course may not be repeated for additional credits.

ENG 2013. Literature and Philosophy. 3 Credit Hours.

An introduction to the intellectual climate which has shaped literary studies. This course was previously taught as "Intellectual Contexts of Literary Study." Students who have earned credits under the prior title will not earn additional credits.

Repeatability: This course may not be repeated for additional credits.

ENG 2014. Myth and Symbol. 3 Credit Hours.

A study of certain literary ideas and patterns that have persisted from ancient times to the present in varying forms. Readings may begin with classical texts in translation, and will include selected works of English and American literature from various periods. NOTE: Students will only receive credit one time for either ENG 2014 or GRC 2011.

Repeatability: This course may not be repeated for additional credits.

ENG 2022. Beyond the Field: Sports and Storytelling. 3 Credit Hours.

This is a course about storytelling, about trying to turn the raw materials of a game into something more interesting than just the final score. Although the particulars change, there are only a handful of plots in sport: troubled athlete seeks redemption, old champion past her prime, young challenger on the rise, athlete plays through the pain (or not), hopeless team seeks hope, bad luck occurs, good luck occurs. There is challenge and opportunity in the familiarity of sports narratives; the writer needs to work harder than ever to avoid cliché, but they also have many models for instruction. In this course, we will study what makes contemporary sports writing work, how to develop your voice, and how to hone your writing to tell the most compelling and unique possible stories about the games we play.

Repeatability: This course may not be repeated for additional credits.

ENG 2096. Introduction to English. 3 Credit Hours.

This introductory course for English majors serves as a gateway to the study of literature and other texts in related subfields undertaken by those in English. This course is also designated as writing intensive and special attention will be given to the writing and research process, including locating secondary sources and how to use them correctly and effectively. Spirited discussion and individual conferences will be a distinctive feature of this course.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ENG 2110. Dark Academia: The Literature of College Life. 3 Credit Hours.

Dark academia is an emerging literary genre that resists prevailing notions of institutions of higher education as idyllic settings and, instead, depicts colleges and universities as eerie, gothic-like establishments. Readings take the form of coming-of-age novels, murder mysteries, and campus thrillers -- all involving students in academic settings intensely dedicated to romanticized pursuits of knowledge. Dark and twisty themes prevail: plots typically include secret societies, ancient rituals, and danger of all kinds. Attention will be paid both to classics and newer titles that define and diversify the genre and may include related film, television, and social media. Note: The content of this course will vary and may be repeated for additional credits.

Repeatability: This course may be repeated for additional credit.

ENG 2111. The Short Story. 3 Credit Hours.

This course will concentrate on a variety of approaches to the short story, including classic, modernist and experimental.

Repeatability: This course may not be repeated for additional credits.

ENG 2112. Children's Literature and Folklore. 3 Credit Hours.

A study of selected works that have been written or adapted for children from the eighteenth century to the present, including subgenres such as fairy tales, nonsense literature, fantasy and historical fiction, and graphic novels. Focuses primarily on literary texts but may also include film and other media.

Repeatability: This course may not be repeated for additional credits.

ENG 2113. Popular Fiction. 3 Credit Hours.

Readings in recent popular fiction, including science fiction, detective novels, fantasy, horror and romance.

Repeatability: This course may not be repeated for additional credits.

ENG 2114. Social Justice and Literature. 3 Credit Hours.

What is the role of literature in social change? How do literary texts perpetuate or reinforce certain forms of social justice? How do they shed light on or give voice to the experience of marginalized individuals for the purposes of social justice? This course will answer these questions by considering the increased role in storytelling and exploring how particular forms of social justice are represented in literary texts. Material to be examined will include various genres of literature and related texts: film, television, music recordings and social media. Particular social justices will vary depending on course material, but the course is designed for students to learn about and engage vigorously with the realities of social injustice and political struggle.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

ENG 2115. Young Adult Literature. 3 Credit Hours.

A study of young adult literature from the genre's commercial emergence in the 1950s to the present, including subgenres such as fantasy and speculative fiction, historical fiction, graphic novels and mystery. Focuses primarily on literary texts but may also include film and other media, as well as work on adolescent psychology and youth culture.

Repeatability: This course may not be repeated for additional credits.

ENG 2116. Disability and Literature. 3 Credit Hours.

This course brings a Disability Studies perspective to a wide range of literature and considers how disability and its representations intersect with other social identities such as race, gender, nation and class.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

ENG 2118. The End: Literature of the Apocalypse. 3 Credit Hours.

In this course students will read a survey of literature that will be organized around various apocalyptic and post-apocalyptic themes (nuclear, ecological, technological, extraterrestrial, contagious diseases, etc.). Readings may take the form of novels, short fiction, poetry, drama, and graphic novels. Topics to be covered include imminent crises, unthinkable catastrophes, and oppressions of all forms in numerous cultural and political contexts. Course members will read both classic and newer titles that define and diversify the genre, and attention may be paid towards related popular media.

Repeatability: This course may not be repeated for additional credits.

ENG 2160. Topics in Women's Literature. 3 Credit Hours.

Variable content course which examines the representation of women and the literature created by English, American, or other countries' women writers. This course has been offered with many specific topics combining biography and literary texts; neglected masterpieces of American literature by black and white women; woman as hero/woman as heroine; the questions of love, marriage, and vocation for women from 1850 to 1940 and other thematic motifs of 20th and 21st century women's literature. Note: Formerly known as Women in Literature WMST 2197 and ENG 2197. Students may earn up to 6 credits of coursework taken from the following courses: ENG 2160, ENG 2197, GSWS 2160, WMST 2160, WMST 2197.

Course Attributes: SI

Repeatability: This course may be repeated for a total of 6 credit.

ENG 2206. The City in Literature. 3 Credit Hours.

This course investigates literary representations of the city, considering how poems, novels and other texts are shaped by urban spaces, and how urban spaces are shaped by texts.

Repeatability: This course may not be repeated for additional credits.

ENG 2211. Literature and Legend. 3 Credit Hours.

An exploration of the mythological and historical aspects of legend. Subjects may include King Arthur, Lancelot, Guinevere, and the Grail; Celtic folklore; and modern fantasy.

Repeatability: This course may not be repeated for additional credits.

ENG 2221. Introduction to Shakespeare. 3 Credit Hours.

A study of the major plays of Shakespeare, including comedies, tragedies, and histories. May focus primarily on the plays as literature, or may study them as performed texts. Note: Formerly known as Shakespeare (Writing Intensive) ENG 2297. Students may receive credit for only one of the following courses: ENG 2297 or ENG 2221.

Repeatability: This course may not be repeated for additional credits.

ENG 2222. Banned Books: The Politics of Reading. 3 Credit Hours.

This course will focus on books that have faced obscenity charges or been successfully banned from schools and public libraries because of content deemed inappropriate, transgressive, forbidden, or too provocative. Topics to be covered include forms of censorship, first amendment rights, and reading as a political act. The course may be organized around a particular theme or genre, and students will read books that have been and remain controversial.

Repeatability: This course may not be repeated for additional credits.

ENG 2341. American Playwrights. 3 Credit Hours.

A study of American playwrights from O'Neill to the present. Principles of dramatic analysis, the distinctively American qualities of the plays and their debt to modern European drama. Writers may include Williams, Miller, Hellman, Hansberry, Baraka, Fuller, Wilson, Mamet, Rabe, Fornes, Shepard.

Repeatability: This course may not be repeated for additional credits.

ENG 2401. African-American Literature I. 3 Credit Hours.

A survey of African-American literature from its beginnings to the early 20th century--poetry, prose, slave narratives, and fiction--including the works of authors such as Phyllis Wheatley, Frederick Douglass, W. W. Brown, Harriet Wilson, Frances E. W. Harper, Charles Chesnutt, B.T. Washington, J.W. Johnson, and W.E.B. DuBois. An examination of racial consciousness as a theme rooted in social and historical developments, with special emphasis on national, cultural, and racial identity, color, caste, oppression, resistance, and other concepts related to race and racism emerging in key texts of the period. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: RS

Repeatability: This course may not be repeated for additional credits.

ENG 2402. African-American Literature II. 3 Credit Hours.

A survey of African-American literature from 1915 to the present, including poetry, prose, fiction, and drama. Analysis of developments in racial consciousness, from "race pride" to the Black Aesthetic and the influences on literature brought about by interracial conflicts, social and historical concepts such as assimilation and integration, and changing notions of culture. Authors such as Toomer, Hughes, McKay, Hurston, Brown, Larsen, Wright, Baldwin, Hansberry, Ellison, Baraka, Morrison, and others. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: RS

Repeatability: This course may not be repeated for additional credits.

ENG 2501. Introduction to British Writing. 3 Credit Hours.

This course studies selected British texts over a period of 150 years or more, in their historical context. It considers how history can shape writing and how writing can influence history.

Repeatability: This course may not be repeated for additional credits.

ENG 2502. Introduction to American Writing. 3 Credit Hours.

This course studies selected American texts over a period of 150 years or more, in their historical context. It considers how history can shape writing and how writing can influence history.

Repeatability: This course may not be repeated for additional credits.

ENG 2503. Introduction to Global Writing. 3 Credit Hours.

This course studies selected Global texts, whether from the Anglophone world or from foreign cultures and translated into English, over a period of 150 years or more, in their historical context. It considers how history can shape writing and how writing can influence history.

Repeatability: This course may not be repeated for additional credits.

ENG 2511. Modern Poetry. 3 Credit Hours.

An introduction to 20th century poetry which views Modernist poetry in light of postmodern perspectives. Topics may include innovation, formalism, contemporary alternatives to Modernism, new directions in post-War and postmodern poetry.

Repeatability: This course may not be repeated for additional credits.

ENG 2512. The Modern Novel. 3 Credit Hours.

An introduction to Modernism in the work of several major novelists, such as James, Conrad, Lawrence, Joyce, Faulkner, Proust, Mann, and Kafka. Emphasis on social and intellectual background, literary methods, and psychological, philosophical and political implications of Modernism.

Repeatability: This course may not be repeated for additional credits.

ENG 2513. Modern Drama. 3 Credit Hours.

A study of major works of representative late 19th century and early 20th century playwrights, such as Ibsen, Strindberg, Chekhov, Pirandello, O'Neill, Shaw. Emphasis on social and intellectual background, dramatic art, and the role of theater in social controversy.

Repeatability: This course may not be repeated for additional credits.

ENG 2521. Contemporary Literature. 3 Credit Hours.

An examination of important trends through selected literary works of the late 20th century. Emphasis on American fiction, with a sampling of works from other countries and genres. Authors may include Bellow, Coover, Pynchon, DeLillo, Morrison, Hughes, Calvino, Garcia Marquez.

Repeatability: This course may not be repeated for additional credits.

ENG 2601. Introduction to Postcolonial Literatures. 3 Credit Hours.

An introduction to modern world literatures in English (or in translation) within the context of colonialism, anti-colonial resistance, and postcolonial movements. Content and geographical focus vary each semester: a sample of authors to be studied might include Clarice Lispector, Gabriel Garcia Marquez, Assia Djebar, Ama Ata Aidoo, Maryse Conde, Zoe Valdes, Derek Walcott, Chinua Achebe, Anita Desai, Salman Rushdie, Michael Ondaatje, among others. The course can be repeated for credit with different topics. Students should consult the department's "Announcement of Classes" for current offerings before registering in the class.

Repeatability: This course may not be repeated for additional credits.

ENG 2696. Technical Writing. 3 Credit Hours.

For students in engineering and related fields. Covers style, organization, and mechanics of technical papers, with emphasis on special problems that face the technical writer: analyses and descriptions of objects and processes, reports, proposals, business correspondence, and research papers. Students write a number of short reports and one long research paper. By the end of the course, professional standards of accuracy in mechanics and presentation are expected. Some impromptu writing exercises.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ENG 2702. Film History I: 1890-1945. 3 Credit Hours.

This course introduces students to the major periods and technological developments in film history from its origins in various 19th century technologies and amusements to the end of World War II. The course will address some of the fundamental phases and international movements in cinema history, focusing on film as a technology, institution, and art form. A range of genres and national cinemas representative of the aesthetic and economic contexts of global media cultures will be examined. The course will be framed by a variety of critical issues in film historiography.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ENG 2097.

ENG 2703. Film History II: 1946-Present. 3 Credit Hours.

This course introduces students to the major periods and technological developments in film history from the end of World War II to the present. The course will address some of the fundamental phases and international movements in cinema history, focusing on film as a technology, institution, and art form. A range of genres and national cinemas representative of the aesthetic and economic contexts of global media cultures will be examined. The course will be framed by a variety of critical issues in film historiography.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ENG 2097.

ENG 2710. Special Topics in Film Studies I. 4 Credit Hours.

Topics alternate from semester to semester.

Repeatability: This course may be repeated for additional credit.

ENG 2711. Introduction to Film Studies. 3 Credit Hours.

This course introduces students to the fundamentals of film analysis. Students will learn about the construction of film narrative, as well as about formal elements of film, including principles of editing, mise-en-scene, and sound. The course also provides an introduction to issues in film studies including the meaning of film genre, the role of the film star, and authorship in the cinema. The course will focus on narrative feature films from the Classical Hollywood cinema, but will include attention to nonfiction practice as well as avant-garde European and Soviet alternatives to Hollywood. Films discussed include works by Hitchcock, Porter, Griffith, Vertov, Lang, Renoir, Hawks, Deren, and Welles. NOTE: In conjunction with English 2297 (W133), may be offered as Shakespeare in Film. Duplicate credit warning: Students who have completed this course under the old title, "Introduction to Cinema Studies," should not take this course as they will not receive duplicate credit.

Repeatability: This course may not be repeated for additional credits.

ENG 2712. International Film. 3 Credit Hours.

An examination, through masterpieces of world cinema, of international film cultures and national cinemas, with emphasis on the cultural, sociopolitical, and theoretical contexts. Offers a global context for film and other arts. NOTE: Variable content; may be given as post-World War II European film, French film, Third World film; consult the Undergraduate English Office or English web page for details.

Repeatability: This course may not be repeated for additional credits.

ENG 2713. Art of the Film. 3 Credit Hours.

An exploration of the black presence in American films from the racist portrayals in "The Birth of a Nation," the Stepin Fetchit films, and "Gone with the Wind," through the blaxploitation films like "Shaft" and "Superfly," culminating in recent black cinema from directors such as Melvin Van Peebles, Spike Lee and John Singleton. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: RS

Repeatability: This course may not be repeated for additional credits.

ENG 2714. Writing for the Arts. 3 Credit Hours.

This course will provide students with experience in the types of writing practiced in careers that support the arts. Students will research both individual artists (writers, visual artists, and performers such as actors, dancers, musicians, and comedians) and the companies, organizations and cultural institutions that present their work to the public. By the end of the semester, students will have compiled a portfolio of professional pieces in multiple genres of arts writing: a reader's report, a profile, a press release, a review, and posts across a variety of media platforms.

Repeatability: This course may not be repeated for additional credits.

ENG 2720. Special Topics in Film Studies II. 4 Credit Hours.

Topics alternate from semester to semester.

Repeatability: This course may be repeated for additional credit.

ENG 2821. Introduction to Linguistics. 3 Credit Hours.

The nature and structure of human language: the universal properties of language, how languages resemble each other, how children learn languages, how sound and meaning are related to each other, how the mind processes language, and how geographic and social factors affect language. Attention to the scientific methods linguists use to test hypotheses. NOTE: Not recommended for students who have had Anthropology 2507 (0127) and Communication Sciences 1108 (0108), or the equivalent.

Repeatability: This course may not be repeated for additional credits.

ENG 2822. Language and Race. 3 Credit Hours.

An investigation of language and race in order to evaluate accurately and objectively many common beliefs about the connections between the two. How all languages systematically organize sounds, grammar, and meanings, with a special emphasis on the structure of African American English; how particular ways of speaking may or may not affect one's thought patterns or social identity; public policy issues involving language and race. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: RS

Repeatability: This course may not be repeated for additional credits.

ENG 2831. Literacy and Society. 3 Credit Hours.

An exploration of the social context for reading and writing: how concepts of literacy can reinforce, elaborate, or threaten established social orders. Experiential study of how the written word is used; self-observation of our own writing practices and observation of others engaged in puzzling out the world through books, letters, pamphlets, flyers, newspapers, textbooks, billboards, signs, and labels. The purpose is to see literacy in action, see written documents shaping lives and see lives shaping written language. Reading about literacy, and a service or experiential component. Students who earned credit for English 2897 will not earn additional credits for this course.

Repeatability: This course may not be repeated for additional credits.

ENG 2832. Science Writing. 3 Credit Hours.

How is science written and how is scientific writing read? Classwork will include the writing and analysis of scientific texts for popular and learned audiences. We will study popular magazine, newsletters, and research journal writing, scientific web sites, museum exhibits and even science fiction, learning to address differing levels of scientific interest and literacy. This course was formerly known as ENG 2898 and entitled "Texts/Cultures of Science." Students who successfully completed the prior version of this course will not receive additional credit for "Science Writing."

Repeatability: This course may not be repeated for additional credits.

ENG 2833. Medical Writing. 3 Credit Hours.

How are experiences of pain and illness represented in writing? How are acts of medical diagnosis and treatment complex, expressions of conflicting values and understandings of the human? How does writing about disease engage biomedical ethical debates? This writing workshop will explore how different kinds of writing are intertwined with medical practice. We will study popular magazine, website, and research journal writing about illness and medicine to develop our own medical writing practice.

Repeatability: This course may not be repeated for additional credits.

ENG 2900. Honors Special Topics. 3 Credit Hours.

Continuity in Community: Poetry and Art Since 1950. This course is a hybrid: a study of the arts and community as well as a poetry writing workshop. As such, the class is intended for students interested in creative writing, art, and music. Baseline readings will most likely include Daniel Kane's *All Poets Welcome: the Lower East Side Poetry Scene in the 1960's*, which will be used to survey a sampling of arts groups/movements since 1950 such as Black Mountain, the San Francisco Renaissance, the New York School, and the Black Arts Movement. The poetry workshop will entail in-class creative and critical writing exercises. Student work will also be presented to the class for commentary and critique.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

ENG 2901. Intermediate Honors: Developing Advanced Literacy in College. 3 Credit Hours.

Although a variable content course, it often serves to prepare students to be peer tutors for first-year students in Temple's basic composition courses. As part of the course requirements, students are required to keep journals, deliver reports, and write research papers. NOTE: Variable content; consult the Undergraduate English Office or English web page for details.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

ENG 2903. Honors Creative Writing: Plays. 3 Credit Hours.

Workshop in which students read and discuss one another's material and develop skills as both writers and readers. Students may consider dramatic and stylistic problems in selected contemporary American plays, but the main texts will be those produced by members of the class.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

ENG 3001. History of Criticism. 3 Credit Hours.

A survey of literary criticism from Plato to the mid-20th century. Key questions in literary theory: What is literature compared to other forms of discourse? Does literature mimic or create? Does literary value adhere to or challenge standards of philosophical or empirical truth? What is the source of literary creation? How does literary value shape social change? These and other questions are addressed through readings in literary and theoretical texts.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3002. Contemporary Criticism. 3 Credit Hours.

Comparative study of literary theories from the 1960s to the present. Survey of several contemporary critical schools, including deconstructionist, neo-psychological, neo-Marxist, new historical, feminist, sociological, and aesthetic criticism.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3003. Intermediate Poetry Workshop. 3 Credit Hours.

Workshop intended to help advanced writers produce, revise, and critique poetry. The premise is that in order to learn to make poems, one needs to learn to read like a poet; in addition to producing original work, therefore, students may read and discuss work by certain contemporary poets.

Note: Prior to Fall 2023, this course was titled "Advanced Creative Writing: Poetry." This course may be taken a maximum of two times for credit, and all attempts will be factored into a student's cumulative GPA.

Note: This course is not designated writing intensive.

Repeatability: This course may be repeated for a total of 6 credit.

Pre-requisites: Minimum grade of C- in ENG 2003.

ENG 3004. Intermediate Fiction Workshop. 3 Credit Hours.

Workshop intended to help advanced writers produce, revise and critique fiction. In addition to producing original work, students may read and discuss certain contemporary writers and theories of fiction.

Note: Prior to Fall 2023, this course was titled "Advanced Creative Writing: Poetry." This course may be taken a maximum of two times for credit, and all attempts will be factored into a student's cumulative GPA.

Note: This course is not designated writing intensive.

Repeatability: This course may be repeated for a total of 6 credit.

Pre-requisites: Minimum grade of C- in ENG 2004.

ENG 3005. Advanced Creative Writing: Plays. 3 Credit Hours.

Workshop intended to help advanced writers produce, revise, and critique plays. In addition to writing original work, students may read and discuss work by certain contemporary playwrights.

Note: This course may be taken a maximum of two times for credit, and all attempts will be factored into a student's cumulative GPA.

Note: This course is not designated writing intensive.

Repeatability: This course may be repeated for a total of 6 credit.

Pre-requisites: Minimum grade of C- in ENG 2005.

ENG 3009. Building Electronic Portfolios. 3 Credit Hours.

This course is designed to support advanced professional writing students' work on a web portfolio. Major course projects other than the portfolio will include work in conceptualizing and designing writing portfolios, reflecting on the role of electronic portfolios in education, and drafting portfolio designs. This course will also use instructional time to help participants revise writings for their portfolio and learn the principles and practices of Web design.

Repeatability: This course may not be repeated for additional credits.

ENG 3010. Special Topics I. 3 Credit Hours.

Advanced study in a specific area, usually concentrating on pre-1900 works. NOTE: Variable content; consult undergraduate office or English web page for details.

Repeatability: This course may be repeated for additional credit.

ENG 3011. The History of Ancient Greek Theater. 3 Credit Hours.

This course traces the development of the ancient Greek theater, from its invention when Thespis stepped out of the chorus to sing solos, through the important tragedies of Aeschylus, Sophocles and Euripides that addressed the great questions of individual, the gods and society, through the early comedies of Aristophanes, to the final evolution of the ancient theater into something we would call melodrama and sit-com. We will study the development of the physical theaters in Athens and the wider Mediterranean, ancient staging techniques, the development of the early acting profession, the portrayal of women in Athenian theater, and the complex relationship between Athenian theater and democracy, as well as with religion. As the scholarly ground of the ancient Greek theater has shifted radically over the past forty years and continues to move, students will participate in the fundamental questions in this exciting field. This course is a "Pre-1800" elective for English majors. Duplicate Credit Warning: This course is cross-listed with GRC 3011. Students who have earned credits for GRC 3011 will not earn additional credits for this course.

Repeatability: This course may not be repeated for additional credits.

ENG 3020. Special Topics II. 3 Credit Hours.

Advanced study in a specific area, usually concentrating on post-1900 works. NOTE: Variable content; consult Undergraduate Office or English web page for details.

Repeatability: This course may be repeated for additional credit.

ENG 3082. Independent Study. 1 to 3 Credit Hour.

Allows students in their junior and senior year to pursue serious independent research in a subject too specialized or too advanced to appear as a regular course offering.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may be repeated for additional credit.

ENG 3085. Career Internship. 1 to 12 Credit Hour.

The mission of English 3085 is to assist and prepare students in securing hands-on work experience related to their career goals and interests and to provide students with an opportunity to acquire experience and skills needed to gain a competitive advantage upon entering the workforce. The course may be taken one time for 1-12 credits, depending on the number of hours worked. If taken for 3 or more credits, this course may count as one elective in the English major, minor, or Certificate in Professional Writing.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3096. Texts and Criticism. 3 Credit Hours.

Focusing on three or four major texts, this course will teach students how to analyze and respond to critical essays about the texts. It prepares students to do advanced research using library and online sources, and to use the results of their research to develop their own arguments about the text.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ENG 2001.

ENG 3097. Feminist Theory. 3 Credit Hours.

Readings in contemporary theorists who describe how the values of a culture are encoded in its language and who analyze the difficulty of escaping the prison house of language. How gender roles are created in and enforced by our symbol systems; how specific discourses change, how those changes can be facilitated, and how a new discourse is then read. Along with theoretical readings, some consideration of feminist applications of these strategies in politics, literature, music, and film. NOTE: Students will earn credit only one time for either ENG 3097 or GSWS 3097.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Course Attributes: SI, WI

Repeatability: This course may not be repeated for additional credits.

ENG 3101. Themes and Genres in Women's Literature. 3 Credit Hours.

In-depth study of ideas, languages, and cultural stances in literature written by women. Students who have earned credit for English 3197 will not earn additional credit for this course. NOTE: Variable content; consult Undergraduate English Office or English web page for details.

Repeatability: This course may not be repeated for additional credits.

ENG 3103. Advanced Poetry Workshop. 3 Credit Hours.

This course is meant to serve as a culmination of the Creative Writing minor for students who have taken one introductory level poetry workshop and one intermediate-level poetry workshop. This is an intensive, advanced reading and writing creative workshop. The coursework will generate a semester project that has both creative and critical components. Students outside of the minor, or who have followed the fiction sequence, may take this course with instructor permission.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ENG 2003 and ENG 3003.

ENG 3104. Advanced Fiction Workshop. 3 Credit Hours.

This course is meant to serve as a culmination of the Creative Writing minor for students who have taken one introductory level fiction workshop and one intermediate-level fiction workshop. This is an intensive, advanced reading and writing creative workshop. The coursework will generate a semester project that has both creative and critical components. Students outside of the minor, or who have followed the poetry sequence, may take this course with instructor permission.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ENG 2004 and ENG 3004.

ENG 3111. Italian Renaissance. 3 Credit Hours.

This course covers major writers and works of the Italian Middle Ages and Renaissance: Dante, Petrarch, Boccaccio, Machiavelli, and Ariosto. Focus is placed on the rebirth of classical values and ideas, and their new forms of expression, which shall be known as the Renaissance. Due attention is given to such themes as the new concept of art and the new image of the artist through the study of Michelangelo's poetry and Cellini's Autobiography, as well as the concept of a united Italy, idealized from Dante through Machiavelli, but never historically achieved.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3112. Masterpieces of European Drama. 3 Credit Hours.

A reading and analysis of a wide range of continental European drama. Representative works from such great ages of drama as classical Greek and Roman, French neoclassic, and modern. Readings may include plays by Aeschylus, Euripides, Terence, Calderon, Racine, Moliere, Goethe, Ibsen, Chekhov, Brecht, and Beckett.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3211. Old English. 3 Credit Hours.

An introduction to the language, literature, and culture of Anglo-Saxon England. Short poems, excerpts from sermons, Bede, the Bible, and Beowulf. All works read in the original Old English. NOTE: No previous knowledge of Old English necessary.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3212. Literature of the Medieval Period. 3 Credit Hours.

Literature of the Middle English period, as well as the relation of the literature to the traditions of medieval literature throughout Western Europe. Works may include *The Owl and the Nightingale*, *Pearl*, *Piers Plowman*, *Sir Gawain and the Green Knight*, and selections from the mystery and morality plays, all usually read in the original in well-annotated texts. NOTE: No previous knowledge of Middle English necessary.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3213. Chaucer. 3 Credit Hours.

This study of the first major poet of the English tradition will focus on the theoretical as well as practical problems he poses for the modern reader. Readings include early dream visions and the *Canterbury Tales* and selections from Chaucer's sources and contemporaries to help students understand literary and social contexts. NOTE: No previous experience with Middle English required.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3221. Advanced Shakespeare I. 3 Credit Hours.

In-depth readings of selected major plays, usually including histories, comedies, and tragedies. Close textual analysis, social context, and philosophical background. NOTE: Assumes completion of at least one 2000-level literature course.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3222. Advanced Shakespeare II. 3 Credit Hours.

Readings in a small number of plays by Shakespeare which have presented special critical problems to scholars, general readers, and performers alike. How such problems define critical perspectives on the plays, and how some current critical modes of reading Shakespeare address these texts. Reading may include such plays as *Troilus and Cressida*, *Measure for Measure*, *King Lear*, *Antony and Cleopatra*, *The Tempest*, *Cymbeline*.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3223. Elizabethan and Jacobean Drama. 3 Credit Hours.

Study of the extraordinarily talented and productive group of playwrights of the late 16th and early 17th centuries; such dramatists as Kyd, Marlowe, Jonson, Middleton, Webster, Ford, Dekker. Some attention to the plays as performances, and some consideration of social and intellectual contexts of the plays.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3224. Renaissance Writers. 3 Credit Hours.

Studies in Tudor and Stuart literature. May focus on a single author or group of authors or be organized generically or thematically. Possible topics include Spenser, Elizabethan courtly literature, lyric, pastoral, and prose fiction. NOTE: Variable content; see the Undergraduate English Office or English web page for details.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3225. Milton. 3 Credit Hours.

A study of John Milton's poetry and prose in its cultural and historical context. The course will begin with shorter poems, such as "Lycidas," and spend the majority of the semester on "Paradise Lost." Selected prose will highlight Milton's views on religion, divorce, and censorship.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3231. Restoration and 18th Century Literature. 3 Credit Hours.

Readings in the major texts, authors, genres, and cultural institutions of the period, 1660-1800. Classes may focus on more specialized time periods (like The Restoration) or topics (colonialism and literature) or genres (forms of comedy) or range more widely. Authors may include: Behn, Milton, Dryden, Rochester, Defoe, Swift, Finch, Pope, Addison, Steele, Montagu, Fielding, Richardson, Johnson, Boswell, Collins, Gray, and Burns.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3232. English Novel to 1832. 3 Credit Hours.

A study of the complex emergence of the novel as a genre in English. Begins in the latter part of the 17th century and early 18th century with authors such as Bunyan and Behn and Defoe and then considers various foundational and revisionary texts, by authors including Richardson, Fielding, Lennox, Burney, and Sterne. Concludes with figures key to the Gothic, the novel of manners, and the historical novel, such as Radcliffe, Austen, and Scott. Key topics may include the relationship of the novel to changing understandings of fact and fiction, to shifting ideas of gender roles, to colonial expansion, and contests over national identity major novelists of the 18th century, beginning with authors Defoe, extending through Richardson, Fielding, Burney, and Sterne, and ending with Mary Shelley, Walter Scott, and Jane Austen. Emphasis on the social and cultural contexts, narrative form and style, and factors leading to the emergence of the novel as a genre in English.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3241. English Romanticism. 3 Credit Hours.

First and second generation romantics, especially Blake, Wordsworth, Coleridge, Byron, Shelley, and Keats; their literary, historical, social, and cultural milieu; and the ideas and issues that contributed to shaping their imaginations and their work.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3251. Victorian Literature. 3 Credit Hours.

An introduction to the range of Victorian literature, including writers such as Alfred Tennyson, Robert Browning, Elizabeth Barrett Browning, Thomas Carlyle, the Brontës, Charles Dickens, George Eliot, Matthew Arnold, Christina Rossetti, Walter Pater, Oscar Wilde, and Thomas Hardy.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3252. Victorian Novel. 3 Credit Hours.

A study of works by Bronte, Dickens, Thackeray, Trollope, Eliot, Meredith, and Hardy, among others. These writers wrote novels intended to entertain and instruct, and were not above appealing to laughter and tears or causing their readers to share their moral fervor or indignation. The goal is an understanding of the social and artistic significance of these works in light of the world in which they emerged.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3261. Modern British Fiction. 3 Credit Hours.

A reading of great novels from the first quarter of the 20th century, the high point of English modernism. May include Conrad's *Lord Jim*, Woolf's *To The Lighthouse*, and Joyce's *Ulysses*. A reevaluation of the achievement of modernism from the perspective of the postmodern age, with the focus on kinds of modernism, kinds of irony, the reinvention of narrative form, and the works' social and moral implications.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3262. Irish Literature. 3 Credit Hours.

A study of selected modern Irish writers, emphasizing close reading, psychological concepts, and cultural history. Writers may include Wilde, Shaw, Yeats, Joyce, Beckett, Kinsella, and Heaney.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3321. American Romanticism. 3 Credit Hours.

A study of the development of a distinctively American character in American literature from 1830 to 1865. Traces the literary expression of America's growing consciousness of its own identity; the literary romanticism of Poe and Emerson, the darker pessimism of Hawthorne and Melville, the affirmative optimism of Thoreau and Whitman; technical innovations in poetry, including that of Emily Dickinson.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3322. American Realism and Naturalism. 3 Credit Hours.

A study of the diverse styles, subject matters, and theories of prose fiction in the late 19th century in terms of their challenge to and/or incorporation of earlier prose styles. Included will be the early realists (Chesnutt, Davis, Cahan, Sedgwick), later realists (James, Jewett, Howells, Garland, Chopin, Cable), and the naturalists (Crane, Norris, Wharton, Frederic, Dreiser).

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3323. 19th Century American Fiction. 3 Credit Hours.

A study of the development of American fiction from the antebellum period through the end of the century: Hawthorne, Melville, James, and others.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3331. Modern American Fiction. 3 Credit Hours.

Technique and subject -- the how and the what -- of a group of American novels from the first half of the 20th century, by such writers as Stein, Anderson, Hemingway, Fitzgerald, Faulkner, Hurston, West, and H. Roth.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3332. Contemporary American Fiction. 3 Credit Hours.

A reading and analysis of representative works of late 20th century fiction, some realistic, some experimental, some mid-way between, leading to a sense of the options available to a writer now. Texts may include Bellow, Updike, Barth, Vonnegut, and such recent writers as Morrison, Auster, Mukherjee, Cisneros, Alexie.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3341. American Literature and Society. 3 Credit Hours.

A study of social issues as explored in U.S. literature and the social context in which literature is produced. May be offered as *The Arts in America*, *Literature of Slavery*, etc. Note: Variable content; consult the English Department's web page for details.

Note: This course may be taken a maximum of two times for credit, and all attempts will be factored into a student's cumulative GPA.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may be repeated for a total of 6 credit.

ENG 3401. Intermediate Writing: Non-Fiction. 3 Credit Hours.

A further exploration of creative and observational non-fiction for a non-academic audience. Classroom discussions will focus on published pieces as well as workshop considerations of student writing.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3411. Studies in African-American Literary Genre. 3 Credit Hours.

This variable content course will explore traditions, themes, or periods in African-American literature by foregrounding issues of genre. The focus may be on a single genre or set of generic conventions, such as drama, the protest novel, biography and letters, or the slave narrative, or on such topics as the influence of oral culture or the figure of testimony in diverse literary genres.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3412. The Harlem Renaissance. 3 Credit Hours.

The Harlem Renaissance represents the first period in Black productivity in all of the arts. The purpose of this course is to explore the themes, genres, and authors that define the literary arena of the Harlem Renaissance. This course will include the ideas and works of such figures as W.E.B. DuBois, Jean Toomer, Langston Hughes, Claude McKay and Zora Neale Hurston.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3413. African-American Literary Criticism. 3 Credit Hours.

This course is designed to give students a basic background in the foundation of African-American literary criticism. While the late 1970s mark the beginning of an exodus of Black academicians trained as literary critics, most of the critics of African-American literature before the 1970s were creative writers, such as W.E.B. DuBois, Alain Locke and Langston Hughes. This course will begin by exploring the fiction, poetry and critical essays by these and other writers. This work will function as a background for an examination of the works of poets from the Black Arts Movement. We shall also give attention to Black feminist scholarship, and the course will end with an analysis of African-American post-structuralist literary theorists such as Henry Louis Gates, Jr.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3414. Blacks/Literature/Drama/Media. 3 Credit Hours.

An exploration of representations of racial difference in the fiction and drama of African-American and European-American authors. Primary texts will be read in conjunction with screenings of films, to examine the role of visual media in shaping perceptions. How image-making in theater, film, and television has influenced the way racial difference is characterized in literature, with an emphasis on the relationship between criticism and creative process. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Course Attributes: RS

Repeatability: This course may not be repeated for additional credits.

ENG 3511. Modern British and American Poetry. 3 Credit Hours.

A study of the major works and writers of the first half of the 20th century. Such poets as Yeats, Eliot, Stein, Williams, Pound, examined in their social and political contexts, and with reference to their contributions to the development of Modernism.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3512. Issues in Modern Literature. 3 Credit Hours.

A study of selected literary, cultural, and political issues as they affect recent writing in diverse cultures and nations; offered variously as Postcolonial Literature, Resistance Literature, Literature of Exile, and the like. Note: Consult the Undergraduate English Office or English web page for details. Note: This course may be taken a maximum of two times for credit, and all attempts will be factored into a student's cumulative GPA.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may be repeated for a total of 6 credit.

ENG 3513. Modern World Fiction. 3 Credit Hours.

A study of significant literary works and developments in fiction in the modern period. Such writers as Flaubert, Joyce, Mann, Proust, and Kafka; or, in the last half of the 20th century, Garcia Marquez, Borges, Saramago, Walcott, Mahfouz, Soyinka, and Grass.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3521. Contemporary Poetry. 3 Credit Hours.

Exploration of the major issues in world poetry of the late 20th century. Theories and practice of postmodernism; the relation of poetry to other arts; the cultural contexts in which poetry is produced.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3522. Contemporary World Fiction in English. 3 Credit Hours.

Recent Anglophone novels and short stories from India, Africa, Canada, Australia, and multicultural England. Memory and self-invention, new forms of narrative, the politics of language, and the forging of national and international conscience in work by such writers as Salman Rushdie, Arundhati Roy, Nuruddin Farah, J.M. Coetzee, Nadine Gordimer, Michael Ondaatje, Peter Carey, Hanif Kureishi, Kazuo Ishiguro, Ben Okri.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3523. Contemporary Drama. 3 Credit Hours.

A study of European and American drama in the latter part of the 20th century, with equal attention to dramatic and theatrical values. May include Wilder, Miller, Williams, Ionesco, Genet, Pinter, Brecht, Duerrenmatt, Shepard, and Mamet.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3524. Advanced Contemporary Literature. 3 Credit Hours.

An examination of important developments in late 20th century literature. May be offered as Post-Modernist literature (such figures as Barth, Pynchon, Borges, Robbe-Grillet, Butor, Duras, Gombrowicz, Kundera, Garcia Marquez, Coover, Winterson) or as Magic Realism (Garcia Marquez, Calvino, Okri, Rushdie). Note: Variable content; consult the Undergraduate English Office or English web page for details.

Note: This course may be taken a maximum of two times for credit, and all attempts will be factored into a student's cumulative GPA.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may be repeated for a total of 6 credit.

ENG 3610. Topics in Postcolonial Literature. 3 Credit Hours.

This junior-level seminar takes a focused approach to the literature and cultural production of one or two regions of the formerly colonized world: Africa, the Caribbean, Asia, the Middle East, Latin America, Australia, and the Pacific. Specific concentrations may center around the emergence and future of the postcolonial literature in question, or on the evolution of a genre (novel, Bildungsroman, poetry, or theater) in light of a selected topic (gender, hybridity, exile, nationalism, or globalization, among others). Please consult individual course listings for specific topics.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may be repeated for additional credit.

ENG 3611. Postcolonial Theory. 3 Credit Hours.

This is a research intensive junior-level class that examines postcolonial theory with a particular focus on the methods and approaches that postcolonial theory has made available to literary studies. The theoretical and historical readings will be drawn from a number of foundational texts in the field and are likely to include the work of Edward Said, Frantz Fanon, Aime Cesaire, Ngugi wa Thiong'o, Gayatri Spivak, Homi Bhabha, Eric Hobsbawm, Mary Louise Pratt, Ashis Nandy, among others. Topics of study vary by instructor and might include the politics of culture; the psychology of colonialism; imperialism and popular representation; refusing and resisting empire; narrating territories; aestheticizing empire; inventing the Other; imagining nationalism.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3710. Special Topics in Film. 4 Credit Hours.

Topics vary. Please consult the English Department or instructor for more information.

Repeatability: This course may be repeated for additional credit.

ENG 3711. Intermediate Film. 3 Credit Hours.

In-depth study of particular issues and questions related to cinema history, culture, and theory. Focus may be on a specific period in film history (such as German Expressionist Cinema), an interdisciplinary topic (such as Women and Film), a film genre (such as American Documentary Film), or a textual problem (such as The Development of Film Narrative). Note: Consult the Undergraduate English Office or English web page for details.

Note: This course may be taken a maximum of two times for credit, and all attempts will be factored into a student's cumulative GPA.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may be repeated for a total of 6 credit.

ENG 3810. Topics in Professional Writing, Editing, and Publishing. 3 Credit Hours.

This course will be a hands-on, practical class in editing and producing a literary journal, with crash courses in typography, copyediting, and Web design. Initially students will edit, copyedit, proofread, typeset, design, print, and bind a chapbook of a fellow student's poetry or fiction. They will then design or redesign an author website. Finally, students will present a mockup of a dream online magazine.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ENG 2001, ENG 2003, ENG 2004, or ENG 2005)

ENG 3811. Theories of Language and Literacy. 3 Credit Hours.

An examination of theories related to language use, both written and oral. This course introduces students to the field of rhetoric and composition. Will include projects that apply theories to classroom and non-academic literacy settings.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3812. Language Variation: Research in Language and Literacy. 3 Credit Hours.

An examination of differences in language practices that reflect the linguistic register in which one is operating or the community to which one belongs. Study of a variety of informal and formal settings, including one-of-a-kind sites; such variations as regional, social, cultural, and gender-related differences, including the English of ESL, African-American, Hispanic-American, and working-class students.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3813. Writers at Work. 3 Credit Hours.

An examination of problems and issues associated with particular kinds of writing - e.g., biography, memoir, political essays. May include reading in contemporary works, but the intention is for students to bridge the gap between theory and practice by producing texts of their own. NOTE: Variable content; consult the Undergraduate English Office or English web page for details.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3814. Topics in Professional Writing. 3 Credit Hours.

This course will be a hands-on, practical class in editing and producing a literary journal, with crash courses in typography, copyediting, and Web design. Initially students will edit, copyedit, proofread, typeset, design, print, and bind a chapbook of a fellow student's poetry or fiction. They will then design or redesign an author website. Finally, students will present a mockup of a dream online magazine.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ENG 2001.

ENG 3821. Linguistics and Grammar. 3 Credit Hours.

A review of traditional grammar parts of speech, subordination, pronoun case, parallelism, modifier placement, punctuation, etc., using the theories and techniques of modern theoretical linguistics. Students perfect their own grammatical knowledge by writing and by exploring linguistic analyses of common writing errors and how to correct them. The linguistic properties of effective prose also discussed.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3822. Semantics. 3 Credit Hours.

"You can't cook eggplant too long." Nobody who speaks English has any trouble understanding that sentence. However, it can mean both one thing (perhaps that eggplant is best eaten rare) and its opposite (eggplant can be cooked indefinitely long with no bad effects). This course on meaning in language will investigate meaning that arises from the structure of sentences and their use, as well as the meanings of words and phrases.

Repeatability: This course may not be repeated for additional credits.

ENG 3823. History of the English Language. 3 Credit Hours.

How and why did the language of Beowulf become, successively, the language of Chaucer, of Shakespeare, of Swift, James, and Hemingway? In surveying the historical development of English language and style, this course will focus where possible on literary texts, and seek to demonstrate how useful a historical grasp of language can be to the appreciation of literature.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

ENG 3824. Forensic Linguistics. 3 Credit Hours.

A kidnapper leaves a ransom note. Can the writing style be used to identify a suspect? How do we know if someone has consented to a vehicle search? Can an implication count as a refusal? Every step of the legal process involves a close look at language, from creating laws, analyzing spoken or written evidence, interrogating suspects, or determining language crimes such as perjury or threats of violence. This course provides an introduction to forensic linguistics, or the application of linguistics within legal settings, using real life examples of language from forensic evidence, interactions between police and suspects, and courtrooms.

Repeatability: This course may not be repeated for additional credits.

ENG 3900. Honors Special Topics I. 3 Credit Hours.

In this course, we will explore the social context for reading and writing. We want to ask questions that will lead us to see how concepts of literacy can reinforce, elaborate, or threaten established social orders. We want to peek at ourselves in the act of using the written word, and we want to listen in while others are puzzling out the world through books, letters, pamphlets, flyers, newspapers, textbooks, billboards, signs and labels. We will read about the history and anthropology of literacy, and consider closely at least two ethnographic studies that highlight the acquisition of literacy. In short, we will try to see that which is usually invisible: the transparent assumptions and associations that twine through literacy acts.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

ENG 4096. Studies in Creative Writing. 3 Credit Hours.

This course is meant to serve as a capstone for students who have taken one beginning-level creative writing workshop and one intermediate-level creative writing workshop. The amount of work is equivalent to that required by a senior seminar, including both critical and literary readings in the field, as well as both critical and creative writing responses. The course will culminate in a final project that has both creative and critical components. The organizing theme of the course will change from year to year.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ENG 2097, (ENG 2003, ENG 2004, ENG 2005, or ENG 2903), and (ENG 3003, ENG 3004, or ENG 3005)

ENG 4097. Studies in Criticism. 3 Credit Hours.

All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ENG 4098. Studies in Modern British Literature. 3 Credit Hours.

All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ENG 4196. Studies in Language and Literacy. 3 Credit Hours.

This senior seminar is the culminating course for a concentration or focus on composition and rhetoric. Students will develop a research project based on theoretical approaches to language use and present their findings orally in class and in an extended essay in the style of a journal in the field. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ENG 4197. Studies in Poetry. 3 Credit Hours.

All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ENG 4198. Studies in Irish Literature. 3 Credit Hours.

All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ENG 4297. Studies in Drama. 3 Credit Hours.

All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ENG 4298. Studies in Early American Literature. 3 Credit Hours.

All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ENG 4397. Studies in Medieval Language and Literature. 3 Credit Hours.

All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ENG 4398. Studies in 19th Century American Literature. 3 Credit Hours.

All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ENG 4497. Studies in Shakespeare. 3 Credit Hours.

All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ENG 4498. Studies in Modern American Literature. 3 Credit Hours.

All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ENG 4597. Studies in Renaissance Literature. 3 Credit Hours.

All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ENG 4598. Studies in African-American Literature. 3 Credit Hours.

All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ENG 4697. Studies in Restoration and 18th Century Literature. 3 Credit Hours.

All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ENG 4698. Studies in World Literature. 3 Credit Hours.

All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ENG 4797. Studies in Romanticism. 3 Credit Hours.

All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ENG 4798. Advanced Topics in Postcolonial Studies. 3 Credit Hours.

A senior seminar, this course re-visits the foundational texts of postcolonial studies addressing such issues as representation, resistance, nationalism, feminism, education, immigration, and globalization. Theoretical texts will be studied in conjunction with colonial and postcolonial literary works and film that exemplify a particular trend or theme. These may include the development of alternate cinemas, re-adaptations of classic literary works, the question of history, the art of revolution, and transnational feminisms. Students will be guided through the completion of a 15-20 pp research paper. Please consult individual course listings for specific topics.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ENG 4897. Studies in the Victorian Age. 3 Credit Hours.

All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ENG 4898. Studies in Film. 3 Credit Hours.

All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

English Education (Elementary) (ENEE)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ENEE 3296. Tch Lang Arts N:6. 3 Credit Hours.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ENEE 3297. Teaching Integrated Language, Reading and Writing. 6 Credit Hours.

An in-depth acquaintanceship and exploration of current theories and programmatic application of sound classroom practices for quality balanced literacy programs. Emphasis will be upon becoming familiar with the separate facets of the language arts/communication skills/literacy skill areas with a strong focus upon the diagnosis and effective teaching of high quality reading and writing programs.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: ELED 3287.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

ENEE 3341. Second Language Development across the Curriculum. 3 Credit Hours.

This course begins with an overview of the basic components of English syntax, phonology, morphology, the lexicon, and pragmatics. Subsequently, the course examines the processes of first and second language acquisition and of bilingual & biliterate development. Students will apply this knowledge as they examine English language learners' language and literacy development through academic content areas. The course also offers an overview of multiple assessment models, which will allow students to document English language learners' progress and address their needs with particular instructional methods and strategies. To this end, each student in the course will be required to make and analyze several audio-recordings of the oral speech of one learner and to collect their written work in order to assess their progress both in spoken and written English. Students will be asked to assess the learners' strengths and weaknesses and to develop instructional adaptations/modifications to assist their learner. This field experience will allow students to deepen their theoretical understanding of the structure of English, to apply their knowledge of assessment of language and literacy development and verbal and non-verbal communication, and to learn how to select resources and instructional approaches to address instructional needs of particular English language learners.

Repeatability: This course may not be repeated for additional credits.

English Education (Secondary) (ENES)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ENES 3338. Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12. 3 Credit Hours.

This course offers students an introduction to theory, research and practice in teaching English language learners in the middle grades. The course begins with an overview of sociocultural characteristics of ELLs, legal responsibilities, and educational and language policies in the United States. Students will also learn the basic theories and principles associated with second language acquisition. Students will explore the philosophies of bilingual and ESL education as well as different program models that address the education of linguistically diverse students. Students will be introduced to an array of contemporary, research-based instructional approaches, including content-based instruction, task-based language teaching, and sheltered English instruction. As a result, they will gain an understanding of how to adapt standards-based lessons for English language learners. Through a practicum component, students will learn to design lessons and assessments for small-group instruction. Students will also develop cross-cultural competence through interactions with ELLs, teachers and school staff in the middle grades. NOTE: Background clearances required.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may not be repeated for additional credits.

ENES 4366. Teaching Literature and Reading 7-12. 3 Credit Hours.

An investigation of what texts ought to be taught in secondary schools, of how to teach them most effectively, and of the extent to which different student populations require different approaches. NOTE: As part of the course, students spend 2-3 hours each week assisting in a language arts classroom.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: EDUC 4389.

Repeatability: This course may not be repeated for additional credits.

ENES 4371. Teaching Oral and Written Communication: 7-12. 3 Credit Hours.

An examination of the knowledge that writers employ when they compose different kinds of texts, of the instructional contexts that are most effective in helping secondary students develop that knowledge, and of the extent to which different student populations require different approaches. NOTE: As part of the course, students spend 2-3 hours each week assisting in a language arts classroom.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: EDUC 4389.

Repeatability: This course may not be repeated for additional credits.

Environmental Engineering Technology (ENVT)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ENVT 0845. The Environment. 3 Credit Hours.

In today's world characterized by rapid and global environmental changes, it is crucial that citizens have an understanding of the key concepts in environmental science. This course provides students with an introduction to the science behind critical environmental debates and breaks down the requirements for creating and maintaining sustainable ecosystems. A major focus of the course is to develop critical thinking skills and apply them to assess relevant questions such as: How do we predict trends in the growth of populations or climate change? How do human activities impact the nitrogen and phosphorus cycles and how does this in turn affect the environment? How can we quantify and value biodiversity? Should we eat lower on the food chain or are genetically modified crops a sustainable solution? What were the key outcomes of the 2015 U.N. Climate Change Conference in Paris and how will various countries carry out their commitments to protect the environment? This course will enhance awareness of the impacts that our everyday decisions have on the environment and will provide students with strategies to become better environmental stewards. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot receive credit for this course if they have successfully completed CEE 0845, CEE 0945, CEE 1051, ENVT 0945, or ENVT 1051.

Course Attributes: GS, SE, SF

Repeatability: This course may not be repeated for additional credits.

ENVT 0945. Honors: The Environment. 3 Credit Hours.

In today's world characterized by rapid and global environmental changes, it is crucial that citizens have an understanding of the key concepts in environmental science. This course provides students with an introduction to the science behind critical environmental debates and breaks down the requirements for creating and maintaining sustainable ecosystems. A major focus of the course is to develop critical thinking skills and apply them to assess relevant questions such as: How do we predict trends in the growth of populations or climate change? How do human activities impact the nitrogen and phosphorus cycles and how does this in turn affect the environment? How can we quantify and value biodiversity? Should we eat lower on the food chain or are genetically modified crops a sustainable solution? What were the key outcomes of the 2015 U.N. Climate Change Conference in Paris and how will various countries carry out their commitments to protect the environment? This course will enhance awareness of the impacts that our everyday decisions have on the environment and will provide students with strategies to become better environmental stewards. (This is an Honors course.) NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot receive credit for this course if they have successfully completed CEE 0845, CEE 0945 CEE 1051, ENVT 0845 or ENVT 1051.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GS, HO, SE, SF

Repeatability: This course may not be repeated for additional credits.

ENVT 1051. Introduction to the Environment. 3 Credit Hours.

Basic environmental issues, systems and change; biogeochemical cycles; human population; ecosystems and their management and restoration; biological diversity, productivity and energy flow; biogeography; environmental health, pollution and toxicology; energy; and global warming. Hands on laboratory exercises are an integral part of the course. The lab exercises are conducted within the class schedule at each campus. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement. Students cannot receive credit for this course if they have successfully completed CEE 0845, CEE 0945, CEE 1051, ENVT 0845 or ENVT 0945.

Course Attributes: SB

Repeatability: This course may not be repeated for additional credits.

ENVT 1117. Sanitary Chemistry and Microbiology. 3 Credit Hours.

Wet chemical analysis of environmental importance, sampling, data handling, standard tests, microbiology.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CHEM 1031 and CHEM 1033)

ENVT 2124. Environmental Instrumentation. 3 Credit Hours.

Optical, electrochemical, and instrumental methods of analysis, environmental applications.

Course Attributes: SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ENVT 1117.

ENVT 2133. Environmental Field Operations. 4 Credit Hours.

Field aspects of environmental engineering, air and water sampling, stack sampling, bioassay, and environmental aspects of planning.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ENVT 2124.

ENVT 4711. Air Pollution Control Systems. 3 Credit Hours.

Principles of design and operation of the major categories of air pollution control equipment. Theory and principles are presented to reinforce extensive application and design components.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ENGT 2521 and PHYS 1062)

ENVT 4721. Water and Wastewater. 3 Credit Hours.

Water treatment theory and design including sedimentation, coagulation, softening, iron removal, and chlorination, wastewater treatment theory and design, including grit chambers, activated sludge, trickling filter, and anaerobic digester.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in ENGT 2521.

ENVT 4731. Hazardous Waste Management. 3 Credit Hours.

Collection and disposal: incineration, landfill, composting, recycling, special wastes, permitting.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ENVT 1117.

ENVT 4741. Environmental Modeling. 3 Credit Hours.

Theory and modeling of pollutant transport and diffusion with particular emphasis on air. Applicable principles of boundary layer meteorology, plume rise, air pollution climatology, data selection, and modeling for design. Survey of available models. Demonstrations and student projects with computer applications.

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (MATH 1042 or 'Y' in MATW), PHYS 1062, and ENGT 2521 (D- or higher)

ENVT 4761. Environmental Regulations. 3 Credit Hours.

Environmental regulations at the federal, state, and local levels. Emphasis on procedures for compliance with surveillance and permit requirements.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: SF

Repeatability: This course may not be repeated for additional credits.

ENVT 4982. Honors Independent Study in Environmental Engineering Technology. 2 to 4 Credit Hours.

Student may complete a regular course during a semester in which the course is not offered to meet prerequisite or graduation requirements. An instructor is assigned to supervise the student.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

ENVT 4983. Honors Directed Study in Environmental Engineering Technology. 1 to 4 Credit Hour.

An opportunity to study specialized topics not covered in currently available courses and providing significant progress towards the technical/professional objectives of the program. An instructor is assigned to define the scope and direct, supervise, and evaluate student progress.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

ENVT 4991. Honors Independent Research in Environmental Engineering Technology. 2 to 4 Credit Hours.

A project conducted under the supervision of a faculty sponsor.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

Environmental Health (ENVH)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ENVH 1103. International Health. 3 Credit Hours.

This course examines avenues of international cooperation in health and explores the most significant health problems and resources in developing and developed countries by focusing on international differences in health status, social/economic/political factors in health care, varied approaches to providing health services, the role of health workers, and the involvement of foundations and multilateral and bilateral agencies. Public Health majors, minors or students studying the Public Health concentration must complete this course with a C or better.

Course Attributes: SI, SS

Repeatability: This course may not be repeated for additional credits.

ENVH 1903. Honors International Health. 3 Credit Hours.

This course examines avenues of international cooperation in health and explores the most significant health problems and resources in developing and developed countries by focusing on international differences in health status, social/economic/political factors in health care, varied approaches to providing health services, the role of health workers, and the involvement of foundations and multilateral and bilateral agencies. Public Health majors, minors or students studying the Public Health concentration must complete this course with a C or better.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, SI, SS

Repeatability: This course may not be repeated for additional credits.

ENVH 2102. Environmental Health. 3 Credit Hours.

This introductory course incorporates not only the common concepts associated with environmental health (such as population dynamics, air pollution, water pollution, and land pollution) but also emerging and controversial issues associated with environmental threats to human health, such as emerging diseases, global warming, and biological and chemical weapons. Emphasis is on biological, chemical, and physical sources of exposures, the effects on human health, and the methods of limiting exposures and effects. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Course Attributes: SE, SF, SS

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (HRPR 1001 (may be taken concurrently), PBHL 1101 (may be taken concurrently), 'Y' in PBH1, or 'Y' in CRHR01)

Environmental Science (CST) (ENVS)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ENVS 3000. Special Topics in Environmental Science. 3 to 4 Credit Hours.

This course is not offered every year.

Variable offerings on special topics that are not part of the standard roster of courses. Check with the Earth & Environmental Science office and/or web site (www.temple.edu/cst/env-sci) for details on Special Topics courses.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (EES 2001, BIOL 1111, BIOL 1911, CHEM 1032, CHEM 1042, CHEM 1952, or 'Y' in BIOW), (GUS 1051, BIOL 1111, BIOL 1911, CHEM 1032, CHEM 1042, CHEM 1952, or 'Y' in BIOW), and (EES 2021, BIOL 1111, BIOL 1911, CHEM 1032, CHEM 1042, CHEM 1952, or 'Y' in BIOW)

ENVS 3027. HAZWOPER Training and the Regulatory Environment. 3 Credit Hours.

This course is typically offered in Spring.

This course is designed to prepare students for working on hazardous waste sites and meet the required training for HAZWOPER certification. Topics include: toxicology, chemical reactivity, monitoring, personal protective equipment, site control, decontamination of equipment, and regulations related to waste sites. Hands-on activities are included based on typical scenarios that working professionals might encounter.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (EES 3021, EES 3025, or 'Y' in CRES01), (CHEM 1031 or 'Y' in CRCH01), (CHEM 1032 or 'Y' in CRCH02), (CHEM 1033 or 'Y' in CRCH03), and (CHEM 1034 or 'Y' in CRCH04)

ENVS 4082. Independent Study: Environmental Science. 1 to 3 Credit Hour.

This course is typically offered in Fall, Spring, Summer I and Summer II.

Duplicate Course: This course can only be counted one time for Environmental Science elective credit. Directed reading and research on a specific topic in Environmental Science agreed to by student and faculty member.

Repeatability: This course may be repeated for additional credit.

ENVS 4085. Internship: Environmental Science. 1 to 3 Credit Hour.

This course is typically offered in Fall, Spring, Summer I and Summer II.

Duplicate Course: This course can only be counted one time for Environmental Science elective credit. Student gains practical experience by working in a government agency, private industry, or non-governmental organization. NOTE: The student's advisor and a faculty sponsor in a related field arrange internship placement and evaluation.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Environmental Science.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: SF

Repeatability: This course may be repeated for additional credit.

ENVS 4198. Environmental Science Senior Seminar. 3 Credit Hours.

This course is typically offered in Spring.

This is the capstone class for the Environmental Sciences major. In this class students will move beyond textbooks and delve into the primary literature by reading, analyzing, and discussing a series of papers that have significantly influenced our understanding of environmental science. These papers will also serve as models for the major assignment of the semester: the preparation of a scientific review paper on a topic chosen by the student. NOTE: For B.S. students only. Senior standing and permission of instructor are required to register for this course.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: SF, WI

Repeatability: This course may not be repeated for additional credits.

Environmental Studies (CLA) (ENST)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ENST 0842. Sustainable Environments. 3 Credit Hours.

Humans are at a critical juncture in their relationship with the environment. Many of the global changes occurring in the atmosphere, climate, and oceans can be attributed to human activity. While the standard of living has increased for many people across the globe, the technological advancements that have made this possible endanger future generations because of their environmental impacts. Environmental toxins and air pollution are increasing, and fossil fuels and forests are being depleted at unsustainable rates. Now more than ever, the viability of human life depends on the scientific understanding of global environmental change, and on developing science-based policies to both protect the environment and promote human well-being in a just and sustainable manner. Course mission: enhance your capability to be environmentally informed consumers and citizens based on a sound understanding of the ecological, technological, economic, political, and ethical dimensions of environmental sustainability. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot receive credit for this course if they have successfully completed EES/Geology 0842, ENST 0942, or GUS 0842/0942.

Course Attributes: GS, SE, SF, SP, SS

Repeatability: This course may not be repeated for additional credits.

ENST 0942. Honors Sustainable Environments. 3 Credit Hours.

Humans are at a critical juncture in their relationship with the environment. Many of the global changes occurring in the atmosphere, climate, and oceans can be attributed to human activity. While the standard of living has increased for many people across the globe, the technological advancements that have made this possible endanger future generations because of their environmental impacts. Environmental toxins and air pollution are increasing, and fossil fuels and forests are being depleted at unsustainable rates. Now more than ever, the viability of human life depends on the scientific understanding of global environmental change, and on developing science-based policies to both protect the environment and promote human well-being in a just and sustainable manner. Course mission: enhance your capability to be environmentally informed consumers and citizens based on a sound understanding of the ecological, technological, economic, political, and ethical dimensions of environmental sustainability. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot receive credit for this course if they have successfully completed EES/Geology 0842, ENST 0842 or GUS 0842/0942.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GS, HO, SE, SF, SP, SS

Repeatability: This course may not be repeated for additional credits.

ENST 2001. Environment and Society. 3 Credit Hours.

This course emphasizes the human dimensions of the relationship between societies and their natural environments. Students will be introduced to those ecological principles that are necessary to understand cultural, social, political, and economic questions at a variety of geographic scales.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

ENST 2002. Physical Geography. 4 Credit Hours.

Physical Geography is a foundational course for Geography and Environmental Studies, providing a basic introduction to physical phenomena and processes. It is about the earth's spheres: the atmosphere, hydrosphere, biosphere, and lithosphere. We will spend about two-thirds of our time on the basics of earth-sun relations, the earth's atmosphere and oceans, climate and weather, and water resources. The other third of the course is principally about tectonic processes and geomorphology, as well as a culminating section on the earth's biomes (major geographic regions defined mainly by climate and characterized by distinct communities of flora and fauna). The main objectives are to broaden and deepen your understanding of our physical environment. Moreover, you should be able to apply what you've learned to critical analysis of various timely and important issues - such as climate change, vulnerability to environmental hazards, and approaches to mitigating and adapting to environmental change. Though this course focuses on the physical environment, the geographic approach is very much about the relationships between humans and their environments, between nature and society. We will not view the physical environment in isolation from human dimensions and interactions.

Course Attributes: SE, SF, SS

Repeatability: This course may not be repeated for additional credits.

ENST 2017. Population Geography. 3 Credit Hours.

This course provides an introduction to human populations with respect to size, composition and spatial distribution, and the issues surrounding the geographic distribution of populations at the world, regional, and local level. Emphasis will be placed on the role of population processes (mortality, fertility, migration), and population structures (age, gender, ethnicity), on economic, social, technological and political development and changes in different parts of the world. Topics covered in this course include: population policies, theories of population change, international and domestic migration flows, cultural and economic influences on population processes, urbanization, and population related issues such as food insecurity, political conflict, poverty, health and disease, and environmental degradation. Lectures and exercises will also familiarize students to publicly available population data and introduce basic analytical techniques used to measure fertility, mortality and migration.

Repeatability: This course may not be repeated for additional credits.

ENST 2022. Gender, Race, Class, and the City. 3 Credit Hours.

This course will focus on the ways that race, class, and gender significantly shape US cities and urban life. The course will explore how urban spaces reflect and perpetuate different relations of power, inequity, and identity. How do multiple and contradictory identities shape one's experience of the city? How are economic, social, and political processes interacting with public policy (or the lack thereof) to determine how resources and power are unequally distributed? How are contemporary urban sustainability initiatives imbued with racial, gender, and class politics? First, we explore critical geographic frameworks for urban analysis that help to explain the social and spatial organization of US cities. We will develop a framework for urban analysis that integrates race, class, and gender, and draws upon the geographic concepts of place and scale. Second, we will use qualitative methods to apply our integrated framework to contemporary metropolitan processes and problems in the Philadelphia area. Key topics that we will address include: everyday experiences of urban life in public and private spaces; environmental (in)justice; neoliberal urban governance; urban social movements; and urban policy and planning. NOTE: The following course numbers are cross-listed: GUS 2022, ENST 2022, or GSWS 2022; students may receive credit for only one of these instances.

Repeatability: This course may not be repeated for additional credits.

ENST 2025. Environmental Law and Regulation. 3 Credit Hours.

This course analyzes how our society protects (or fails to protect) the environment through law and regulation. Students will examine and compare several U.S. environmental laws that are designed to redress environmental damage and to protect the environment. In doing so, they will analyze the relative costs and benefits of various forms of environmental regulation within the context of the American political, administrative, and legal systems. The course focuses on U.S. environmental law, but will also consider the increasingly important field of international environmental law and agreements. Duplicate credit warning: This course was previously taught under ENST 3025. Students who have earned credit under the prior number will not earn additional credit if the course is repeated.

Course Attributes: SF, SP, SS

Repeatability: This course may not be repeated for additional credits.

ENST 2051. The Urban Environment. 3 Credit Hours.

This course examines the interactions between theory, policy, and the urban environment. Students have the opportunity to study the urban environment not only as a physical landscape or natural ecosystem, but also as a constructed landscape shaped by local, regional and global social, economic and political processes. The course addresses issues that continue to challenge urban society, including environmental injustice and racism, degradation of local environmental quality, the impact of local-global relationships on community-scale environments and the commodification of nature.

Course Attributes: SE, SF, SP, SS

Repeatability: This course may not be repeated for additional credits.

ENST 2096. Problems of Environmental Quality. 3 Credit Hours.

Specific environmental problems, especially in the Philadelphia area. Students acting as research teams seek better understanding of such problems and practical solutions to them. Duplicate credit warning: This course was previously taught under GUS and ENST 4096. Students who have earned credit under the prior number will not earn additional credit if the course is repeated.

Course Attributes: SF, WI

Repeatability: This course may not be repeated for additional credits.

ENST 2097. Research Design in Environmental Studies. 3 Credit Hours.

This course is an introductory survey of research design in Environmental Studies. It is designed to allow students to explore what it means to conduct social science research, particularly around issues of sustainability. Students have the opportunity to learn how to research using scholarly articles, write a literature review, and collect and analyze primary and secondary data. Methods covered include case study research, interview design and technique, analysis of census data, and tools commonly used in community and participatory action research. Individual assignments will focus on researching sustainability. This is a writing intensive course and will require extensive writing and revision of your assignments in a semester long assignment sequence.

Course Attributes: SF, WI

Repeatability: This course may not be repeated for additional credits.

ENST 2157. Environmental Ethics. 3 Credit Hours.

A study of the ethical dimensions of several contemporary environmental controversies. The course examines the major theoretical approaches to environmental ethics, including human-centered (anthropocentric), animal-centered (zoocentric), and nature-centered (biocentric and ecocentric) value systems, as well as the most important critiques of these ethical approaches. The course will also address specific issues such as biodiversity and wilderness preservation; human use of animals as food, entertainment, and research subjects; environmental racism and toxic dumping; sustainable development, population and consumption. NOTE: Students will receive credit only one time for any of the following course numbers: ENST 2157, ENST 2957, PHIL 2157, or PHIL 2957.

Course Attributes: SF, SS

Repeatability: This course may not be repeated for additional credits.

ENST 2957. Honors Environmental Ethics. 3 Credit Hours.

A study of the ethical dimensions of several contemporary environmental controversies. The course examines the major theoretical approaches to environmental ethics, including human-centered (anthropocentric), animal-centered (zoocentric), and nature-centered (biocentric and ecocentric) value systems, as well as the most important critiques of these ethical approaches. The course will also address specific issues such as biodiversity and wilderness preservation; human use of animals as food, entertainment, and research subjects; environmental racism and toxic dumping; sustainable development, population and consumption.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, SF, SS

Repeatability: This course may not be repeated for additional credits.

ENST 3000. Special Topics in Environmental Studies. 3 Credit Hours.

Variable offerings on special topics that are not part of the standard roster of courses. Check with the Environmental Studies office and/or web site (www.temple.edu/cla/es) for details on Special Topics courses.

Course Attributes: SF

Repeatability: This course may be repeated for additional credit.

ENST 3001. Earth Ethics. 3 Credit Hours.

What ethical relationship do human beings have to the natural world? What cultural and religious values, conceptions, and assumptions have shaped human interactions with the environment? Through also examining practical issues such as sustainability, technology, and urban living, students will assess individual life-styles and alternative visions of the good life on planet Earth. Note: This course is cross-listed with Religion 3001 and Asian Studies 3001. Students may only receive credit once for these courses: ASST 3001, ASST 3904, ENST 3001, ENST 3904, REL 3001, or REL 3904.

Course Attributes: SF, SS

Repeatability: This course may not be repeated for additional credits.

ENST 3004. Geography of Natural Resources. 3 Credit Hours.

The material goods you use on a daily basis (e.g. food, phones, furniture) are linked to the production of natural resources. This course helps us to understand how our everyday consumption patterns are connected to resource production and distribution on a global scale and what the social, environmental, and economic impacts of natural resource production are. To explore the complicated intersection of resource management, economics, and development, we examine the literature on natural resource development, allocation, management, and geopolitics as they relate to economic systems and "development." We draw on case studies that include production for the global market, as well as local subsistence systems. Through these cases, we examine the geography of resource flows, from the sites of extraction to the sites of consumption. We consider the role of technology and capital investment in the production of resources, property institutions and regulatory regimes, commodity chains, and sustainability concerns associated with resource production. The production of and competition for the control of key natural resources, by corporations, societies, and states, are critical processes in constructing the global economy. These processes materially transform the conditions of societies, as well as, contribute to the shaping of those societies, politically and economically.

Course Attributes: SE, SI, SP, SS

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ENST 2001.

ENST 3015. The Geographic Basis of Land Use Planning. 3 Credit Hours.

An examination of the forces that influence land use planning in and around American metropolitan regions. Considers economic perspectives (land values), public interest perspectives (zoning subdivision, housing and building codes, redevelopment and renewal programs, etc.), and social perspectives of land use. Also examines separately housing, commercial locations, and industrial development. Duplicate credit warning: This course was previously taught under GUS and ENST 4015. Students who have earned credit under the prior number(s) will not earn additional credit if the course is repeated.

Repeatability: This course may not be repeated for additional credits.

ENST 3023. Police, Prisons, and Pollution. 3 Credit Hours.

In 2001, a group of farmworkers, environmental justice activists, and anti-prison organizers in California held a conference called "Joining Forces: Environmental Justice and the Fight against Prison Expansion." The goal was to interrogate prisons as forms of environmental racism and injustice and to build coalitions between the anti-prison and environmental justice movements. This course takes as a starting point an insight made by a group of youth participants at that conference: that the greatest threats to their communities constituted "three Ps," police, prisons, and pollution. We will explore critical texts and organizing surrounding police, prisons, and pollution. How do struggles for environmental justice intersect with organizing against police and prisons? How are racial and class disparities heightened through overlapping geographies of policing, incarceration, and environmental pollution? How do policing and imprisonment operate as environmental toxins themselves, much like pesticides and greenhouse gas emissions? As a major component of the course, students will work on group projects examining the intersections of policing, incarceration, and pollution.

Course Attributes: SE, SF, SS

Repeatability: This course may not be repeated for additional credits.

ENST 3051. Environmental Policy Issues. 3 Credit Hours.

How are environmental policies formulated and implemented in the U.S.? Topics include the role of citizen participation in decision-making, the place of environmental impact assessment, environmental justice and equity, intergovernmental relations, and environmental obligations of the U.S. toward less developed countries.

Course Attributes: SF, SS

Repeatability: This course may not be repeated for additional credits.

ENST 3052. Environmental Problems in Asia. 3 Credit Hours.

Japan is used as an introduction and model for examining environmental issues in several East and Southeast Asian countries. Emphasis is on deforestation, river basin development, urban planning, ecotourism, and the role of non-governmental organizations. Note: This course is cross-listed with Geography and Urban Studies 3052 and Asian Studies 3052. Students may only receive credit once for these courses: ASST 3052, ENST 3052, or GUS 3052.

Course Attributes: SE, SF, SP, SS

Repeatability: This course may not be repeated for additional credits.

ENST 3053. Climatology. 3 Credit Hours.

In this course, we study global climate patterns and the underlying processes that shape them. Among the specific topics we examine are: global distribution of individual climate elements, upper-atmospheric waves and jet streams, use of web-based maps and data, construction of climate models, U.S. climate regions, and major global climatic regions. In the course's final weeks, we consider historic climates, climate change mechanisms, and forecasted future climates.

Course Attributes: SE, SI

Repeatability: This course may not be repeated for additional credits.

ENST 3054. Energy, Resources and Society. 3 Credit Hours.

Vital nonrenewable resources are identified and their global and North American distribution, character, and utilization studied. Special attention to energy sources now in short supply and to benign renewable sources for future needs. NOTE: This course was previously titled "Energy, Resources, and Conservation" and students can receive credit only once for GUS 3054 or ENST 3054.

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

ENST 3055. Environmental Hazards and Disasters. 3 Credit Hours.

This course provides a synthesis of the social and natural dimensions of disasters. Students become familiar with the concept that disasters emerge when the specific characteristics of hazards (e.g. volcanoes, droughts, floods, tsunamis) intersect with social vulnerability (e.g. class, race, gender). Case studies from around the world are used to elaborate and explore this concept. Duplicate credit warning: This course was previously taught under GUS and ENST 4051 and was previously titled "Geography of Hazards." Students who have earned credit under the prior number(s)/title will not earn additional credit if the course is repeated.

Repeatability: This course may not be repeated for additional credits.

ENST 3056. Political Ecology. 3 Credit Hours.

This course addresses the broad themes of political ecology as an academic discipline as well as a set of theoretical and methodological tools. Historically political ecology has focused on the rural developing world, but more recent work has branched out into environmental justice and resource use in industrialized societies. The course covers the concepts that have distinguished political ecology from other types of analysis like cultural and human ecology. It also introduces students to the construction of theory including a consideration of space, scale, justice, feminism, property, and nature. Finally, the course presents students with diverse case studies that may include topics like resource use, mining, bio-prospecting, forestry, conservation, fisheries, "sustainable" development, and eco-tourism. Duplicate credit warning: This course was previously taught under GUS and ENST 4056. Students who have earned credit under the prior number(s) will not earn additional credit if the course is repeated.

Course Attributes: SE, SI, SS

Repeatability: This course may not be repeated for additional credits.

ENST 3057. Sustainable Cities. 3 Credit Hours.

This course introduces the concept of urban sustainability and explores environmental problems linked to urbanization, drawing on historical analysis, social theory, landscape ecology, and city planning/design practice. Can we make cities sustainable places to live? If so, how? The goal of this course is to provide students with an opportunity to learn about the major environmental challenges facing cities in the developed and developing world and to learn about innovative solutions that cities are adopting to address them. We will also explore how the political, social, and environmental context affects a city's ability to implement sustainable policies. The course will cover topics such as sustainable city strategies, ecological footprints, urban metabolism, mega-cities, urban ecology, cities and climate change adaptation and mitigation, water management, urban gardening/farming, measuring sustainability, planning strategies, smart growth, carbon neutral cities, metropolitan governance, green buildings, environmental justice, green infrastructure, and green investment strategies, etc.

Course Attributes: SE, SF, SS

Repeatability: This course may not be repeated for additional credits.

ENST 3058. Environment and Development. 3 Credit Hours.

Is capitalism at the heart of environmental change? What does it mean to divide nations into "developed" and "developing" countries? Whose definition of progress guides policy promoting sustainable urbanization and development? How do we create parks and green infrastructure without displacing people? This course will contextualize these and related questions to understand and think critically about environment and development. By the end of the semester, you will be able to speak, read and write with fluency about contemporary nature-society relations using concrete examples drawn from historical and contemporary contexts. This course is cross-listed with GUS 3058. Duplicate Credit Warning: This course was previously offered as ENST 3097. Students may receive credit for one of the following course numbers: ENST 3097, GUS 3097, ENST 3058 or GUS 3058.

Course Attributes: SE, SF, SP

Repeatability: This course may not be repeated for additional credits.

ENST 3061. Fundamentals of Cartography. 3 Credit Hours.

This course is designed to introduce students to cartography and computer mapping. Through hands-on exercises, students will manipulate data, compare map projections, design, execute, and reproduce small-scale thematic maps suitable for publication using computer software. A final project involves the production of maps in color. NOTE: No prior computer knowledge is necessary.

Repeatability: This course may not be repeated for additional credits.

ENST 3062. Fundamentals of Geographic Information Systems. 3 Credit Hours.

This course teaches the theory and practical use of Geographic Information Systems (GIS). Major components of the course include vector and raster spatial data models and operations, including vector overlay and raster map algebra. At the end of the course students are expected to have an understanding of elementary GIS theory, working knowledge of a GIS software package, and the ability to develop GIS-based solutions to geographic modeling and analysis tasks. Note that students who take GUS 3062 will not receive duplicate credit if they register for ENST 3062.

Repeatability: This course may not be repeated for additional credits.

ENST 3063. Environmental Remote Sensing. 3 Credit Hours.

This course will teach the basic principles of environmental remote sensing using aerial photography and satellite imagery. Topics covered include the mechanics of aerial photography and satellite remote sensing systems, photointerpretation, image rectification, and image processing and classification. Emphasis will be on urban and environmental applications.

Course Attributes: SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ENST 3062 or GUS 3062)

ENST 3064. Qualitative Methods. 3 Credit Hours.

This class is designed to expose students to the purpose, scope and procedures of qualitative research, applied in different disciplines but especially in environmental studies, geography, and urban planning. It provides an opportunity for students to create qualitative research design schemes, and critically analyze research using these methods. Note: This course is equivalent to GUS 3064; students may receive credit for either ENST 3064 or GUS 3064.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GUS 2197 or ENST 2097)

ENST 3065. Census Analysis with GIS. 3 Credit Hours.

Introduction to analysis with Census data products for the US, including Decennial Census and American Community Survey. Methods for analyzing segregation, environmental justice, migration and mobility, commuting trends, etc. Students will learn how to combine Census data with data from other sources using incommensurate geographies. Heavy emphasis on open source tools. Note: Formerly offered as GUS/ENST 4068. Students who have received credit for GUS 4068, ENST 4068 or GUS 3065 will not receive additional credits for this course.

Repeatability: This course may not be repeated for additional credits.

ENST 3067. GIS and Location Analysis. 3 Credit Hours.

This course examines the concepts and techniques of location analysis - how to 1) describe the spatial arrangements of features on the earth's surface and 2) prescribe the best location or spatial arrangement of features for a particular activity - for economic and social service applications. The course introduces concepts in Geographic Information Systems (GIS) and spatial statistics to address issues of location. NOTE: Students who have already earned credit for GUS 3067 will not earn additional credit for ENST 3067.

Repeatability: This course may not be repeated for additional credits.

ENST 3068. Environmental Impact Assessment. 3 Credit Hours.

This course addresses the methods of environmental impact assessment (EIA). During the course of your environmental careers, most of you will be expected to conduct, reference, evaluate, or otherwise incorporate EIA into your work. Most EIA's incorporate a diverse set of research methods - and an understanding of a wide-ranging set of research methodologies, and when and how to deploy them - is a central objective for this course.

Repeatability: This course may not be repeated for additional credits.

ENST 3069. GIS for Health Data Analysis. 3 Credit Hours.

Geographic Information Systems (GIS) has emerged as an essential tool for health researchers and practitioners. This course provides an introduction to the most common geographic methods utilized in health research and spatial epidemiology for mapping and analyzing health disparities, disease risk factors, health services and geographic variation in health outcomes and disease. Through lecture and laboratory exercises students will learn how to create and edit spatial data, create disease maps, develop neighborhood-based measures, conduct geographic cluster detection and point pattern analysis, map geographic health disparities, measure access to health services, and critically assess potential study bias introduced from missing geographic data or positional accuracy. Selected case studies will be presented in order to highlight methods and techniques and hands-on experience will be gained through laboratory exercises and real-world applications. Guest speakers will be invited to share their real-world examples of GIS in health research and practice.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GUS 3161, ENST 3161, SOC 3201, STAT 2103, PBHL 2219, CJ 2602, or ANTH 3771)

ENST 3071. Health Geography. 3 Credit Hours.

Health geography applies concepts and methods from the discipline of geography to study medical and health related events and topics. Health geography has a close disciplinary tie with epidemiology, biostatistics, medical ecology and medical anthropology, but it is differentiated by its focus on the spatial distributions of health/medical related events. By focusing on geographic scale and the location of health events we can more accurately account for data variability and provide a more accurate representation of a population's health. Throughout the course, we will examine numerous examples of how geographic scale and measurement can influence study results or how health resources or events appear to be distributed. The class will provide a broad introduction to medical geography touching on the topics of disease ecology, geographical information systems for public health, disparities in health and healthcare, and various methods and data sources for analyzing health/medical data. Duplicate credit warning: This course was previously taught under ENST and GUS 4071. Students who have earned credit under the prior number(s) will not earn additional credit if the course is repeated. NOTE: This course was previously titled "Medical Geography." Students who completed the course under the prior title will not earn additional credit if the course is repeated.

Repeatability: This course may not be repeated for additional credits.

ENST 3085. Internship in Environmental Studies. 3 Credit Hours.

This course is offered in both fall and spring semesters to accompany on-the-job training with local consulting firms, planning agencies, private companies, non-profits, and various state, local and federal agencies of government, mostly but not exclusively in the Philadelphia metro area. Students will apply the knowledge and skills they have acquired in an array of both natural and social science courses to address some of the major environmental challenges on local, regional, and international scales. Students need to arrange their own positions, usually after consulting with the department's internship coordinator. The search for a placement should start several months in advance of the semester or summer session when the internship will take place. The course is available to GUS/ES majors only. NOTE: The student's advisor and/or Environmental Studies Internship Coordinator arrange internship placement and evaluation. Duplicate credit warning: This course was previously taught under GUS 4085/ENST 4085. Students who have earned credit under the prior number(s) will not earn additional credit if the course is repeated.

Repeatability: This course may not be repeated for additional credits.

ENST 3152. U.S. Environmental Policy. 3 Credit Hours.

An analytical examination of the development and execution of governmental policies in such areas as air and water pollution control, control of atomic energy, and planning of space exploration program.

Course Attributes: SF, SS

Repeatability: This course may not be repeated for additional credits.

ENST 3161. Spatial Statistics. 3 Credit Hours.

This course provides an introduction to statistical analysis with an emphasis on urban applications. The course covers basic statistical principles of sampling, probability, and tests of significance, measures of association; ordinary least squares regression; factor, principal component and cluster analysis and an introduction to spatial applications of these tools. The course is focused on the practical application of these techniques through exposure to the rationale and principles underpinning them. Students will attend lectures and complete problem sets that provide practical experience in the application of the theoretical concepts and methodologies. Note: This course is equivalent to GUS 3161; students may receive credit for either ENST 3161 or GUS 3161.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 0701, MATH 0702, MATH 1021, MATH 1022, MATH 1041, MATH 1941, 'Y' in MC3, any course with attribute "QA", any course with attribute "QB", 'Y' in MC3A, 'Y' in MC3S, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC6A, 'Y' in MATW, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

ENST 3170. Methods in Archaeology. 3 Credit Hours.

A series of practical, topical courses which deal with aspects of archaeological fieldwork and laboratory analysis. The topic or focus of the course varies by semester and includes: field methods; ceramic analysis; lithic analysis; soils and stratigraphy.

Repeatability: This course may be repeated for additional credit.

ENST 3175. Heritage Management in Archaeology. 3 Credit Hours.

The United States and other governments of the world have legal mandates to manage cultural resources on behalf of the public. This course focuses on the archaeological component of cultural resources management in the United States and its linkage with environmental and developmental planning. Participants are given a working knowledge of how the system works, and how to work within it as a professional through a series of readings, classroom discussions, and hands-on exercises. Topic coverage includes: relevant legislation; the phased approach to archaeological and historical research; state and federal review procedures; proposal writing; interacting with clients, native peoples, and the public; professional ethics and standards. The nature of heritage management in other countries is considered for comparative purposes and as a way of illuminating the historical, socio-economic, and legal factors that have shaped the practice in the United States. NOTE: This course helps to satisfy topical requirements in the Anthropology major and the Environmental Studies major.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

ENST 3189. Field Session in Archaeology. 3 Credit Hours.

Techniques and concepts of field archaeology. Students will be expected to spend the greatest part of the session in the field during the excavation of prehistoric and historic sites.

Repeatability: This course may be repeated for additional credit.

ENST 3214. North American Environmental History. 3 Credit Hours.

This course examines the interactions between human societies and the natural world in North America. That relationship is complex: the environment both reflects people's influences and affects human history. Through lectures, readings, and discussion, participants in this course will examine this reciprocal relationship. Issues to be discussed in the course include Native American management of the environment; the effects of the European ecological invasion; resource exploitation in the industrial era; the foundations of the preservationist and conservationist movements at the beginning of the 20th century; the evolution of 20th century environmentalism; and the historical context of current environmental problems.

Course Attributes: SF, SS

Repeatability: This course may not be repeated for additional credits.

ENST 3221. Land System Science. 3 Credit Hours.

This course will provide scientific and theoretical foundations and practical applications of land system science. The course will include a description of the main theories and conceptual frameworks used to understand complex interactions between human decisions and ecological processes that derive into changes in the land system. The course also explores the sustainability implications of such changes for biodiversity conservation and people's wellbeing across different locations and scales. Students will become familiar with available technologies for monitoring, modeling and predicting land system change. The course will also draw on concepts and techniques from landscape ecology, land system modeling and scenario building to teach students how to assess social and ecological consequences of land system change and to inform land use decisions. This course is cross-listed with GUS 3221.

Repeatability: This course may not be repeated for additional credits.

ENST 3265. International Environmental Policy. 3 Credit Hours.

International negotiations and agreements on environmental problems, and comparisons of domestic environmental policymaking among selected countries. Special attention to negotiations on atmospheric and oceanic policies, international regulation of nuclear materials, and environmental aspects of international trade agreements. NOTE: Students will receive credit only once for either POLS 3265 or ENST 3265.

Course Attributes: SE, SF, SS

Repeatability: This course may not be repeated for additional credits.

ENST 3307. Transportation and Culture. 3 Credit Hours.

Students will learn to approach the modern geography of transportative possibility from a critical standpoint. Rather than accepting this contemporary geography as being the outcome of supposedly "superior" transport technologies' rendering marginalized technologies obsolete, students will examine how processes of cultural, political, and environmental struggle have shaped, opened up, and in some cases limited the modern array of possibilities for human mobility. Waterborne, animal-based, and human-powered modes of transportation will receive special attention, as will ongoing debates and struggles over automobile planning and mass transit. The history of transportation will be presented as necessarily entangled with parallel histories of public protest, working-class knowledge, emergency logistics, human-animal relations, guerilla warfare, unrealized technologies, and political oppression. The course readings will look at many parts of the world: the United States, Canada, Southeast Asia, North Africa, the Middle East, China, Western Europe, the Caribbean, and Polynesia.

Course Attributes: SF, SS

Repeatability: This course may not be repeated for additional credits.

ENST 3314. Food Studies: A Geographical Perspective. 3 Credit Hours.

This course introduces students to key issues in food studies from a geographical and environmental perspective. The course includes an overview of the agricultural transitions, and examines issues of food security, access and control, ultimately focusing attention on the question of how to produce more just food systems. A major goal of this course is to give students a basic foundation from which to understand and interpret food systems as well as to familiarize students with today's major issues in research on food. Note: This course is equivalent to GUS 3314; students may receive credit for either ENST 3314 or GUS 3314.

Course Attributes: SF, SS

Repeatability: This course may not be repeated for additional credits.

ENST 3511. Sociology of the Environment. 3 Credit Hours.

In the first half of the course, we will focus on the interaction among four components: population size, social organization, environmental conditions and available technology. We will consider issues such as the relationships among the technology of farming, the volume of agricultural production and the availability of labor for economic development. We will also learn about "input-output" models focusing on the intensity of resource use as well as problems of waste management. In the second half of the course, we will concentrate on issues of social organization. What kinds of political arrangements do we see for the management of waste? How does the transfer of natural resources from resource-rich but economically underdeveloped countries to the United States and other industrial societies affect the social, economic and political arrangements of both groups of countries? Finally, we will address the question of whether the social will can be organized in such a way as to reduce the pressure on the environment and remaining natural resources.

Repeatability: This course may not be repeated for additional credits.

ENST 3596. Energy, Ecology, and Economy. 3 Credit Hours.

After surveying the elements of energy and ecology, and reviewing the basics of economics, this course investigates the interaction of the three. Each of the major nonrenewable and renewable energy sources is examined in light of its "eco-feasibility." The potential of energy conservation is examined, and the need for energy/environmental/economic (3-E) policy is debated. Some speculations about future 3-E scenarios are offered, as the U.S. and the rest of the world face their energy, ecological, and economic problems.

Course Attributes: SE, SF, SP, WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101 or ECON 1901) and (ECON 1102 or ECON 1902)

ENST 3900. Honors Special Topics. 3 Credit Hours.

Variable Honors offerings on special topics that are not part of the standard roster of courses. Check with the Environmental Studies office and/or web site (www.temple.edu/cla/es) for details on Special Topics courses.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

ENST 3904. Honors Earth Ethics. 3 Credit Hours.

What is, or should be, our relation to the natural world? Especially since we are presently living in a modern urban environment, have we perhaps outgrown nature? Is it something we have mastered? Is it primarily a luxury of sorts that we can go to for periodic enjoyment or relaxation? On the other hand, why do we seem to be in a burgeoning environmental crisis? Is it just greed? Too many people? Insufficient technology? How did we get to where we are? Or more immediately--and perhaps deeply--what fundamental beliefs, attitudes, and values shape our everyday actions, how we perceive and use (or misuse) the earth? What creative alternatives can we find, and how can we apply them? In addressing these kinds of questions we will explore both Western and Asian ways of conceiving and interacting with the natural world, past and present. Our approach will also be interdisciplinary, including materials from art, film and literature, as well a range of academic disciplines. NOTE: This is an University Honors course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, SF, SS

Repeatability: This course may not be repeated for additional credits.

ENST 4000. Special Topics in Environmental Studies. 3 Credit Hours.

Seminars on special topics vary according to the instructor. Check the course schedule for specific seminar topics.

Repeatability: This course may be repeated for additional credit.

ENST 4017. Health and Environment Seminar. 3 Credit Hours.

This course addresses the relationship between community-level characteristics, such as neighborhood socioeconomic disadvantage, with health outcomes, with an emphasis on health behaviors such as substance use, exercise, and healthy eating. Access to resources such as health services and nutritious food will be examined, as will exposure to harmful or risky environment conditions that can promote disease. A methodological focus will address how environmental influence on health is analyzed, as well as how individual-level characteristics such as age, sex, and race/ethnicity may moderate such influences. The role of community level factors in health disparities will also be examined. NOTE: Students can receive credit only once for either: ENST 4017, GUS 4017, ENST 4917, or GUS 4917.

Course Attributes: SE, SF, SS

Repeatability: This course may not be repeated for additional credits.

ENST 4061. Cartographic Production. 3 Credit Hours.

A course concerned with aspects of storage, retrieval, and display of information within geographic information systems. Emphasis will be placed on computer mapping. NOTE: This course is cross-listed with GUS 4061; students will only receive credit for one course from GUS 4061 and ENST 4061.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ENST 3061 or GUS 3061)

ENST 4064. Web Mapping and GIS. 3 Credit Hours.

In this course, students will explore theoretical and practical concepts of Web Mapping (GIS and spatial data visualization on the Internet). From a theoretical perspective they will study advantages and techniques for publishing, visualizing and accessing maps and data on the Internet. This entails examining architectures of Web GIS/Web mapping systems, markup languages (e.g. HTML, XML, SVG, and KML), scripting languages, screen cartography, data sharing and geoportals, as well as social and critical perspectives toward web mapping. From a practical perspective they will learn to develop Web mapping applications including static and interactive platforms. They will also learn and work with some well-known open source software and libraries.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GUS 3062 or ENST 3062)

ENST 4065. Urban Geographic Information Systems. 3 Credit Hours.

The purpose of this course is to build on the basic principles of the introductory GIS course to demonstrate how GIS may be applied to the analysis of physical and human systems. Topics of the course include vector and raster data integration; address matching, geocoding, and network analysis; terrain and hydrological analysis; and interpolation of environmental and population data. At the end of the course the student is expected to grasp advanced GIS analysis and modeling concepts.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GUS 3062 or ENST 3062)

ENST 4066. Environmental GIS. 3 Credit Hours.

Geographic Information Systems are widely used to investigate environmental processes and to develop solutions to environmental issues. This course will build upon concepts introduced in Fundamentals of GIS to investigate how the techniques, data, and interpretations from GIS analysis are applied across a variety of environmental fields. Topics to be covered include natural hazard vulnerabilities, global climate change, renewable energy potential, environmental health, and conservation.

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GUS 3062 or ENST 3062)

ENST 4068. Census Analysis with GIS. 3 Credit Hours.

Introduction to analysis with Census data products for the US, including Decennial Census and American Community Survey. Methods for analyzing segregation, environmental justice, migration and mobility, commuting trends, etc. Students will learn how to combine Census data with data from other sources using incommensurate geographies. Heavy emphasis on open source tools.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GUS 3062 or ENST 3062)

ENST 4072. Advanced Remote Sensing. 3 Credit Hours.

This hands-on course will provide skills and knowledge for the effective and efficient processing and analysis of satellite data for advanced applications with emphasis in the application of remote sensing for detecting and monitoring social and environmental changes. The course will include a semester-long project where students will apply the concepts and procedures learned to their own research or a particular topic of their interest.

Course Attributes: SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GUS 3062 or ENST 3062) and (GUS 3063 or ENST 3063)

ENST 4073. Geovisualization. 3 Credit Hours.

Maps can be powerful devices for communication, but also tools for exploration of relationships among social and physical processes manifesting in space. This computer-intensive course will focus on this dual purpose of maps as tools for visual communication and visual thinking. You will create data-driven products that combine geographic and statistical visualizations for static, interactive, and animated display. Previous experience with a programming language will be helpful. A previous course in cartography is recommended but not required. Heavy emphasis on open source tools.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GUS 3161 or ENST 3161)

ENST 4082. Independent Study: Environmental Studies. 1 to 3 Credit Hour.

Duplicate Course: This course can only be counted one time for Environmental Studies elective credit. Directed reading and research on a specific topic in Environmental Studies agreed to by student and faculty member.

Repeatability: This course may be repeated for additional credit.

ENST 4117. Seminar in Environmental Archaeology. 3 Credit Hours.

This course introduces the student to the techniques and disciplines used in conjunction with archaeology to understand the environmental context and paleo-ecology of prehistoric cultures, as well as the nature of the archaeological record itself. Included in this survey are geology, soil and sediment analysis, geomorphology, palynology, ethnobotany and general floral analysis, phytolith analysis, zooarchaeology, and the analysis of blood and other residues found on artifacts. The range of contributions possible from interdisciplinary research will be explored in addition to how to design such research, how to communicate with specialists in other fields, and how to use existing sources of data to solve archaeological problems.

Repeatability: This course may not be repeated for additional credits.

ENST 4198. Senior Research Seminar. 3 Credit Hours.

Students engage in research projects, either as individuals or part of a team. Seminar meetings are devoted to analysis of a small set of readings, common discussion of research issues, and preparation for life beyond the baccalaureate. NOTE: Open only to Environmental Studies students.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Environmental Studies.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ENST 2097.

ENST 4917. Honors Health and Environment Seminar. 3 Credit Hours.

This course addresses the relationship between community-level characteristics, such as neighborhood socioeconomic disadvantage, with health outcomes, with an emphasis on health behaviors such as substance use, exercise, and healthy eating. Access to resources such as health services and nutritious food will be examined, as will exposure to harmful or risky environment conditions that can promote disease. A methodological focus will address how environmental influence on health is analyzed, as well as how individual-level characteristics such as age, sex, and race/ethnicity. The role of community level factors in health disparities will also be examined. NOTE: Students can receive credit only once for either: ENST 4017, GUS 4017, ENST 4917, or GUS 4917.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: UHONORS, UHONORSTR.

Course Attributes: HO, SE, SF, SS

Repeatability: This course may not be repeated for additional credits.

Epidemiology and Biostatistics (EPBI)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

EPBI 2219. Biostatistics and Public Health. 3 Credit Hours.

This course is designed to provide students with a solid background in applied biostatistics in the field of public health. Specifically, the course includes an introduction to the application of biostatistics and a discussion of key statistical tests. Appropriate techniques to measure the extent of disease, the development of disease, and comparisons between groups in terms of the extent and development of disease are discussed. Techniques for summarizing data collected in samples are presented along with limited discussion of probability theory. Procedures for estimation and hypothesis testing are presented for means, for proportions, and for comparisons of means and proportions in two or more groups. Multivariable statistical methods are introduced but not covered extensively in this undergraduate course. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

EPBI 2301. Public Health Beyond Borders. 3 Credit Hours.

Public Health Beyond Borders is a course that will introduce you to the world of disease detectives to solve public health challenges in global (i.e., global and local) communities. You will learn about conducting disease investigations to support public health actions relevant to affected populations. You will discover what it takes to become a field epidemiologist through hands-on activities focused on promoting health and preventing disease in diverse populations across the globe.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

EPBI 2361. Epidemiology 360: Determinants, Disease and Health-related Outcomes. 3 Credit Hours.

This course will provide introductions to the major causes of morbidity and mortality in the US and key determinants of those diseases from an epidemiologic perspective. The course will familiarize students with the major sources of data, the basic methods for estimating burden of diseases or prevalence of exposures, the key risk factors for diseases or outcomes of determinants, and the strengths and limitations of surveillance systems and data collection methods, as well as public health efforts to address these issues. This class will encourage students to decide for themselves what the most pressing health issues facing populations today are and think critically about initiatives that are intended to address those issues.

Repeatability: This course may not be repeated for additional credits.

EPBI 3101. Introduction to Epidemiology. 3 Credit Hours.

This course explores the application of epidemiology practices in public health including using and interpreting data, calculating measures of health status, and identifying various research study designs used in epidemiologic studies. Additionally, the course will apply the steps in epidemiological disease investigation in order to become familiar with the methodology used in studying an epidemic outbreak. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Public Health.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

EPBI 3102. Introduction to Research Methods. 3 Credit Hours.

This course will cover the basic concepts of public health research, including study designs, human subjects protection, quantitative and qualitative research techniques, and data collection. These concepts will be applied to public health settings and topics. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Public Health.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

EPBI 3203. Applied Survey Methods. 3 Credit Hours.

This course addresses theoretical and practical aspects of conducting survey research in human populations. We will discuss various types of self-report data, including questions to assess knowledge, attitudes, behaviors, and perceived health and well-being. Design issues include wording of items and response scales, sampling, and respondent and interviewer/staff burden. Implementation issues include methods of administration, interviewer training, and participant recruitment. The primary focuses of this course are observational study designs using probability and non-probability sampling.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Public Health.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (EPBI 3101 or 'Y' in CREP02) and (EPBI 2219 or 'Y' in CREP01)

EPBI 3205. Introduction to Statistical Computing. 3 Credit Hours.

This course is designed to provide students with a solid foundation in statistical computing using SAS and R programming software, which are standard analytic packages in research, business, and public health practice. The course includes an introduction to data management principles and data documentation followed by a series of SAS and R modules. These modules cover syntax and logic for writing SAS and R code to: manipulate datasets, including but not limited to data cleaning and recoding continuous and categorical variables; conduct descriptive analyses; and interpret output for statistical tests for measures of disease frequencies.

Repeatability: This course may not be repeated for additional credits.

EPBI 3382. Independent Study in Public Health. 1 to 6 Credit Hour.

Students in this course pursue supervised independent projects on issues related to public health. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better. NOTE: Registration must be preapproved by faculty before registration.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Public Health.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

Film and Media Arts (FMA)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

FMA 0843. Race and Ethnicity in the Cinematic Arts. 3 Credit Hours.

Movies, cinematic arts, episodic narrative, and media arts have played a central role in how we understand diverse racial and ethnic identities. The course will study Hollywood as well as more recent streaming studios such as Amazon and Netflix as they engage in evolving portrayals of African American, Indigenous, Asian American, South American and Mexican descent, Italian American identities and more. From early cinema to the present the course will ask critical questions such as: How are stereotypes built upon century-old cinematic and moving image traditions and how are they functioning still today? What cinematic representations of "self" have creators from marginalized racial and ethnic groups developed as a source of engagement and resistance to mainstream commercial views? How do diverse racial and ethnic cinematic representations intersect with gender, class, sexual orientation, religion, disability, and age? The course will trace the impact of racism throughout the history of cinematic arts as well as provide opportunities for group discussion to share personal experiences with diversity through viewing, researching, and critiquing cinematic and media arts. Note: Prior to Fall 2023, this course was titled "Race and Ethnicity in American Cinema." NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed FMA 0943.

Course Attributes: GD, SI

Repeatability: This course may not be repeated for additional credits.

FMA 0869. The Cinematic City. 3 Credit Hours.

This course takes students to cities around the world, and across time, examining how national cinemas have richly depicted and interpreted urban life during the last hundred years. We will study both screen images as well as the business structure that produces them and the audiences that view them. The urban focus of the course is international, including Tokyo, London and Rome, but the "home" setting is Philadelphia itself. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed FMA 0969. Also, prior to fall 2023, the title for FMA 0869 was "Imaginary Cities."

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

FMA 0943. Honors Race and Ethnicity in the Cinematic Arts. 3 Credit Hours.

Movies, cinematic arts, episodic narrative, and media arts have played a central role in how we understand diverse racial and ethnic identities. The course will study Hollywood as well as more recent streaming studios such as Amazon and Netflix as they engage in evolving portrayals of African American, Indigenous, Asian American, South American and Mexican descent, Italian American identities and more. From early cinema to the present the course will ask critical questions such as: How are stereotypes built upon century-old cinematic and moving image traditions and how are they functioning still today? What cinematic representations of "self" have creators from marginalized racial and ethnic groups developed as a source of engagement and resistance to mainstream commercial views? How do diverse racial and ethnic cinematic representations intersect with gender, class, sexual orientation, religion, disability, and age? The course will trace the impact of racism throughout the history of cinematic arts as well as provide opportunities for group discussion to share personal experiences with diversity through viewing, researching, and critiquing cinematic and media arts. (This is an Honors course.) Note: Prior to Fall 2023, this course was titled "Honors Race and Ethnicity in American Cinema." NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed FMA 0843.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GD, HO, SI

Repeatability: This course may not be repeated for additional credits.

FMA 0969. Honors: The Cinematic City. 3 Credit Hours.

This course takes students to cities around the world, and across time, examining how national cinemas have richly depicted and interpreted urban life during the last hundred years. We will study both screen images as well as the business structure that produces them and the audiences that view them. The urban focus of the course is international, including Tokyo, London and Rome, but the "home" setting is Philadelphia itself. (This is an Honors course.) NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed FMA 0869. Also, prior to fall 2023, the title for FMA 0969 was "Honors Imaginary Cities."

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GG, HO

Repeatability: This course may not be repeated for additional credits.

FMA 1141. Film, Video and Interactive Foundations I. 4 Credit Hours.

An introductory course in media arts which examines the history, theory and practice of image making, sound production, and new technologies. Students will explore both hands-on production processes and theoretical foundations of film, video, and audio in a range of technologies including digital video and photographic formats, studio, and computerized digital settings. Coursework will emphasize individual students' rigorous exploration of creative, personal visions, along with mainstream applications.

Repeatability: This course may not be repeated for additional credits.

FMA 1142. Film, Video and Interactive Foundations II. 4 Credit Hours.

A continuation of media arts theory and practice with an increased emphasis on aesthetics, genres, writing, and project design. Assigned production projects and readings include documentary, fictional, and experimental formats.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FMA 1141 or 'Y' in CRFM01)

FMA 1143. Media Arts Combined. 4 Credit Hours.

An accelerated introductory course in media arts production and theory, which examines image making, sound, and new technology for those students who already have a production background. The course will further develop hands-on production processes, while relating them to the theoretical and expressive foundations of media arts. Course work will include production projects, readings and written assignments. NOTE: This course is for Honors candidates or FMA transfer students only. FMA 1143 (0110) counts in place of FMA 1141 (0100) and FMA 1142 (0101).

Repeatability: This course may not be repeated for additional credits.

FMA 1144. Media Arts for Non-Production Majors. 4 Credit Hours.

This course introduces basic media arts production to non-production majors. The focus will be on developing technical and conceptual skills in a manner that will enhance the student's understanding of the medium firsthand. This practical experience will provide a deeper understanding of the close relationship between media theory and media practice. This course will explore the aesthetics and mechanics of shooting digital video, the importance of sound and how to record and mix it, and how to develop a project from concept to final cut. Course work will include classical theoretical readings and written assignments, which will address a range of narrative, documentary and experimental approaches to moving the image. The class will also offer an historical and theoretical context in which to think about technique and form, and general media literacy. The projects will cover the basic stages of short video production, diverse visual strategies, and how to apply them in several camera and sound exercises, short production exercises, and one final project that grows out of one or more theoretical and formal approaches we explored during the semester. A fundamental premise of the course is that we are exploring the moving image as an art form: an intellectual process with creative choices.

Repeatability: This course may not be repeated for additional credits.

FMA 1171. Media & Culture. 3 Credit Hours.

An overview of cultural production, distribution, and reception explored through lectures, readings, and screenings. Equally oriented towards practical concerns such as the economics of the arts and the mass media, and theoretical debates on the social, political, economic and aesthetic forces that shape culture.

Repeatability: This course may not be repeated for additional credits.

FMA 1172. Introduction to Film and Video Analysis. 3 Credit Hours.

This course will provide students with a conceptual and theoretical tools to analyze film, television, and video. Screenings, lectures, and readings will emphasize critical analysis, form, and content.

Repeatability: This course may not be repeated for additional credits.

FMA 1241. Mobile Media Filmmaking. 4 Credit Hours.

This course is a workshop designed to allow students to explore ideas of culture, art and national identity using the city as their backdrop. Using "pocket" technology such as smart phones, digital cameras, iPads, etc., students will produce topical and conceptual film projects and develop an individual mode of expression. All projects will be collected at a class website for worldwide dissemination. The course requires no media production background and will use mobile technology for production, editing, and distribution. In doing so, the course will explore the blurring lines between high and low culture, and between professional and amateur media production.

Repeatability: This course may not be repeated for additional credits.

FMA 1451. Survey of New Media. 3 Credit Hours.

An introduction to the history, theory and aesthetics of digital and networked media arts. This course explores critical perspectives on how new technologies have shaped our world, as well as aesthetic and interactive strategies for alternative ways of seeing, understanding and reconfiguring our world via digital media. The course includes readings in history, theory and artists writings, as well as screenings and interactive exercises.

Repeatability: This course may not be repeated for additional credits.

FMA 1972. Honors Introduction to Film and Video Analysis. 3 Credit Hours.

This course will ask what it means to "read" a film or video: How can we analyze moving image media in the manner that we interpret literary texts or appreciate form in the fine arts? What are the differences between film, video, and these older media? This course introduces basic analytical tools and concepts to begin to answer these questions. It surveys the broad artistic, social, and political dimensions of the cinema, with some attention to newer moving image media. As an Honors course, the readings and discussion will further emphasize the intersection between film studies and other areas of academic inquiry.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

FMA 2071. Creative Industry Head Start. 3 Credit Hours.

This course, best suited to sophomores and juniors, provides students with a general overview of internship, job, and career options in the entertainment industry, as well as current industry trends and professional practices. Students will explore media hubs and companies of interest to them, and examine how their creative goals and skills can be applied to internships and jobs. Students will develop comprehensive resumes and cover letters, create professional online profiles, and hone job search, networking, and interviewing strategies designed to help them gain experience and break into the field.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

FMA 2241. Filmmaking. 4 Credit Hours.

The art, theory, and technology of 16mm film and digital cinema production with special attention paid to exposure, lenses, cameras, location lighting, location sound, cinematic composition, and film structure. Coursework will consist of individual and collaborative exercises and projects. NOTE: This course is for majors only. Permission of the instructor is required for non-majors.

Department Restrictions: Must be enrolled in one of the following Departments: CA:Film & Media Arts.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Film and Media Arts.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FMA 1171 or 'Y' in CRFM03), (FMA 1172 or 'Y' in CRFM04), and (FMA 1142, FMA 1143, or 'Y' in CRFM02)

FMA 2242. Videography. 4 Credit Hours.

Intensive instruction and practice with the tools of recording and structuring video. Coursework will consist of individual and group exercises and projects conducted in the studio and in the field. NOTE: This course is for majors only. Permission of the FMA chair required for non-majors.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FMA 1171 or 'Y' in CRFM03), (FMA 1172 or 'Y' in CRFM04), and (FMA 1142, FMA 1143, or 'Y' in CRFM02)

FMA 2243. Audio: Production and Aesthetics. 4 Credit Hours.

An introduction to audio production and audio as a form of aesthetic expression. Students will explore theoretical concepts as they use digital audio recording and editing systems to complete projects. Coursework will consist of lectures, hands on instruction, and discussion.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FMA 1171 or 'Y' in CRFM03), (FMA 1172 or 'Y' in CRFM04), and (FMA 1142, FMA 1143, or 'Y' in CRFM02)

FMA 2244. Still Photography for Filmmakers. 4 Credit Hours.

Using a single lens reflex camera, the student will learn technical and aesthetic considerations regarding natural and artificial light, exposure, shutter speeds, f/stops, framing, composition, lens selection and how these factors affect perspective and depth of field. The course will relate concepts in still photography to parallel practices in motion pictures.

Repeatability: This course may not be repeated for additional credits.

FMA 2245. Video Production for Non-Production Majors. 1 Credit Hour.

This supplemental, one credit course is geared towards students with no background in film and video production. It is designed to be taken in conjunction with FMA 3247 and to provide non-FMA majors sufficient training in video production for FMA 3247. Students will study and practice both field and studio production skills (camera, lighting, sound recording), non-linear editing, sound editing and mixing, as well as different modes of filmmaking such as documentary, fiction, experimental, notebooks, diaries, and essay films. It cannot be taken for credit by FMA majors.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Film and Media Arts.

Repeatability: This course may not be repeated for additional credits.

FMA 2341. Directing Fundamentals. 4 Credit Hours.

This class provides students with a general overview of the functionality of an episodic director in the television industry, which will then give them the language to understand the role of a director in the larger film industry. Students will learn that a great director in television is able to stay under budget and make their days while interpreting the screenplay and breaking it down for all their collaborators, choosing every element within the frame, shaping their actors' performances, and telling the whole story with the camera. Students will learn what it takes to be a great director - a leader and collaborator who is able to multitask and work with several crew members at once with very little time and money.

Department Restrictions: Must be enrolled in one of the following Departments: CA:Film & Media Arts.

Repeatability: This course may not be repeated for additional credits.

FMA 2396. Screenwriting I. 4 Credit Hours.

Seminar and workshop exploring various approaches to fiction and nonfiction media writing. NOTE: This course is for majors only. Permission of the FMA chair required for non-majors. Prior to Spring 2009, the course title was "Writing for Media."

Field of Study Restrictions: Must be enrolled in one of the following Majors: Film and Media Arts.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FMA 1171 or 'Y' in CRFM03), (FMA 1172 or 'Y' in CRFM04), and (FMA 1142, FMA 1143, or 'Y' in CRFM02)

FMA 2451. Experimental Video and Multi-Media. 4 Credit Hours.

Intensive laboratory and field experience exploring personal, aesthetic, and social applications of video utilizing digital camcorders, editing, and multi-media facilities. This course includes regularly scheduled screenings of significant experimental video and multimedia projects.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FMA 1171 or 'Y' in CRFM03), (FMA 1172 or 'Y' in CRFM04), and (FMA 1142, FMA 1143, or 'Y' in CRFM02)

FMA 2452. Web Art & Design. 4 Credit Hours.

In this production course, students learn how to conceptualize and produce digital media works on the web, using both Web 2.0 applications and more nuts & bolts technical means. The course will explore new aesthetic forms of web-based narrative, imaging and interaction. Through screenings, talks, readings and guest lectures, the course will consider issues of design, mixed reality media works, social media, locative media, virtual world-building. Students will receive a solid grounding in website construction and content development for the web.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FMA 1171 or 'Y' in CRFM03), (FMA 1172 or 'Y' in CRFM04), and (FMA 1142, FMA 1143, or 'Y' in CRFM02)

FMA 2453. Introduction to Animation. 4 Credit Hours.

This course will introduce a variety of fundamental concepts and techniques in animation. Students will learn the basic principles of creating animation in a variety of forms, focusing primarily on hand-drawn, digital, and stop motion with overviews on various hardware and software. Coursework will consist of discussing animation film examples, individual exercises that practice animation forms and concepts, and workshopping student-made animations. By the end of the course, students will have created a festival- and/or portfolio-ready animation and be able to create their own independent animations while having gained a foundation to serve advanced animation topics in subsequent coursework.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (FMA 1171 or 'Y' in CRFM03), (FMA 1172 or 'Y' in CRFM04), and (FMA 1142, FMA 1143, or 'Y' in CRFM02)

FMA 2471. New Media Colloquium. 1 Credit Hour.

A seminar for New Media students, which will host guests from the New Media professions and arts. The course will critique student and professional work and focus on a topic related to this discipline. Class will seek to integrate student's work across the New Media concentration.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in ((FMA 1141 and FMA 1142), FMA 1143, (FMA 1141 and 'Y' in CRFM02), (FMA 1142 and 'Y' in CRFM01), or ('Y' in CRFM01 and 'Y' in CRFM02)) and ((FMA 1171 and FMA 1172), (FMA 1171 and 'Y' in CRFM04), (FMA 1172 and 'Y' in CRFM03), or ('Y' in CRFM03 and 'Y' in CRFM04))

FMA 2551. Editing Film and Video. 4 Credit Hours.

Techniques, practices, equipment, procedures, and theories involved in achieving structure in film and video.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FMA 1171 or 'Y' in CRFM03), (FMA 1172 or 'Y' in CRFM04), and (FMA 1142, FMA 1143, or 'Y' in CRFM02)

FMA 2670. Topics in Film Study. 4 Credit Hours.

An intermediate exploratory seminar in film study. Topics may include: the creative process, film and politics, directors, genres, and periods. NOTE: Open to FMA majors and non-majors.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may be repeated for additional credit.

FMA 2671. Film Noir. 3 Credit Hours.

This course examines the concept of "Film Noir" in its cultural context using a body of films (literature, photography, art, music) to analyze predominant themes and the history of the concept in film scholarship. Directors, producers and writers of Noir; the industrial process by which these films were produced, marketed and exhibited; and a variety of cultural/historical issues (e.g. race, gender, class, urban development, national morale) will be examined. The first part of the class will focus on "Classic" Noir (1940-60), while the second will concentrate on the evolution of Noir, scrutinizing 1960-contemporary films that have appropriated Film Noir characteristics, paying particular attention to international examples. NOTE: Open to FMA majors and non-majors.

Repeatability: This course may not be repeated for additional credits.

FMA 2672. Film Comedy. 4 Credit Hours.

This course will examine American Comedy, with a particular focus on several significant directors/producers: Harold Lloyd, Preston Sturges, Frank Tashlin, Woody Allen. We will approach this class in equal parts as a directors study, a genre study, an American culture study. Some of the questions we'll address are: How does comedy function/work? What personal styles emerge from the genre? Are these films and their critical concerns reflective of larger patterns and tendencies in American life? NOTE: Open to FMA majors and non-majors.

Repeatability: This course may not be repeated for additional credits.

FMA 2673. Independent Film/Video. 4 Credit Hours.

Lectures, screenings and critical assignments will survey and analyze significant narrative, documentary and experimental works that challenge the assumptions and practices of mainstream media.

Repeatability: This course may not be repeated for additional credits.

FMA 2674. History of Photography. 4 Credit Hours.

An examination of the history and aesthetics of fine art, documentary and commercial photography within their cultural contexts. The course will cover the works of major photographers and will relate historical and contemporary concepts in still photography to parallel practices in motion pictures.

Repeatability: This course may not be repeated for additional credits.

FMA 2675. Film History I (1895-1950). 4 Credit Hours.

This course surveys the broad trends in the development of cinema as an art and as an industry. Spanning from the beginning of cinema to the immediate post-World War II years, it will ask how a popular art arose and how cinema finds its expression either with or against its commercial nature. Topics to include the Hollywood studio system, European national and international cinema traditions, the avant-garde, the role of documentary and propaganda, and the role of women in the film industry.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (FMA 1172 (may be taken concurrently), ENG 2711 (C- or higher; may be taken concurrently), or 'Y' in CRFM04)

FMA 2676. Film History II (1950-Present). 4 Credit Hours.

This course surveys the broad trends in the development of cinema as an art and as an industry. Spanning from 1950 to the present, it will particularly examine how notions of film art and social protest defined national cinemas, including American film, against the traditional Hollywood studio film. Topics to include the decline of the studio system, the international art film, the New Hollywood, oppositional countercinema, independent cinema, and transnational and global exchange of cinematic style and language.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (FMA 1172 (may be taken concurrently), ENG 2711 (C- or higher; may be taken concurrently), or 'Y' in CRFM04)

FMA 2678. History of Experimental Film and Video Art. 4 Credit Hours.

This course surveys major movements, artists, and works made outside the traditions of fiction and documentary filmmaking. It will chart experimental film's relation to the avant-garde art movements and cultural upheavals of the mid-20th century. In addition to experimental film, the course will provide an introduction to video art history and aesthetics and will examine installation based work, "expanded cinema," the gallery film, and recent work in digital media.

Repeatability: This course may not be repeated for additional credits.

FMA 2771. Producing. 4 Credit Hours.

Producing presents an overview of the processes of developing, line producing and distributing a documentary, fiction, or experimental media production. Emphasis is on projects produced independently, outside the commercial mainstream. Students will produce a comprehensive proposal for a viable film or media project.

Department Restrictions: Must be enrolled in one of the following Departments: CA:Film & Media Arts.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Film and Media Arts.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FMA 1171 or 'Y' in CRFM03), (FMA 1172 or 'Y' in CRFM04), and ((FMA 1142 and FMA 1141), FMA 1143, (FMA 1142 and 'Y' in CRFM01), (FMA 1141 and 'Y' in CRFM02), or ('Y' in CRFM01 and 'Y' in CRFM02))

FMA 3085. Internship. 1 to 4 Credit Hour.

Students selected on the basis of special qualifications are assigned as interns on an unpaid basis with organizations professionally engaged in broadcasting and film. NOTE: Enrollment subject to availability of openings. Contact FMA's internship director.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

FMA 3241. BFA Junior Directing Projects. 4 Credit Hours.

BFA Junior Directing Projects is a required course for BFA Directing majors. Integrating and building upon what they have previously learned, it will take students through all the elements of the production process at a smaller scale than they will face in their senior BFA Directing projects. The course will include both fiction and non-fiction production. Topics will include developing scripts or documentary proposals, organizing and managing productions, narrative coverage and non-fiction camera work, directing actors and social actors, directing the camera, interview techniques and fieldwork and post-production. Course will culminate in each student producing a 3-7 minute short film.

Department Restrictions: Must be enrolled in one of the following Departments: CA:Film & Media Arts.

Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Directing.

Class Restrictions: Must be enrolled in one of the following Classes: Sophomore 30 to 59 Credits, Junior 60 to 89 Credits.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

Repeatability: This course may not be repeated for additional credits.

FMA 3242. Experimental Media Workshop. 4 Credit Hours.

An advanced workshop to develop projects in experimental, documentary, or narrative forms using portable video, TV studio, and editing facilities. NOTE: This course is repeatable for credit. Prior to fall 2009, this course was called "Experimental TV."

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (FMA 2241, FMA 2242, FMA 2451, 'Y' in CRFM05, or 'Y' in CRFM08)

FMA 3244. Lighting for Film and Video. 4 Credit Hours.

This workshop will explore the technical, aesthetic, and compositional aspects of lighting for cinematic, photographic, and electronic media for all students, as well as advanced issues of cinematography and synchronous sound for those students who wish to continue study of filmmaking. The course will analyze the evolution of lighting styles (such as classical Hollywood, neorealist, film noir, and expressionism) in fiction and non-fiction moviemaking. Each student will complete an individual and/or group portfolio of different lighting exercises. Students with an advanced interest in filmmaking will substitute camera and synchronous sound exercises for some of the lighting exercises.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (FMA 2242, FMA 2241, THTR 2511 (C- or higher), FMA 2244, 'Y' in CRFM05, or 'Y' in CRFM06)

FMA 3245. Cinematography: Junior Projects. 4 Credit Hours.

Cinematography: Junior Projects is a suggested elective course for BA Cinematography Concentration candidates. Integrating and building upon what they have previously learned, this course is designed to help junior level students secure skills and experiences necessary to lead a production crew as a Director of Photography (DP). The course will explore production strategies for both fiction and non-fiction motion pictures. Topics include planning camera setups and coverage, advanced lighting design, light plots, creating a "look", field monitors and LUTs, high dynamic range RAW files, workflows, and crew organization. Designed to work in conjunction with the BFA Junior Directing course, this class will culminate with each cinematography student serving as the lead DP for a BFA Junior Directing Projects Film (FMA 3241).

Department Restrictions: Must be enrolled in one of the following Departments: CA:Film & Media Arts.

Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Cinematography.

Repeatability: This course may not be repeated for additional credits.

FMA 3246. Documentary Workshop I. 4 Credit Hours.

An intermediate workshop in the theory, practice, and ethics of documentary production. The workshop will feature exercises in oral history and interview techniques, camerawork, field-sound recording, and music research, specialized editing assignments, and a final project. These skills will be integrated with documentary screenings along with readings and discussion.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FMA 2396 or 'Y' in CRFM07), (FMA 2551 or 'Y' in CRFM09), and (FMA 2241, 'Y' in CRFM05, FMA 2242, or 'Y' in CRFM15)

FMA 3247. Cross-Cultural Image Making. 3 Credit Hours.

This advanced production course will focus on cross-cultural image making. It is designed specifically to address the challenges of making films while immersed in a foreign culture and/or language. How do we make films about places that are unfamiliar to us often with limited resources and technology? How do time restraints such as being on the move and constantly changing locations affect the types of images selected and gathered? How does one assemble a future archive from which to draw at a future date in a short period of time? What happens to a culture when it is perceived as "other" and how does the lens of defamiliarization, dislocation, and disorientation translate into audiovisual production? What images, sounds and techniques represent the culture and history of a place? Which are site specific and which are transferable? What is the tension between the local and the global? At the end of the course, each student will be asked to produce their own short film based on their experiences and observations living away from home and out of their comfort zone. The course is open to majors and non-majors alike. However students without filmmaking experience must take the accompanying FMA 2245, Video Production for Non-Production Majors.

Repeatability: This course may be repeated for additional credit.

FMA 3249. Documentary Workshop II. 4 Credit Hours.

This second semester of documentary workshop will expand the original documentary short produced in Documentary Workshop I. The course will explore creative editing strategies and introduce a Post-Production workflow process to identify the main thread and ideas for our final film. At the start of the semester, students will evaluate their footage (logging) and define a set of steps called Milestones, which will guide their project towards completion. Each completed Milestone is developed with the instructor's assistance and is presented according to class assignment deadlines. By the end of the semester, each student will have completed their final documentary.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in FMA 3246.

FMA 3341. Scene Analysis for Writers and Directors. 4 Credit Hours.

Analysis and exercises dealing with the conventional language of mainstream narrative film, including how this language, traditionally presented as the only way to organize narrative films, actually serves to circumscribe the kind of stories that may be told.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FMA 2396 or 'Y' in CRFM07) and (FMA 2241, FMA 2242, FMA 2451, 'Y' in CRFM05, or 'Y' in CRFM08)

FMA 3342. Serial Writing. 4 Credit Hours.

This is a writing workshop focusing on dramatic serial writing in which students learn to work in close collaboration with other class members. In preparation for the class, students will be required to read or view several dramatic serials as well as read several pilot scripts. The class itself will hear "pitches" for a serial, select one story, and then begin to develop it. The course is limited to BFA students with a concentration in Screenwriting.

Department Restrictions: Must be enrolled in one of the following Departments: CA:Film & Media Arts.

Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Screenwriting.

Class Restrictions: Must be enrolled in one of the following Classes: Sophomore 30 to 59 Credits, Junior 60 to 89 Credits.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

Repeatability: This course may not be repeated for additional credits.

FMA 3343. Screenwriting II. 4 Credit Hours.

An advanced course concentrating on the preparation of a complete television, motion picture, or non-fiction script.

Department Restrictions: Must be enrolled in one of the following Departments: CA:Film & Media Arts.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FMA 2396 or 'Y' in CRFM07)

FMA 3344. Adaptation and Docudrama: Screen and Television Writing from Pre-Existing Source Material. 4 Credit Hours.

This will be an exercise course leading to a final written project. It will focus on screenplays for film and television based on literature, drama and historical events. Because the material pre-exists, the course will be able to focus on the nuances of translation to screen including the visual representation of internal life, time, levels of reality, "voice," historical context, and social change.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FMA 2396 or 'Y' in CRFM07)

FMA 3361. Screen Performance. 3 Credit Hours.

This course is designed to develop performance skills before the camera. Actors are given experience in texts for commercials, soap operas, sit-coms, and film scenes, so that they are prepared for auditions in these areas. Individual and ensemble exercises may be on location or in the studio.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (any FMA course numbered 2241 to 2244, FMA 2396, FMA 2451, THTR 1231 (C- or higher), 'Y' in CRFM13, 'Y' in CRFM07, or 'Y' in CRFM08)

FMA 3451. Animation Workshop. 4 Credit Hours.

A workshop on the art, techniques and concepts of animation, exploring several approaches from cards and cells to computer image making.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FMA 1171 or 'Y' in CRFM03), (FMA 1172 or 'Y' in CRFM04), and (FMA 1142, FMA 1143, or 'Y' in CRFM02)

FMA 3452. New Technologies Lab. 4 Credit Hours.

A creative laboratory for exploring new media arts and interactive technologies for producing a variety of experimental, documentary, narrative and genre blended projects. Generating from classical traditions (film, video, and performing arts) to contemporary forms of interactive media: video games, blogs & You Tube, the projects range from the production of websites to interdisciplinary multi-media installations and performances. Successful NewTechLab productions have included individual and collaborative works by students from FMA, Art, Architecture, Dance, Music, Theater, Computer & Information Sciences. NOTE: Open to all FMA majors with suggested prerequisites that include: FMA 1451 (0196), FMA 2451 (0241), FMA 2451 (0245). Permission of the instructor required for students with equivalent prerequisites in other departments.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FMA 1451 or 'Y' in CRFM14)

FMA 3453. Interdisciplinary Media Studio. 4 Credit Hours.

This production course provides the opportunity for exploring media arts in an interdisciplinary context. It is intended to introduce a broad interdisciplinary media toolbox, including developing competency in a range of technical skills, but more importantly, students are challenged to develop interdisciplinary conceptual skills. Starting with video and audio as the basis, students will follow a series of exercises that situate media in different cultural and disciplinary contexts: as installation with one or more screens (Media and Sculpture); as an element of performance (Media Projection Design for Theater and Dance); as narrative mapping (Internet-based Interactive Narrative with community partners); as location-based virtual architecture viewed through the smartphone or tablet (Virtual Public Art/Design for Civic Engagement); as engaged by an interactive sensor (Design for Physical Computing, in conjunction with Engineering).

Department Restrictions: Must be enrolled in one of the following Departments: CA:Film & Media Arts.

Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Media Arts.

Class Restrictions: Must be enrolled in one of the following Classes: Sophomore 30 to 59 Credits, Junior 60 to 89 Credits.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

Repeatability: This course may not be repeated for additional credits.

FMA 3455. 3D Modeling. 4 Credit Hours.

This course introduces the concepts and techniques of three-dimensional digital graphics, using Lightwave3D software. The first half of the semester introduces a broad palette of techniques and formal ideas, while the second half is spent on a major project of your own design. Previous experience with graphics or animation software is not required. The course offers a unique skill set and formal perspective. The course is open to juniors and seniors, including non-majors and upper-level students from other colleges, with the specific aim of fostering an interdisciplinary, collaborative workshop environment.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (FMA 1171 or 'Y' in CRFM03), (FMA 1172 or 'Y' in CRFM04), and (FMA 1142, FMA 1143, or 'Y' in CRFM02)

FMA 3456. 3D Animation. 4 Credit Hours.

This course introduces the concepts and techniques of three-dimensional digital imagery and motion graphics, using Lightwave3D software. The first half of the semester introduces a broad palette of techniques and formal ideas, while the second half is spent on a major project of your own design. The course offers a unique skill set and formal perspective for upper-level students. Open to juniors and seniors, including non-majors and upper-level students from other colleges, with the specific aim of fostering an interdisciplinary, collaborative workshop environment.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

FMA 3457. Video Game and Playable Media Design. 4 Credit Hours.

This course introduces the many different disciplines that make up video game development and illustrate how they all come together to form a final product. Rather than emphasize any one specific subject, our focus will be broad and include introductory lessons across many aspects of development. The goal of the course is to provide as many components of development as possible to give a holistic view of everything that goes into making games. While students may not leave this course with all the specific skills needed to build their own dream games, they should come away with a strong understanding of how all the pieces fit together and where to get started in each area.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (FMA 1171 or 'Y' in CRFM03), (FMA 1172 or 'Y' in CRFM04), and (FMA 1142, FMA 1143, or 'Y' in CRFM02)

FMA 3473. Moving Camera. 4 Credit Hours.

Moving Camera is a workshop course that explores the art and practice of moving camera media production. The course covers the range of techniques including handheld, dolly, jib, virtual/motion sensors and particularly focus on Steadicam operation. Class time will be spent on group discussion/exercises, lectures/screenings, lab instruction and critiquing work. Through a series of production projects, students will work through the aesthetics of moving camera and gain the technical and physical expertise necessary for successful projects. This course will also explore the theory and history of camera movement as well as blocking & directing techniques. Locative & mobile media projects will extend the work outside the classroom.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FMA 2241, FMA 2242, 'Y' in CRFM05, or 'Y' in CRFM15)

FMA 3551. Advanced Editing. 4 Credit Hours.

Screenings, discussions, critiques, and individual as well as collaborative workshop exercises build upon editing techniques and aesthetic concepts introduced in FMA 2551. Through projects, lectures and screenings students will be exposed to professional editing methods, approaches and techniques while completing individual projects in picture montage, sound design and digital effects.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FMA 2551 or 'Y' in CRFM09)

FMA 3553. Color Correction. 4 Credit Hours.

This course is an introduction to the aesthetic considerations and technical aspects of color in modern post-production and cinematography. Color has a subconscious influence on emotion in storytelling. With the advent of modern digital cinema, every film and television production undergoes some level of color grading. Cinematographers must understand the process to maintain creative control of the images they produce. Editors must understand the process to perform basic color correction on low budget productions. This class is a combination of lecture and workshop with each student striving to efficiently navigate the art and practice of color correction.

Department Restrictions: Must be enrolled in one of the following Departments: CA:Film & Media Arts.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FMA 2551 or 'Y' in CRFM09)

FMA 3670. Topics in Media Culture. 4 Credit Hours.

An exploratory seminar with varying special topics, which might include Gender, Theories of Subjectivity, and Marginalization and Representation. NOTE: Course may be repeated.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C (except where noted) in (FMA 1171, FMA 1172, ENG 2711 (C- or higher), CMST 2111, 'Y' in CRFM03, 'Y' in CRFM04, or 'Y' in CRFM02)

FMA 3671. Theory and Practice of Media Culture. 4 Credit Hours.

The course will describe how cultural studies have grown out of film and media studies, combining intellectual and social history with changing representational practices. Students will analyze the dynamic relationship between ideas, socio-cultural, practices and technologies. NOTE: This course is for majors only. Permission of the FMA chair required for non-majors.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in ((FMA 1171 and FMA 1172), ENG 2711 (C- or higher), CMST 2111, (FMA 1171 and 'Y' in CRFM04), (FMA 1172 and 'Y' in CRFM03), ('Y' in CRFM03 and 'Y' in CRFM04), or 'Y' in CRCM02)

FMA 3677. American Film. 4 Credit Hours.

This course studies the American cinematic tradition from its inception in the 1890s to the present. We will examine the development of film as an aesthetic medium and a technical language, and we will connect the issues and ideas that films deal with to changes in American culture and society during this time period. We will be especially concerned with how films are used in the major value debates that shape America.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (FMA major prerequisites: (FMA 1172, ENG 2711 (C- or higher), or 'Y' in CRFM04) and (FMA 2675, 'Y' in CRFM18, FMA 2676, FMA 2671, FMA 2670, FMA 3670, FMA 3671, FMA 3871, 'Y' in CRFM10, or 'Y' in CRFM11) or Comm Studies prerequisites: (CMST 2111 or 'Y' in CRCM02) and (FMA 1172 or 'Y' in CRFM04))

FMA 3679. Film Directors, Periods, and Genres. 4 Credit Hours.

This course offers an in-depth study of a film director, a period of film history, or a film genre. It will address the recurring thematic and aesthetic concerns of these films, as well as the historical and social context in which they were made. Different topics may be repeated for credit.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C (except where noted) in (FMA 1172, ENG 2711 (C- or higher), or 'Y' in CRFM04) and (FMA 2675, FMA 2676, 'Y' in CRFM11, or 'Y' in CRFM18)

FMA 3680. Foreign Studies in FMA. 3 to 6 Credit Hours.

This course is a seminar in one of Temple's study abroad locations. It uses study of cinema and moving-image arts as a mean to more deeply understand another national culture. Reading, screenings, and field trips will connect the study of cinematic arts to other material in the study-away program. NOTE: FMA students may only count four credits towards the FMA major.

Repeatability: This course may be repeated for additional credit.

FMA 3696. Writing-Intensive Seminar: Film Directors, Periods, and Genres. 4 Credit Hours.

A writing-intensive seminar with varying special topics to offer an in-depth study of a film director, a period of film history, or a film genre. Students will use a deeper exploration of the focused topic as a chance to develop research and critical writing skills. NOTE: Course may be repeated.

Course Attributes: WI

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C (except where noted) in (FMA 1172, ENG 2711 (C- or higher), or 'Y' in CRFM04)

FMA 3770. Topics in Film Study. 4 Credit Hours.

Lectures and screenings on a special topic arranged each semester. Topics may include Film and the City, War and Film, Black Women and Film, Utopias and Dystopias, Documentary Fiction, Terrorism and Film, Gay and Lesbian Identity on Film, Philadelphia Cinema History, and Horror. Please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C (except where noted) in (FMA 1172, ENG 2711 (C- or higher), CMST 2111, 'Y' in CRFM04, or 'Y' in CRCM02)

FMA 3771. Exhibition and Distribution of Independent Media. 3 Credit Hours.

The objective of this course is to expose students to methods and approaches for exhibition and distribution of independent media. Students will investigate popular media outlets such as film/video festivals, microcinemas and internet exhibition possibilities, to name only a few. The course will serve dual functions in that it will prepare students to distribute their own work while also exposing them to industry opportunities in exhibition and distribution. FMA 3771 is considered an advanced studies course.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Film and Media Arts.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

FMA 3772. Fundraising for Independent Media. 3 Credit Hours.

This course is a workshop class where students must come prepared with a project around which they will create a fundraising campaign. During the course of the semester students will be exposed to information on grant writing, non-profit and for-profit media entities and the legalities of media producing. At the conclusion of the course, students will have a full funding proposal ready for dissemination to various funding sources. FMA 3772 is considered an advanced studies course.

Department Restrictions: Must be enrolled in one of the following Departments: CA:Film & Media Arts.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

FMA 3773. Contemporary Screen Studies. 4 Credit Hours.

In this course, students will examine contemporary cinema, media, and film criticism, in order to articulate their own artistic, scholarly, and professional practice. Readings in film and media history, visual theory, and aesthetics will help make sense of the contemporary mediascape, with an emphasis on cinema and media arts work in the new millennium. The course will use theory and history to contextualize artistic and industrial practices from both "high" and "low" culture. Possible areas for exploration are digital cinema; "slow cinema"; multimedia installation; the gallery film; video game aesthetics; comics and film; episodic cinema; interactive, animated, and hybrid documentary; and long-form serial television.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Film and Media Arts.

Repeatability: This course may not be repeated for additional credits.

FMA 3775. Entertainment Industry Perspectives. 4 Credit Hours.

This course explores career paths and current trends in the entertainment industry through visiting guest lecturers who are working in fields including scriptwriting, directing, editing, distribution, production design, advertising and more. Weekly visits offer students a chance to learn from and converse with established professionals while reflecting upon their own personal internship experiences within the entertainment industry.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

FMA 3871. Film Theory. 4 Credit Hours.

This course introduces key ideas and debates in film theory. Covering work from classical film theory through the 1970s Screen theory to contemporary approaches, the course asks how best to understand film as an art form and social document. It will interrogate the nature of cinema as a medium and the direction of film in a digital age. Key ideas to include film aesthetics, signification, textuality, ideology, narration, political modernism, and feminist and postcolonial critique. Film screenings will illuminate concepts in the readings.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (FMA 1172, ENG 2711 (C- or higher), or 'Y' in CRFM04) and (FMA 2675, FMA 2676, FMA 2671, FMA 2670, FMA 3670, FMA 3671, FMA 3677, 'Y' in CRFM10, 'Y' in CRFM11, 'Y' in CRFM12, or 'Y' in CRFM18)

FMA 4240. Topics in Production. 4 Credit Hours.

A workshop in film, video, audio, or emerging new technologies. The course will address a particular production issue (an aspect of technology or an aesthetic approach) each time it is offered, such as production design, color correction, 3-D computer imagery, special effects, audio experimentation, video verité, and film/video diary.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Film and Media Arts.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

FMA 4241. BFA Directing Projects I. 4 Credit Hours.

Advanced pre-production and production of film, high definition video, or emerging technologies with specific emphasis on producing an ambitious work of artistic and social consequence, with critiques and evaluations by faculty and visiting professionals. Intensive field and laboratory work leading towards a year-long individual or collaborative final project for exhibition. NOTE: First semester of a two-semester sequence (4241-4242).

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FMA 2396 or 'Y' in CRFM07), (FMA 2551 or 'Y' in CRFM09), and (FMA 2241, FMA 2242, 'Y' in CRFM05, or 'Y' in CRFM15)

FMA 4242. BFA Directing Projects II. 4 Credit Hours.

Continuation of FMA 4241 (0382) with an emphasis on completing the field production and post-production phases of a year-long project in film, high definition video or an emerging new technology. NOTE: Second semester of a two-semester sequence (4241-4242).

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in FMA 4241.

FMA 4243. Film and Video Sound. 4 Credit Hours.

Theory and practice of sound as it relates to film and video production location recording techniques, wild sound pick-up, Foley and sound effects, sound sweetening, scoring for film, and sound mixing for film.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in FMA 2243.

FMA 4245. Cinematography Master Class I. 4 Credit Hours.

An advanced production workshop that combines theory and practice in the making of personal films and crewing each other's productions in Super 16mm or High Definition 24P digital video, along with technical and aesthetic exercises deconstructing cinematographic/videographic moviemaking.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in FMA 3244.

FMA 4246. Cinematography Master Class II. 4 Credit Hours.

This course is a continuation of the fall semester as a practicum in completing projects in super 16mm and 24P digital advanced productions as well as introducing new exercises. This course will have professional visitors and will continue to deconstruct cinematography and various cinematic forms in the treatment of fiction/non-fiction portraiture in observational/direct cinema, avant-garde (burst and unconventional filming), and autobiographical styles of moviemaking.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in FMA 4245.

FMA 4248. Introduction to 3D: Modeling. 4 Credit Hours.

This course introduces the concepts and techniques of three-dimensional digital graphics, using Lightwave3D software. The first half of the semester introduces a broad palette of techniques and formal ideas, while the second half is spent on a major project of your own design. Previous experience with graphics or animation software is not required. The course offers a unique skill set and formal perspective. The course is open to juniors and seniors, including non-majors and upper-level students from other colleges, with the specific aim of fostering an interdisciplinary, collaborative workshop environment.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FMA 1171 or 'Y' in CRFM03), (FMA 1172 or 'Y' in CRFM04), and (FMA 1142, FMA 1143, or 'Y' in CRFM02)

FMA 4249. Introduction to 3D: Animation. 4 Credit Hours.

This course introduces the concepts and techniques of three-dimensional digital imagery and motion graphics, using Lightwave3D software. The first half of the semester introduces a broad palette of techniques and formal ideas, while the second half is spent on a major project of your own design. The course offers a unique skill set and formal perspective for upper level students. Open to juniors and seniors, including non-majors and upper-level students from other colleges, with the specific aim of fostering an interdisciplinary, collaborative workshop environment.

Repeatability: This course may not be repeated for additional credits.

FMA 4250. Topics in Production. 4 Credit Hours.

A workshop with a changeable technological or artistic topic in film or video post-production, multimedia, or 3-D computer animation.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Film and Media Arts.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

FMA 4251. Producing Master Class I. 4 Credit Hours.

Producing Master Class I is the first semester in the year-long capstone experience of the BA degree in Producing. Students will apply knowledge they have learned about producing independent film work by serving as a lead producer for a BFA directing project. The course will be structured as a workshop and will be coordinated with the capstone courses for the BFA in Directing, BA in Cinematography and BA in Post Production. This capstone course will give students a comprehensive experience in producing that will prepare them to begin a career in industry and independent film producing.

Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Producing.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts.

Repeatability: This course may not be repeated for additional credits.

FMA 4252. Producing Master Class II. 4 Credit Hours.

Producing Master Class II is the second semester in the year-long capstone experience of the BA degree in Producing. Producing students will serve as the hub around which the director, cinematographer and editor will collaborate, as they guide their directing project through production, post-production and strategizing audience outreach and distribution.

Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Producing.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in FMA 4251.

FMA 4253. Advanced Post Production Techniques. 4 Credit Hours.

This course expands on theories and techniques developed in FMA 3551 Advanced Editing. Topics covered include best practices for digital convergence, advanced HD workflow and advanced audio for narrative short filmmaking. This is a recommended class for BA Post Production concentration students.

Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Post Production.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in FMA 3551.

FMA 4254. Post Production Master Class. 4 Credit Hours.

This course is the capstone experience of the BA Post Production concentration. Students will serve as the lead editor and post supervisor of a BFA/BA Master Class thesis film.

Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Post Production.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in FMA 3551 and (FMA 4253, FMA 4451, FMA 3553, FMA 2452, FMA 4243, FMA 4248, or FMA 4249)

FMA 4282. Special Projects. 1 to 4 Credit Hour.

Individual projects proposed by advanced students. NOTE: Candidates submit a detailed project plan on prescribed form before registration.

Repeatability: This course may be repeated for additional credit.

FMA 4341. Screen Directing. 4 Credit Hours.

Theories of directing, dramatic form, and acting are examined through lectures, demonstrations, readings, and applied exercises to establish a theoretical and practical foundation in film and television directing.

Department Restrictions: Must be enrolled in one of the following Departments: CA:Film & Media Arts.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Film and Media Arts.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FMA 2241, FMA 2242, FMA 2451, 'Y' in CRFM05, 'Y' in CRFM08, or 'Y' in CRFM15)

FMA 4342. BFA Screenwriting Projects I. 4 Credit Hours.

The first half of the senior year capstone in the BFA in Screenwriting. Students will integrate in practice everything they have learned about film, screenwriting and story by developing the first draft of a feature-length screenplay or television serial pilot and bible. The course will be structured as a workshop and will present students with the opportunity to further hone their critical skills and introduce them to the discipline of the writer's life.

Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Screenwriting.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

Repeatability: This course may not be repeated for additional credits.

FMA 4343. BFA Screenwriting Projects II. 4 Credit Hours.

The second half of the senior year capstone in the BFA in Screenwriting. Students will focus on rewriting as an essential part of the writing process, as they rewrite and polish the first drafts of their feature scripts or television serial plot and bible developed in FMA 4342 BFA Screenwriting Projects I. They will be expected to cultivate their ability to give and receive a high level of criticism.

Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Screenwriting.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in FMA 4342.

FMA 4345. The Director-Actor Collaboration. 4 Credit Hours.

This course is designed to develop performance skills in front of, and directing techniques behind, the camera. An emphasis will be placed on the collaboration and exchange of techniques between actors and directors. Directors have the opportunity to learn what works from the actors' perspective during acting exercises. Likewise, actors will learn about the directors' perspective during directing technique exercises. Students will develop skills in each craft through acting and experiencing what it feels like to take direction; learning rehearsal flexible techniques; practicing directing techniques that are suited specifically to film and TV productions; and studying script analysis techniques that allow directors to prepare thoroughly prior to actual production.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

FMA 4440. Topics in Production. 4 Credit Hours.

A workshop in film, video, audio, or emerging new technologies. The course will address a particular production issue (an aspect of technology or an aesthetic approach) each time it is offered, such as color correction, 3-D computer animation, special effects, digital audio applications, and multimedia.

Repeatability: This course may be repeated for additional credit.

FMA 4441. Physical Computing. 4 Credit Hours.

Physical Computing is a studio class in which students build electronic interfaces for interactive media projection and exhibition. This class mingles media-making with simple engineering, developing students' skills in designing new ways to access and experience video and audio media.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FMA 2451, FMA 1451, 'Y' in CRFM08, or 'Y' in CRFM14)

FMA 4442. BFA Media Arts Project I. 4 Credit Hours.

This course is the first part of the two semester Senior Capstone in the Media Arts BFA. In this production course, students will develop a substantial interdisciplinary media arts project in dialogue with BFA cohort and faculty. They will create prototypes of proposed projects with an interdisciplinary team of collaborators from the Media Arts BFA and relevant programs in parallel arts, humanities and sciences disciplines. The development of the prototype projects will engage interdisciplinary media arts skills and concepts mastered in the sophomore and junior years of the BFA.

Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Media Arts.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

Repeatability: This course may not be repeated for additional credits.

FMA 4443. BFA Media Arts Project II. 4 Credit Hours.

This course is the second part of the two semester Senior Capstone in the Media Arts BFA. In this production course, students will continue to develop a substantial interdisciplinary media arts project in dialogue with BFA cohort and faculty. Each student will use the project prototype created in the fall Media Arts Project I course as a blueprint for the realization of the final capstone project. Students will continue to work with the interdisciplinary team of collaborators they put together during the first semester of the course to complete their media arts project, including the finalizing, testing and development of hardware, software, content, implementation and documentation.

Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Media Arts.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in FMA 4442.

FMA 4451. Digital Animation, Compositing and Modeling. 4 Credit Hours.

Animation, image compositing and object modeling have facilitated the crossover between animation and photographic imaging, mingling the fictive and the realistic image in digital film and videomaking. This workshop explores the techniques and effects of processing and layering the moving image within film/video language and within non-linear structures. Primary focus is on 2D animation and compositing using Adobe AfterEffects with other software packages introduced as time permits.

Repeatability: This course may not be repeated for additional credits.

FMA 4453. Interactive Exhibition Design. 3 to 4 Credit Hours.

The course explores the use of interactive media for the public exhibition of historical and artistic materials in libraries, museums, or other cultural institutions. The course will teach interactive applications such as video motion tracking, projection design, VR environments and mobile Augmented Reality. Thematically, the course will explore the challenges of cultural visibility and access and aim for critical forms of public engagement with cultural production and presentation.

Repeatability: This course may not be repeated for additional credits.

FMA 4461. Interactive Narrative. 4 Credit Hours.

A creative course within a critical frame in which students make and study interactive worlds; textual, audio, graphical and video based stories, environments and games that incorporate explicit user choice. The course will be structured around a series of weekly exercises and readings, followed by a substantial final project. Students will learn necessary software. NOTE: An emphasis on interactive environments and games.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FMA 2241, FMA 2242, 'Y' in CRFM05, or 'Y' in CRFM15), (FMA 2396 or 'Y' in CRFM07), and (FMA 2451, FMA 2452, 'Y' in CRFM08, or 'Y' in CRFM16)

FMA 4462. Video Game Theory and Writing. 4 Credit Hours.

This course will look at both the critical literature that has developed around video games and other interactive environments, as well as the practice of writing video games. Student's work will combine critical essays and written game or interactive creation that explores some of the theories addressed in the course. The course will look at some of the major issues in video game studies, such as simulation, representation, play, narrative, the ergotic, cut-scenes, and interactive space and time, as well as considering how video games may engage some long-standing aesthetic and philosophic questions that predate these games themselves.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in FMA 1172.

FMA 4471. Media Arts Projects at the Kimmel: The Virtual City. 4 Credit Hours.

Graduate and undergraduate students will work with Prof. Roderick Coover and visiting artists at the Kimmel Center to create works using emerging cinematic technologies including virtual reality (VR). The course aims to produce highly experimental and collaborative media arts works oriented around themes of the city. The course will take place at main campus, center city campus and at the Kimmel Center. This course is open to students from across the arts and it encourages interdisciplinary and cross-genre collaborations of image, sound, movement and performance.

Repeatability: This course may be repeated for additional credit.

FMA 4475. The Artist in the Business World. 4 Credit Hours.

Freelance/independent contracting is the most common type of work for any emerging artist or filmmaker but newly graduated alumni often do not know how to find work or how to protect their self-interests. This seminar class is created to help juniors and seniors prepare to move from school into the working world of media production as independent contractors/freelancers. Topics to be covered include: Creating your unique brand, negotiating rates, understanding insurance and taxes for freelancers, and understanding contracts and other legal concerns of freelancing.

Repeatability: This course may not be repeated for additional credits.

FMA 4670. Topics in Film Study. 4 Credit Hours.

Lectures and screenings on a special topic arranged each semester. Topics may include: Advanced Film Theory, Third Cinema, Soundtracks, Exile Cinema, The Idea of Art Cinema, Hollywood Cinematographers, Hybrid Cinema, Gender and Sexuality. Please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (FMA major prerequisites: (FMA 1171 or 'Y' in CRFM03), (FMA 1172 or 'Y' in CRFM04), and (FMA 1142, FMA 1143, or 'Y' in CRFM02) or Comm Studies prerequisites: (CMST 2111 or 'Y' in CRCM02) and (FMA 1172 or 'Y' in CRFM04))

FMA 4671. Senior Media Culture Thesis I. 4 Credit Hours.

The planning, conceptualization, and design of a written research project that combines skills in theory, criticism, and historiography, or a producible script based on research.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FMA 3671 or FMA 3871)

FMA 4672. History of Documentary Film. 4 Credit Hours.

This course surveys broad trends in the history of non-fiction cinema from 1895 to present. Covering movements like the city symphony film, the postwar essay film, direct cinema, the personal documentary, and animated documentary, it will explore the conceptual issues facing documentary makers and introduce key debates around documentary representation.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (FMA 1172, ENG 2711 (C- or higher), or 'Y' in CRFM04)

FMA 4673. International Cinema. 4 Credit Hours.

The course will survey and examine the various cultural determinants of international film forms through screenings, lectures, and readings. It will attempt to define the differences and similarities between mainstream Hollywood cinema and the range of international film forms from Africa, Latin America, Asia, Europe, and the Middle East.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (FMA 1172, ENG 2711 (C- or higher), CMST 2111, 'Y' in CRFM04, or 'Y' in CRCM02)

FMA 4674. Anthropological Film/Media. 3 Credit Hours.

Anthropological perspectives on media studies in terms of both cultural organization and anthropological research tools; includes anthropological and communication theory, history of ethnography, and research methods with special emphasis on visual recording modes.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FMA major prerequisites: (FMA 1171 or 'Y' in CRFM03), (FMA 1172 or 'Y' in CRFM04), and (FMA 1142, FMA 1143, or 'Y' in CRFM02) or Comm Studies prerequisites: (CMST 2111 or 'Y' in CRCM02) and (FMA 1172 or 'Y' in CRFM04))

FMA 4675. Women Film/Video Artists. 4 Credit Hours.

This seminar will examine closely the work of women filmmakers and video artists and their dialogue with theories of gender representation. Working outside or against the currents of mainstream commercial practices, these media artists have taken up alternate cinematic forms, whether the independently produced feature film to experimental film and video art. Readings, screenings, and writing assignments will explore the historical, theoretical and aesthetic concerns that inform and respond to groundbreaking work by women such as Martha Rosler, Mira Nair, Trinh T. Minh-Ha, Chantal Akerman, Julie Dash, Claire Denis, Ngozi Onwurah, Sadie Benning, Samira Makmalbaf, and Miranda July, among others.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (FMA 1172, ENG 2711 (C- or higher), CMST 2111, 'Y' in CRFM04, or 'Y' in CRCM02)

FMA 4676. Sound Studies. 4 Credit Hours.

This course is an advanced study of the aesthetics and meaning of sound in film, media, and moving-image arts. Examining the acoustic across a broad spectrum of genres and media - radio, film, video, sound art - it introduces the interdisciplinary field of Sound Studies and its relevance for the history and study of cinematic sound.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (FMA 1172, ENG 2711, or 'Y' in CRFM04)

FMA 4678. Climate and the Arts. 4 Credit Hours.

This seminar class examines how film, video, visual art, architecture, music, dance, theater, literature, and social media have responded to long-term shifts in climate. Drawing on primary sources in the arts and sciences, we will explore a range of issues related to the changing climate: natural, cultural and virtual forces affecting global, socio-political and economic factors including race, class, ethnicity, gender, etc. We begin with these fundamental questions about Climate Change: What? Why? When? Who? How?... and proceed with informed research through readings and screenings to produce journal notes and a final project.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

FMA 4680. Advanced Topics in Media Arts Studies. 4 Credit Hours.

Advanced Topics in Media Arts Studies is a variable-content topics history/theory course in such media art topics as new technologies, sound, interactive video, mobile media, visual ethnography and other areas of interdisciplinary media art. This is an upper level studies course for undergraduate seniors, and students in the Film and Media Arts BFA with a concentration in Media Arts.

Department Restrictions: Must be enrolled in one of the following Departments: CA:Film & Media Arts.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Film and Media Arts.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (FMA 1451 or 'Y' in CRFM14), (FMA 1141 or 'Y' in CRFM01), (FMA 1142 or 'Y' in CRFM02), and (FMA 1171 or 'Y' in CRFM03)

FMA 4696. Senior Media Culture Thesis II. 4 Credit Hours.

The completion of the research project or script begun in FMA 4671 (0380).

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in FMA 4671.

FMA 4697. Advanced Film History. 4 Credit Hours.

Throughout its century-plus of existence, the cinema has been at once a popular entertainment, a major art form, a culture industry, and a basis for social and national identity. This course goes into depth into historical case studies to examine what film history means as an attempt to explain the richness of cinema's past. The emphasis will be on research and argumentation. Possible topics to include the political economy of the film industry, reception study, social history of cinema going, national cinema, and auteur or star agency in the studio system. NOTE: Prior to spring 2010, the course title was "History of Narrative Film."

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (FMA 1172, ENG 2711 (C- or higher), or 'Y' in CRFM04) and (FMA 2675, FMA 2676, 'Y' in CRFM11, or 'Y' in CRFM18)

FMA 4698. Writing-Intensive Study in Documentary Film. 4 Credit Hours.

An advanced course in the history, theory, and aesthetics of nonfiction film and media. The seminar will use documentary films as a starting point for a student-led research and writing projects. The emphasis may vary, but the course will examine more advanced debates in ethics, representation, and history posed by nonfiction cinema.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (FMA 1172, ENG 2711 (C- or higher), or 'Y' in CRFM04)

FMA 4770. Topics in Producing. 3 Credit Hours.

A workshop in film and media art producing. The course will address a particular producing issue each time it is offered, such as budgeting, scheduling, project development or entertainment law.

Department Restrictions: Must be enrolled in one of the following Departments: CA:Film & Media Arts.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in FMA 2771.

FMA 4771. Pathways to Media Careers. 2 Credit Hours.

This course is designed to assist FMA Juniors and Seniors in transitioning from the insulation of the classroom to "real world" careers in media production. It will provide insight into the diverse opportunities available in media at independent, corporate, and industry levels.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FMA 1171 or 'Y' in CRFM03), (FMA 1172 or 'Y' in CRFM04), and (FMA 1142, FMA 1143, or 'Y' in CRFM02)

FMA 4772. Art of the Sell. 4 Credit Hours.

In this course, students will examine the pragmatic details of the producer's role and responsibilities during each stage of a project's life, from development to distribution, utilizing a case study of a produced feature film. Concurrently, this course will foster students' development of pitching techniques that creators in the media and entertainment industry use to "sell" projects - as well as themselves - to potential collaborators, investors and consumers during a project's life cycle.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

FMA 4940. Honors Topics in Film. 4 Credit Hours.

An advanced seminar or workshop in film or video. Topics vary each semester. NOTE: Reserved for University Honors students.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

FMA 4950. Honors Topics in Media. 4 Credit Hours.

An advanced seminar or workshop in multimedia, digital media, or new technologies. Topics vary each semester. NOTE: Reserved for University Honors Students.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

FMA 4983. Honors Reading. 1 to 4 Credit Hour.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

FMA 4991. Honors Research/Project. 1 to 4 Credit Hour.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

Finance (FIN)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

FIN 0822. Investing for the Future. 4 Credit Hours.

This class will teach you about seemingly complicated financial topics in a very comprehensible manner that will help you make informed financial decisions to ensure a secure financial future. We begin with identification of common financial problems among the "young, fabulous and broke" and how to avoid them. After thinking about life and financial priorities, we address why thinking about retirement now must be at the top of your list. We examine how to compute your retirement needs and how to get there, primarily with a focus on investing in common stock. You will learn how to think smart about big ticket purchases such as cars, housing, and graduate/professional education. Finally we will make sure you understand how to create a safety net to protect your future. NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed ECE 0822, FIN 0922 or RMI 0822.

Course Attributes: GQ

Repeatability: This course may not be repeated for additional credits.

FIN 0922. Honors Investing for the Future. 4 Credit Hours.

This class will teach you about seemingly complicated financial topics in an understandable manner that will help you make well-informed "money" decisions to ensure a secure financial future. At the same time, we will use the tools learned to analyze important current events such as the constant dollar (or inflation-adjusted) minimum wage and unfunded pension liabilities. We begin with identification of common financial problems among the "young, fabulous and broke" and how to think about addressing them. After addressing life and financial priorities, you will learn why retirement savings must be at the top of your list. We examine how to compute your retirement needs and how to get there, primarily with a focus on investing in the stock market. You will learn how to think smart about big ticket purchases such as cars, housing, and graduate/professional education. Finally we will make sure you understand how to create a safety net to protect your future. NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed ECE 0822, FIN 0822 or RMI 0822.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GQ, HO

Repeatability: This course may not be repeated for additional credits.

FIN 2501. Introduction to Careers in Finance I. 1.5 Credit Hour.

This is the first 1.5 credit course in a two-course career orientation sequence offered over the fall and spring semesters. The course introduces students to various career paths in finance and prepares them for internships. The discussion of each career path covers general responsibilities, required skills, and desired academic background. The course includes various activities specific to different careers to provide students with a high level "hands-on" experience. The majority of discussed problems require Excel, and students obtain a working knowledge of it through in-class activities. Students also familiarize themselves with professional platforms used in the finance industry including Bloomberg, Capital IQ, and FactSet and learn how to find relevant information on company websites and in the SEC filings. Many classes have guest speakers who describe their own careers and job responsibilities. Note: Prior to fall 2023, the course title was "Finance Fellows I."

Class Restrictions: May not be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

FIN 2502. Introduction to Careers in Finance II. 1.5 Credit Hour.

This is the second 1.5 credit course in a two-course career orientation sequence offered over the fall and spring semesters. The course introduces students to various career paths in finance and prepares them for internships. The discussion of each career path covers general responsibilities, required skills, and desired academic background. The course includes various activities specific to different careers to provide students with a high level "hands-on" experience. The majority of discussed problems require Excel, and students obtain a working knowledge of it through in-class activities. Students also familiarize themselves with professional platforms used in the finance industry including Bloomberg, Capital IQ, and FactSet and learn how to find relevant information on company websites and in the SEC filings. Many classes have guest speakers who describe their own careers and job responsibilities. Note: Prior to fall 2023, the course title was "Finance Fellows II."

Class Restrictions: May not be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

FIN 2527. Digital Disruption in Financial Services. 3 Credit Hours.

The course provides students exposure to the current technological advances reshaping the financial services industry, using research papers, business news articles and guest speakers to highlight topics. The course focuses on blockchain, digital currencies, artificial intelligence, machine learning and the regulatory environment surrounding these innovations. The course requires intensive reading and reflection on the class speaker content. An important deliverable is a team project where students develop a fintech application.

Repeatability: This course may not be repeated for additional credits.

FIN 3101. Financial Management. 3 Credit Hours.

This course provides a survey of the financial problems associated with the life cycle of a business firm. Topics include: financial analysis and planning, capital budgeting, cost of capital, and the sources and uses of business funds. While the emphasis is on decision making within a corporate environment, the tools taught in this course are just as relevant to other forms of business organization and to personal financial management.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Construction Engr Tech, Construction Mgt Tech, Career and Technical Education, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101 or ECON 1901), (ECON 1102 or ECON 1902), (ACCT 2101 or ACCT 2103), and (STAT 2103 (may be taken concurrently), STAT 2903 (may be taken concurrently), STAT 2104 (may be taken concurrently), or MATH 3031 (may be taken concurrently))

FIN 3102. Financial Management Lab. 1 Credit Hour.

This online course is for finance majors and minors only. It is designed to provide a more in-depth study and application of topics covered in the FIN 3101/3901 courses, such as time value of money; bond and stock pricing, risk and return, financial analysis and planning, capital budgeting, cost of capital, capital structure. The course will be Excel intensive and focus on problems that require a higher level of critical problem solving skills beyond simple one-step solutions.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Finance.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FIN 3101 (may be taken concurrently), FIN 3901 (may be taken concurrently), 'Y' in CRFI01, or 'Y' in CRFI07)

FIN 3504. Intermediate Corporate Finance. 3 Credit Hours.

This course covers several areas of corporate financial management such as capital budgeting, capital structure, and firm valuation. Students learn how firms make investment decisions, determine the cost of capital, set the target leverage, and use financial statement forecasting and free cash flows to find the firm's value. Students demonstrate their proficiency in each area through an exam and case analysis using Excel.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FIN 3101, FIN 3901, 'Y' in CRFI01, or 'Y' in CRFI07)

FIN 3505. Bank Enterprise Risk Management. 3 Credit Hours.

This course covers the management of banks and other financial institutions. Topics include the risk-return tradeoffs, regulatory constraints, performance analysis, asset-liability management, and management of liquidity, interest rate, and credit risks.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FIN 3101, FIN 3901, FIN 3504, 'Y' in CRFI01, 'Y' in CRFI07, or 'Y' in CRFI02)

FIN 3506. Derivatives and Financial Risk Management. 3 Credit Hours.

This course introduces students to derivative securities. Students learn how to use, how to price, and how to trade financial derivatives such as futures, options, and swaps. Topics also include speculative and hedging strategies and financial risk management. Although the material of the course is quite quantitative, the focus is on the general principles of derivative pricing and practical use of derivatives rather than on mathematical technicalities.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FIN 3101, FIN 3901, FIN 3504, 'Y' in CRFI01, 'Y' in CRFI07, or 'Y' in CRFI02)

FIN 3507. Security Analysis and Portfolio Management. 3 Credit Hours.

This course covers the main principles of investing in financial assets. Topics include the portfolio theory, asset pricing models, fundamental security analysis, and valuation of equity and fixed income securities. Students also learn how securities are traded in the financial markets and how to evaluate the investment performance.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FIN 3101, FIN 3901, FIN 3504, 'Y' in CRFI01, 'Y' in CRFI07, or 'Y' in CRFI02)

FIN 3508. Fixed Income Modeling and Analysis. 3 Credit Hours.

This course provides a theoretical and applied analysis of the spot markets for fixed income instruments. Topics include: Estimation of zero coupon spot curves, computation of forward rates, day count conventions, valuation of bonds with embedded options, duration and convexity of bond yields, default risk probabilities, interest rate volatility, bond portfolio management strategies, and securitization. Note: Prior to fall 2017, the course title was "Money and Fixed Income Markets."

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FIN 3101, FIN 3901, 'Y' in CRFI01, or 'Y' in CRFI07)

FIN 3509. Real Estate Investment and Finance. 3 Credit Hours.

This course provides theoretical and practical analysis of investments in real estate assets. Topics include real estate interests, forms of ownership, market and site analysis, financing alternatives, and valuation techniques.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FIN 3101, FIN 3901, FIN 3504, 'Y' in CRFI01, 'Y' in CRFI07, or 'Y' in CRFI02)

FIN 3512. Financial Modeling. 3 Credit Hours.

This course teaches how to apply Excel to capital budgeting and financial statement modeling for the purposes of forecasting and valuation. Students will learn how to calculate various project performance measures, construct financial statements from trial balances, develop financial statement forecasting models, and assess the sensitivity of the obtained results to forecasting assumptions. Other topics include bond valuation, beta analysis, and optimization methods. All techniques will be illustrated by applying them to real market data from Capital IQ and FactSet.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FIN 3101, FIN 3901, FIN 3504, 'Y' in CRFI01, 'Y' in CRFI07, or 'Y' in CRFI02)

FIN 3513. Financial Statement Analysis. 3 Credit Hours.

This course teaches students to use and interpret economic and accounting information that is essential in financial analysis and valuation. By the end of the course, students should be able to use financial statements to evaluate a firm's performance, indicate key financial reporting issues, identify potential sources of financial statement manipulation, calculate and interpret financial ratios and their trends, and prepare a comprehensive financial assessment of a firm.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FIN 3101, FIN 3901, FIN 3504, 'Y' in CRFI01, 'Y' in CRFI07, or 'Y' in CRFI02)

FIN 3514. Commercial Real Estate Analysis. 3 Credit Hours.

This course is designed to give students an understanding of activities and decisions that result in the man-made environment by introducing students to the complex world of commercial real estate analysis and development. Of primary interest are principles of sound development and the procedures and interactions of the analyst/developer that are necessary to coordinate with governmental officials, community leaders, and neighbors, while meeting the needs of users of commercial real estate space. Of importance is the integration of community preferences including environmental and sustainable development issues. An understanding of commercial real estate markets and development dynamics requires an understanding of real estate assets; complex urban dynamics; pertinent laws and regulations; the use of public and private financing; and the marketing of space within an urban context. Students should also develop the skills necessary to determine the requirements for the successful financial analysis of commercial real estate development including the forecasts of future cash flows and application of appropriate financial analysis techniques.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FIN 3101, FIN 3901, 'Y' in CRFI01, or 'Y' in CRFI07)

FIN 3515. Financial Markets and Institutions for Business. 3 Credit Hours.

This course provides finance majors with a survey of financial instruments (with a focus on fixed income and money markets), markets, and institutions with a strong current events perspective. The course will have an applied managerial perspective that focuses on both how the markets are viewed by companies who need access to funding as well as the professionals that work in the financial services industry. The course is intended not only for those interested in careers in financial markets and institutions, but also for those who wish to extend their institutional industry specific knowledge.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FIN 3101 (may be taken concurrently), FIN 3901 (may be taken concurrently), 'Y' in CRFI01, or 'Y' in CRFI07)

FIN 3516. Corporate Valuation. 3 Credit Hours.

This course covers the valuation of public and private companies using discounted cash flow methods, market multiples, and hybrid models. Valuation techniques based on discounted cash flows include dividend discount models, free-cash flow models, and residual income models. Multiples-based methods use both market prices and enterprise values. The instructional format of the course is lecture supplemented with case analysis. The course extends the basic concepts of financial management beyond textbook fundamentals to practical applications. NOTE: Prior to Fall 2023, this course was titled "Advanced Corporate Finance."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FIN 3101, FIN 3901, 'Y' in CRFI01, or 'Y' in CRFI07)

FIN 3517. Financial Data Analysis. 3 Credit Hours.

This course applies the core materials in statistics and econometrics to the analysis of large financial data sets. The course covers three areas with intensive finance application: 1) statistical inference: distributions, hypothesis testing, confidence interval; 2) regression analysis: simple and multiple linear regressions, and probit/logit regression; and 3) big data and data mining: Monte Carlo simulation, and SQL. Students completing this course should be well prepared for the level of analysis required in the capstone for the asset pricing track.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FIN 3101, FIN 3901, 'Y' in CRFI01, or 'Y' in CRFI07)

FIN 3519. Introduction to Financial Planning. 3 Credit Hours.

This course provides an overview of the professional approach to personal financial planning. Topics include client/planner interactions; time value of money applications to retirement planning needs; personal financial statement development and assessment; cash flow and debt management; education planning; risk management and insurance; investment planning; employee benefits, tax and estate planning; ethics and practices standards; and practice management concepts. Note: This course only counts towards the Financial Planning major. It can't be used to satisfy any requirements for the Finance major.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FIN 3101, FIN 3901, 'Y' in CRFI01, or 'Y' in CRFI07)

FIN 3522. Advanced Portfolio Analysis. 3 Credit Hours.

This course provides majors in the asset pricing track with hands-on experience to a variety of portfolio management skills. In this course students are exposed to Capital Asset Pricing Model (CAPM), estimating betas and the Security Market Line (SML), backtesting portfolio allocation, portfolio optimization, risk parity, asset correlation, efficient frontier, Fama-French factor regression analysis, factor performance attribution and stress tests. CapitalWave's Portfolio Asset Simulator will be used as the primary means of instruction giving students an opportunity to create and adjust portfolios to different events and evaluate their performance in response to simulated news feeds using the techniques described above.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FIN 3101, FIN 3901, 'Y' in CRFI01, or 'Y' in CRFI07)

FIN 3523. Real Estate Financial Modeling. 3 Credit Hours.

The fundamentals of understanding real estate involve a combination of market conditions and economics, legal and environmental due diligence, marketing, and finance. The course is on real estate financial modeling, but will review the accompanying components involving legal and environmental due diligence. This course mixes theory and practice. The financial analysis occurs while obtaining and tracking an actual property. That property is proposed to be an apartment building, since a residential investment is the most likely that small investors can acquire. The class continues to examine real estate financial modeling, but with the use of Argus. The remainder of the class is on financing and capital structure for the project. These include remaining material on depreciation, amortization and loan financing, mezzanine and cash flow waterfalls.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FIN 3101, FIN 3901, 'Y' in CRFI01, or 'Y' in CRFI07)

FIN 3524. Real Estate Finance and Mortgage Markets. 3 Credit Hours.

This course explores real estate finance and quantitative methods that are used in the valuation of real estate. Students develop an understanding of real estate financing and valuation as well as related topics such as underwriting, risk analysis, and financial leverage. In addition, students learn about the mortgage market including a review of the government-sponsored enterprises including Fannie Mae and Freddie Mac, and the securitization process for residential and commercial mortgages. The course includes analysis of both residential and commercial real estate markets. Students will be able to set up a term sheet to attract equity capital, prepare an offering memorandum for lenders to propose financing packages, and evaluate between competing loan proposals.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FIN 3101, FIN 3901, 'Y' in CRFI01, or 'Y' in CRFI07)

FIN 3525. Real Estate Development. 3 Credit Hours.

This course evaluates ground-up development on vacant sites as well as rehabilitation, redevelopment, and acquisition investments. The course examines raw and developed land and the similarities and differences of traditional real estate product types including office, R & D, retail, warehouses, single family and multi-family residential, mixed use, and land as well as specialty uses like golf courses, assisted living, and fractional share ownership. Emphasis is on concise analysis and decision making. The course discusses the development process with topics including market analysis, site acquisition, due diligence, zoning, entitlements, approvals, site planning, building design, construction, financing, leasing, and ongoing management and disposition. Special topics like workouts and running a development company are discussed.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FIN 3101, FIN 3901, 'Y' in CRFI01, or 'Y' in CRFI07)

FIN 3526. Commercial Credit Essentials. 3 Credit Hours.

This course will introduce you to commercial credit risk analysis undertaken by financial services firms. The topics range from financial statement analysis to loan structuring and detecting problem loans. Case studies are used extensively along with mini-assignments to reinforce the learning goals for each topic. The culmination of the course is a final case study exercise that is a turn-key underwriting exercise.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FIN 3101, FIN 3901, 'Y' in CRFI01, or 'Y' in CRFI07)

FIN 3551. International Finance. 3 Credit Hours.

The course surveys theoretical and institutional aspects of international finance. Topics include the structure of global financial systems, foreign exchange markets, exchange rate risk management, and international corporate finance.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FIN 3101, FIN 3901, FIN 3504, 'Y' in CRFI01, 'Y' in CRFI07, or 'Y' in CRFI02)

FIN 3571. Owl Fund Seminar. 3 Credit Hours.

This course provides select students with the in-depth training required to manage the William C. Dunkelberg Owl Fund.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FIN 3101, FIN 3901, 'Y' in CRFI01, or 'Y' in CRFI07)

FIN 3580. Special Topics. 3 Credit Hours.

Special topics in the field of Finance.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (FIN 3101, FIN 3901, FIN 3504, 'Y' in CRFI01, 'Y' in CRFI07, or 'Y' in CRFI02)

FIN 3581. Field Experience in Finance. 3 Credit Hours.

This course allows finance majors to apply what they have learned in the classroom coupled with any professional skills they may have acquired in the workplace. The requirements of the course include: (1) an expectation that you can demonstrate a synthesis of finance concepts through the preparation of a final paper; (2) student responsibility to arrange meetings every other week with their faculty sponsor to track progress throughout the semester; and (3) a strong work ethic including self-motivation and self-discipline as well as an ability to meet deadlines is critical.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FIN 3504 or 'Y' in CRFI02) and (FIN 3507 or 'Y' in CRFI03)

FIN 3582. Independent Study. 1 to 6 Credit Hour.

Readings and/or research paper under the supervision of a faculty member.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Finance, Real Estate.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (FIN 3101, FIN 3901, 'Y' in CRFI01, or 'Y' in CRFI07)

FIN 3671. Advanced Owl Fund Seminar. 3 Credit Hours.

This course is a continuation of Finance 3571 that will focus on improving the students' skills in value investing and applied portfolio analysis. Students may register for this class only with the permission of the instructor.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in FIN 3571.

FIN 3682. Independent Study. 1 to 6 Credit Hour.

Readings and/or research paper under the supervision of a faculty member.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Finance, Real Estate.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (FIN 3101, FIN 3901, 'Y' in CRFI01, or 'Y' in CRFI07)

FIN 3901. Honors Financial Management. 3 Credit Hours.

This course provides a survey of the financial problems associated with the life cycle of a business firm. Topics include: financial analysis and planning, capital budgeting, cost of capital, and the sources and uses of business funds. While the emphasis is on decision making within a corporate environment, the tools taught in this course are just as relevant to other forms of business organization and to personal financial management. Finance 3901 is the honors section of Finance 3101 and meets the FSBM Finance 3101 requirement.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Construction Mgt Tech, Career and Technical Education, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101 or ECON 1901), (ECON 1102 or ECON 1902), (ACCT 2101 or ACCT 2103), and (STAT 2103 (may be taken concurrently), STAT 2903 (may be taken concurrently), STAT 2104 (may be taken concurrently), or MATH 3031 (may be taken concurrently))

FIN 3999. Honors Thesis I. 1 to 3 Credit Hour.

The first of a two-part sequence of courses in which independent research is conducted under the supervision of a thesis advisor from the Finance department resulting in a substantial piece of original research, roughly 30 to 50 pages in length upon completion of Finance 4999. The student must publicly present his/her findings at a Temple University Research Forum session or the equivalent during one of the two semesters during which these courses are undertaken.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Finance.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

FIN 4596. Seminar in Corporate Finance. 3 Credit Hours.

This course integrates the knowledge and skills obtained by students from other finance courses and teaches how to holistically apply them to real-world situations. The focus of the course is on financial decisions made by corporate executives. Using realistic cases, the students will learn how to perform financial analysis of a firm, compute a firm's cost of capital using publicly available data, value a firm using various methods, assess potential capital structure changes, and evaluate takeover alternatives. This is a writing intensive course that will help students further develop professional communication skills as well as satisfy the writing requirements for their degree.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Finance.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in ((FIN 3504 and FIN 3507), (FIN 3504 and 'Y' in CRFI03), (FIN 3507 and 'Y' in CRFI02), or ('Y' in CRFI02 and 'Y' in CRFI03)) and (BA 2196 (C- or higher; may be taken concurrently) or BA 2996 (C- or higher; may be taken concurrently))

FIN 4597. Seminar in Real Estate Asset Analysis. 3 Credit Hours.

This course is designed to provide students with an integrative experiential learning opportunity in real estate finance that is an ideal preparation for entry into the workplace. It covers a variety of topics including the acquisition and cash flow analysis, lease analysis, asset and property management strategies, financing strategies, disposition strategies, federal income taxation issues, risk management strategies, and standard valuation techniques for commercial real estate. Over the semester, students work on a real estate project that requires a holistic application of the skills learned in the other courses. NOTE: FIN 4597 is the required capstone course for Real Estate majors. It is also a writing intensive course that helps students further develop business communication skills as well as satisfy the writing requirements for their degree.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Real Estate.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (FIN 3509 or 'Y' in CRFI04), (RE 3501 or 'Y' in CRRE01), and (BA 2196 (C- or higher; may be taken concurrently) or BA 2996 (C- or higher; may be taken concurrently))

FIN 4598. Seminar in Financial Planning. 3 Credit Hours.

This course integrates the knowledge obtained by students throughout their studies in six areas: fundamentals of financial planning, risk management, investments, income tax planning, retirement planning, and estate planning. Over the semester, students develop and present a financial plan for a hypothetical client that requires a holistic application of the skills learned in the other financial planning courses. NOTE: FIN 4598 is the required capstone course for Financial Planning majors. It is also a writing intensive course that helps students further develop professional communication skills as well as satisfy the writing requirements for their degree.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (FIN 3507 or 'Y' in CRFI03), (FIN 3519 or 'Y' in CRFI05), and (BA 2196 (C- or higher; may be taken concurrently) or BA 2996 (C- or higher; may be taken concurrently))

FIN 4696. Seminar in Investment Analysis. 3 Credit Hours.

This course integrates the knowledge and skills obtained by students from other finance courses and teaches how to holistically apply these to real-world situations. The focus of the course is on investing in financial markets. Through realistic cases, students learn how to value stocks using fundamental and technical analysis, perform asset allocation, and evaluate a fund manager's performance. Over the semester, students complete their own investment research project that requires statistical techniques to analyze large financial data sets. This is a writing intensive course that helps students further develop professional communication skills as well as satisfy the writing requirements for their degree.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (FIN 3101, FIN 3901, 'Y' in CRFI01, or 'Y' in CRFI07), (FIN 3504 or 'Y' in CRFI02), (FIN 3507 or 'Y' in CRFI03), and (BA 2196 (C- or higher; may be taken concurrently) or BA 2996 (C- or higher; may be taken concurrently))

FIN 4999. Honors Senior Thesis II. 1 to 3 Credit Hour.

Independent research conducted under the supervision of a thesis advisor from the Finance Department resulting in a substantial piece of original research, roughly 30 to 50 pages in length. Student must publicly present his/her findings at a Temple University Research Forum session or the equivalent if this was not done in Finance 3999.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Finance.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in FIN 3999.

Foundation Program (FDPR)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

FDPR 1501. Introduction to Art and Design. 1 Credit Hour.

This course, for all Tyler first year students in art, design, and architecture, investigates the context for emerging ideas and issues relevant to contemporary practice.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

FDPR 1502. Investigations of Art and Design. 1 Credit Hour.

This course, for Tyler BFA students, continues course 1501 and addresses the area in which undeclared students may pursue majors at Tyler School of Art.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

FDPR 1503. Woodshop Fundamentals. 1 Credit Hour.

This 7 week intensive lab course will orient and train students in proper use and safety protocol in the All School Wood Shop. This class is directed at creating etiquette and knowledge that will be a guide for future courses through a student's career at the Tyler School of Art and Architecture. A thorough overview of shop safety and tool function will be introduced to students in the first weeks of this course. As this class progresses, projects will be introduced that establish woodworking joinery while implementing safe and proper use of hand tools and stationary shop equipment. By the end of this 7 week course students will attain a proper understanding and skills of basic construction methodology and terms that will act as a reference aid throughout their career. By the end of this course students will attain access to the All School Wood Shop during open hours.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

FDPR 1511. Foundation Drawing. 3 Credit Hours.

An introduction to drawing course that concentrates on developing basic formal, conceptual, and technical skills. The course examines varied media in the study of the figure, landscape, and other observational subjects. A discussion of technology in studio practice is part of all Foundation courses.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

FDPR 1512. Foundation Drawing. 3 Credit Hours.

An introduction to foundation drawing course that concentrates on developing basic formal, conceptual, and technical skills. The course examines varied media in the visualization of invented forms, use of research, and exploration of media. A discussion of technology in studio practice is part of all Foundation courses.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

FDPR 1521. 2D Foundation Principles. 3 Credit Hours.

This course introduces students to the fundamental principles of visual language, including formal, technical, and conceptual aspects of image making in two-dimensions. The emphasis is on acquiring a basic vocabulary for the discussion of 2D art and design across media, and projects focus on the construction of meaning through a variety of representational strategies. Projects in this course are carried out in black and white to emphasize value, contrast, and figure ground relationships. A discussion of technology in studio practice is part of all Foundation courses. NOTE: Enrollment is limited to students accepted for Tyler BFA programs.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

FDPR 1522. 2D Foundation Principles. 3 Credit Hours.

This course introduces students to the fundamental principles of visual language, including formal, technical, and conceptual aspects of image making in two-dimensions. The emphasis is on acquiring a basic vocabulary for the discussion of 2D art and design across media, and projects focus on the construction of meaning through a variety of representational strategies. Each 2D project provides a unique theoretical and practical context from which students are introduced to the mechanics of color. NOTE: Enrollment limited to students accepted for Tyler BFA programs.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

FDPR 1531. 3D Foundation Principles/W. 3 Credit Hours.

A foundation course, paired with BFA Foundation 1532, which teaches students the fundamentals of working with 3D form and space. The course emphasizes the utilization of a variety of basic materials, and an intensive introduction to the woodshop. A discussion of technology in studio practice is part of all Foundation courses.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Science.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Co-requisites: FDPR 1503.

Repeatability: This course may not be repeated for additional credits.

FDPR 1532. 3D Foundation Principles/C. 3 Credit Hours.

A foundation course, paired with BFA Foundation 1531, which introduces the fundamentals of working with 3D form and space. Simple materials such as paper, cardboard, wire, plaster, and clay are used, and moldmaking is introduced. A discussion of technology in studio practice is part of all Foundation courses. NOTE: Enrollment is limited to students accepted for Tyler BFA programs.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

FDPR 1541. Foundation Computer. 2 Credit Hours.

This course introduces Foundation students to the fundamentals of digital imaging and research, including research on the World Wide Web, imaging software (such as Adobe Photoshop and Adobe Illustrator), and concepts inherent in the digital image.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

FDPR 1542. Foundation Computer Lab. 0 Credit Hours.

This course introduces Foundation students to the fundamentals of digital imaging and research, including research on the World Wide Web, imaging software (such as Adobe Photoshop and Adobe Illustrator), and concepts inherent in the digital image.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

French (FREN)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

FREN 0868. World Society in Literature & Film. 3 Credit Hours.

Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindi, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

FREN 1001. Introduction to French I. 4 Credit Hours.

Introduction to the basic skills of French speaking, listening comprehension, reading, and writing in authentic cultural contexts using multimedia resources. At the end of the course students should be able to converse, write and read at the Novice Low level (ACTFL Rating Scale - see the proficiency guidelines at www.actfl.org).

Course Attributes: LA

Repeatability: This course may not be repeated for additional credits.

FREN 1002. Introduction to French II. 4 Credit Hours.

A continuation of the activities of French 1001. The basics already learned are practiced, and new patterns of oral communication and writing are introduced. Additional fundamentals of grammar, graded readings, listening and viewing activities provide further insight into Francophone cultures using multimedia resources. At the end of the course students should be able to converse, write and read at the Novice Mid-level (ACTFL Rating Scale).

Course Attributes: LA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (FREN 1001, 'C1002' in LCFR, 'B1002' in LCFR, 'C1003' in LCFR, 'B1003' in LCFR, or 'EXMPT' in LCFR)

FREN 1003. Introduction to French III. 3 Credit Hours.

Reinforces previously acquired language skills. Introduction of more subtle points of grammar, more sophisticated conversation, readings, listening and viewing activities provide deeper awareness of Francophone cultures using multimedia resources. At the end of the course students should be able to converse, write and read at the Intermediate Low level (ACTFL Rating Scale).

Course Attributes: LB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (FREN 1002, 'C1003' in LCFR, 'B1003' in LCFR, or 'EXMPT' in LCFR)

FREN 1703. Cours Pratique de Langue Française - Elements. 3 Credit Hours.

This course is offered by the Sorbonne in Paris, France. See the French advisor for placement and a full description.

Repeatability: This course may not be repeated for additional credits.

FREN 1704. Cours Pratique de Langue Française - Elements. 4 Credit Hours.

Introduction to the basic structures and vocabulary of written and oral French. Emphasis is placed on the four skills - speaking, understanding, reading, and writing. Includes 10 hours of phonetics in a phonetics laboratory. Course given in France and taught by native French speakers. Placement determined by examination administered in Paris.

Repeatability: This course may not be repeated for additional credits.

FREN 2001. Intermediate. 3 Credit Hours.

Reinforces and enhances the activities of French 1003 (C061). The student completing the course should be able to converse and write at the Intermediate Low level, and to read literary works in French at the Intermediate Mid level (ACTFL Rating Scale). NOTE: Intended as a bridge to upper-level courses.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (FREN 1003 or 'EXMPT' in LCFR)

FREN 2021. Conversation I. 3 Credit Hours.

Study of French language with intensive work in skills required for understanding and speaking. Stress on phonetics, practical vocabulary, idioms, and useful sentence structures. At the end of the course, students should be able to converse at the Intermediate Mid level (ACTFL Rating Scale - see the proficiency guidelines at www.actfl.org).

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in FREN 2001.

FREN 2041. Reading I. 3 Credit Hours.

Intensive work on skills required for reading. Emphasis on techniques to allow understanding of French texts without translating them into English. At the end of the course, students should be able to read at the Intermediate High level (ACTFL Rating Scale).

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in FREN 2001.

FREN 2096. Composition I. 3 Credit Hours.

Intensive work on skills required for writing. Stress on vocabulary and sentence patterns helpful in writing French. Use of source materials (dictionaries, reference works, specialized vocabularies, etc.). At the end of the course, students should be able to write at the Intermediate Mid level (ACTFL Rating Scale).

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in FREN 2001.

FREN 2501. French for Business I. 3 Credit Hours.

Intensive work in spoken and written French needed by business personnel and other travelers to Francophone areas. Vocabulary, idiomatic usage and special terminology for professional needs. Cultural aspects, practice in personal contact and letter writing. At the end of this course students should be able to converse, write and read at the Intermediate Mid level (ACTFL Rating Scale).

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in FREN 2001.

FREN 2703. Cours Pratique de Langue Francaise - Intermediate Level. 3 Credit Hours.

This course is offered by the Sorbonne in Paris, France. See the French advisor for placement and a full description.

Repeatability: This course may not be repeated for additional credits.

FREN 2704. Cours Pratique de Langue Francaise - Intermediate Level. 4 Credit Hours.

This course reinforces the basic skills of speaking, understanding, reading, and writing French. Emphasis on composition, conversation and some textual analysis. Introduction to French culture and civilization. Includes 10 hours of phonetics in a phonetics laboratory. Course given in France and taught by native French professors. Placement is determined by examination administered in Paris.

Repeatability: This course may not be repeated for additional credits.

FREN 3001. Advanced Grammar. 3 Credit Hours.

Review and enhancement of French grammar to ensure mastery of the structures of the written and spoken language needed for effective performance in other courses at the 3000 and 4000 levels.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in FREN 2096 and any FREN course numbered 2000 to 4999.

FREN 3021. Conversation II. 3 Credit Hours.

Enhancement of the skills developed in French 2021. At the end of this course students should be able to converse at the Intermediate High level (ACTFL Rating Scale - see the proficiency guidelines at www.actfl.org).

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in FREN 2021.

FREN 3096. Composition II. 3 Credit Hours.

Writing-intensive Capstone Course required for all French majors. Challenging reading and writing assignments. Builds on writing skills acquired at the lower intermediate level, with emphasis on composition, register and style. Students do considerable writing of different types and expand active vocabulary appropriate to style and register. At the end of this course students should be able to write at the Intermediate High level (ACTFL Rating Scale).

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (FREN 2041 and FREN 2096)

FREN 3101. Survey of French Literature I. 3 Credit Hours.

Movements, trends, and events which constitute the evolution of French literature from the Middle Ages to the Enlightenment, and an examination of the contributions of major authors in each period.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (FREN 2041 and FREN 2096)

FREN 3102. Survey of French Literature II. 3 Credit Hours.

Movements, trends and events which constitute the evolution of French literature in the 19th and 20th centuries, and an examination of the contributions of major authors in each period.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (FREN 2041 and FREN 2096)

FREN 3201. Culture and Civilization I. 3 Credit Hours.

Study of the historical, geographical, artistic, psychological, and social bases of contemporary France. This course is essential for students seeking teaching certification.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (FREN 2041 and FREN 2096)

FREN 3240. Topics in French Cinema and Literature (in English). 3 Credit Hours.

This course is designed to deepen understanding of French culture, ethnicity, and universal themes as they are portrayed in French film and literature. It explores commonality and difference between two different forms of creative expression, in particular novels that were then adapted for film, as well as works of authors and filmmakers that are not directly linked. Topics vary. Viewing of films, readings. Taught in English.

Repeatability: This course may be repeated for additional credit.

FREN 3241. French Culture through Film. 3 Credit Hours.

This course examines contemporary French cinema in the context of its relationship to modern France. Students will analyze the socio-political and cultural commentary found in selected films.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (FREN 2041 and FREN 2096)

FREN 3703. Cours Pratique de Langue Francaise - Upper Level. 3 Credit Hours.

This course is offered by the Sorbonne in Paris, France. See the French advisor for placement and a full description.

Repeatability: This course may not be repeated for additional credits.

FREN 3704. Cours Pratique de Langue Francaise - Upper Level. 4 Credit Hours.

Refines and improves oral and written proficiency in French. Emphasis on tenses, moods, syntax, and the use of language types (informal, colloquial, refined). Grammar review, composition, and textual analysis. Focus on French culture and civilization. Includes 10 hours of phonetics in a phonetics laboratory. Course given in France and taught by native French professors. Placement is determined by examination administered in Paris.

Repeatability: This course may not be repeated for additional credits.

FREN 4140. Topics in French Literature. 3 Credit Hours.

Different topics in the analysis of prose, poetry and drama. These topics include: major works considered in the aesthetic, philosophical and historical context of the Renaissance, the Classical Age and the Enlightenment; the social, political and intellectual changes as revealed in the works of the Romantics, the Realists, the Naturalists and the Symbolists; major figures of contemporary French literature, representative of the various traditional genres as well as the new approaches to both genres and criticism which the modern/post-modern authors have brought to these traditions. NOTE: This course is repeatable for credit under different topics.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (FREN 3101 and FREN 3102) and (FREN 3096 or FREN 3001)

FREN 4161. Francophone Literatures and Cultures. 3 Credit Hours.

A course in contemporary Francophone literature designed to give students an understanding of the literary, political, and cultural issues that dominate contemporary Francophone fiction from Africa, Canada and the Caribbean. Six novels will be studied with a special focus on autobiography and the position of women in different cultures. The course will be taught in French.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in FREN 3096, (FREN 3101 or FREN 3102), and FREN 3001.

FREN 4182. Independent Study. 3 Credit Hours.

Topics in French and/or Francophone literature. Considered only for extraordinary reasons. Written petition to be submitted by student and instructor before the end of the pre-registration period. NOTE: Does not replace required courses, unless specified and approved by the French advisor and department chair.

Repeatability: This course may be repeated for additional credit.

FREN 4240. Topics in French Cinema and Literature. 4 Credit Hours.

This course is designed to deepen understanding of French culture, ethnicity, and universal themes as they are portrayed in French film and literature. It explores commonality and difference between two different forms of creative expression, in particular novels that were then adapted for film, as well as works of authors and filmmakers that are not directly linked. Topics vary. Viewing of films, readings. This course is taught in English and includes a tutorial hour conducted in French.

Repeatability: This course may be repeated for additional credit.

FREN 4703. Cours Pratique de Langue Francaise - Advanced Level. 3 Credit Hours.

This course is offered by the Sorbonne in Paris, France. See the French advisor for placement and a full description.

Repeatability: This course may not be repeated for additional credits.

FREN 4704. Cours Pratique de Langue Francaise - Advanced Level. 4 Credit Hours.

Focuses on perfecting oral and written skills in French. Emphasis on the subtle points of grammar, syntax, semantics, and nuances and registers of the French language. Critical analysis of literary passages. Substantial written work. Includes 10 hours of phonetics in a phonetics laboratory. Course given in France and taught by native French professors. Placement is determined by examination administered in Paris.

Repeatability: This course may not be repeated for additional credits.

Gender, Sexuality and Women's Studies (GSWS)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

GSWS 0801. Border Crossings: Gendered Dimensions of Globalization. 3 Credit Hours.

This course explores the ways in which gender manifests in a variety of cultural and national contexts and the impact of globalization on gendered social relationships. Gender indicates the ways in which our social lives are organized around gender categories - in relation to work, family, sexuality, immigration, crime, culture, and nation-state. Globalization indicates the transnational flow of capital, goods, people, ideas, militaries, cultures, media, diseases, ecologies, and more. Questions we will explore include: How does globalization relate to settler colonialism, white supremacy, patriarchy, and racialized slavery? How do women, men, transgender, and non-binary people experience globalization differently? For example, how are their wages, compensation, and value negotiated in the global labor market? How different are experiences of women in the Global North from those of women in the Global South? We will explore these issues and others by reading scholarly studies, watching films/documentaries, and engaging in classroom discussion. The course will take an intersectional approach in considering the complex interactions between gender and other social categories such as race, religion, class, sexuality, age, ability, and nationhood in a range of geographic contexts. This intersectional approach to gender informs the course's exploration of global strategies for decolonization and collective liberation. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed LAWU 0801 or WMST 0801.

Course Attributes: GG, SI

Repeatability: This course may not be repeated for additional credits.

GSWS 0824. Gender and World Societies. 3 Credit Hours.

Learn about the history of feminine and masculine gender roles from comparative and international perspectives. Using case studies from Ancient Greece, Medieval Europe, West Africa, Victorian Britain, Modern Europe, the Middle East, South Asia, East Asia, and/or Latin America, we will explore certain themes - The State, The Sacred, Work, The Family, The Body and Sexuality, Modern Revolutionary Movements - to investigate how gender and gender roles have changed over time, and their significance today. Readings include primary sources written both by men and by women, secondary sources, novels, and films. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: Gender, Sexuality & Women's Studies 0824; History 0824, 1708, C065; Women's Studies 0824, 1708, or C065.

Course Attributes: GG, SI

Repeatability: This course may not be repeated for additional credits.

GSWS 0832. Politics of Identity in America. 3 Credit Hours.

Gay or straight. Black or white. Male or female. What do these different group identities mean to Americans? How do they influence our politics? Should we celebrate or downplay our diversity? This course explores how we think about others and ourselves as members of different groups and what consequences it has for how we treat one another. Our fundamental social identities can be a source of power or of powerlessness, a justification for inequality or for bold social reform. Students learn about the importance of race, class, gender and sexual orientation across a variety of important contexts, such as the family, workplace, schools, and popular culture and the implications these identities have on our daily lives. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed Gender, Sexuality & Women's Studies 0932, History 0832, Political Science 0832/0932, Sociology 0832 or Women's Studies 0832/0932.

Course Attributes: GD, SI

Repeatability: This course may not be repeated for additional credits.

GSWS 0851. Gender in America. 3 Credit Hours.

Being a man or a woman means feeling like a man or a woman. People display gender by learning the routines and expectations associated with being male or female. How do people learn gender? How does living in a gendered society lead to differences in power and opportunities between men and women? How do race, ethnicity and sexuality affect the way gender is experienced for these different groups? How does gender acquire such important meaning in terms of identity and behavior? Using a variety of written materials including novels that explore gender identity construction, this course looks at how gender has become such a prominent feature of life in America. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: Gender, Sexuality & Women's Studies 0851; Sociology 0851, 1676, 1696, C081, X081; Women's Studies 0851, 1676, 1696, C081, X081.

Course Attributes: GU, SI

Repeatability: This course may not be repeated for additional credits.

GSWS 0863. Living for Change: Autobiographies of Women in Radical Social Movements. 3 Credit Hours.

This course explores women's involvement in, and influences on, political culture in the U.S. through autobiographical narratives of women in social movements from the mid-20th century to the present. Historically, women's roles in society have been restricted to the private, domestic sphere, where they have been expected to fulfill their duties as wives and mothers, tasked with imparting the values of their communities to the next generation of citizens. Broader social change, however, unfolds through political activism in the public sphere, which is traditionally considered the realm of men. Consequently, across the historical record and within today's political landscape, the most visible activists and change-makers tend to be men, while women's leadership is often overlooked. In this course, we will learn about how women have consistently served as radical agents of change. We will read and discuss women's accounts of their life stories, supplemented by scholarly studies on gender and social movements. The focus of the course will be on six movements that typically are not associated with women's political and cultural work: the Black Power Movement, the American Indian Movement, the Farmworkers Movement, student and anti-war movements, disability rights movements, and LGBTQ+ movements. Questions we will consider include: Why did these women get politically involved? How were their experiences in social movements shaped by their gender? What is their cultural and political legacy? Why did they write about their lives? Why do we read their narratives? And, most importantly, what can we learn from them about what it means to live an activist life? NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: GSWS 0863/0963; WMST 0863/0963.

Course Attributes: GU, SI

Repeatability: This course may not be repeated for additional credits.

GSWS 0963. Honors Living for Change: Autobiographies of Women in Radical Social Movements. 3 Credit Hours.

This course explores women's involvement in, and influences on, political culture in the U.S. through autobiographical narratives of women in social movements from the mid-20th century to the present. Historically, women's roles in society have been restricted to the private, domestic sphere, where they have been expected to fulfill their duties as wives and mothers, tasked with imparting the values of their communities to the next generation of citizens. Broader social change, however, unfolds through political activism in the public sphere, which is traditionally considered the realm of men. Consequently, across the historical record and within today's political landscape, the most visible activists and change-makers tend to be men, while women's leadership is often overlooked. In this course, we will learn about how women have consistently served as radical agents of change. We will read and discuss women's accounts of their life stories, supplemented by scholarly studies on gender and social movements. The focus of the course will be on six movements that typically are not associated with women's political and cultural work: the Black Power Movement, the American Indian Movement, the Farmworkers Movement, student and anti-war movements, disability rights movements, and LGBTQ+ movements. Questions we will consider include: Why did these women get politically involved? How were their experiences in social movements shaped by their gender? What is their cultural and political legacy? Why did they write about their lives? Why do we read their narratives? And, most importantly, what can we learn from them about what it means to live an activist life? NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: GSWS 0863/0963; WMST 0863/0963.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GU, HO, SI

Repeatability: This course may not be repeated for additional credits.

GSWS 1076. Introduction to Gender Studies. 3 Credit Hours.

An interdisciplinary course covering a variety of perspectives on gender and sexuality, and their intersections with race, gender identity, class and other identities in U.S. society. This course explores the institution of family, the sexual division of labor, the ideologies of femininity and masculinity, and the political, economic and cultural bases of these ideologies. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. Note: Students who earned credit for "Introduction to Women's Studies" will not receive additional credits for taking "Introduction to Gender Studies."

Course Attributes: IN

Repeatability: This course may not be repeated for additional credits.

GSWS 1096. Introduction to Women's Studies. 3 Credit Hours.

An interdisciplinary course covering a variety of perspectives on women and gender. Emphasis on women in American society with consideration of special conditions of women in third world societies. Studies the central institutions of gender-including family, sexuality and love, the sexual division of labor, the ideology of femininity, and the structural basis of this ideology - women's social roles, and symbolic representations of women in culture. Special emphasis on class and racial differences and similarities. NOTE: This course can be used to satisfy a university Core Individual and Society (IN) and Writing Intensive (WI) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: IN, SI

Repeatability: This course may not be repeated for additional credits.

GSWS 1301. Foundations in Women's Studies. 3 Credit Hours.

This course explores the essential texts that define the history of Women's Studies and its evolution into the more expansive field of Gender, Sexuality and Women's Studies. The course will address how gender difference is constituted, the diversity of women's experiences in relation to class, race, sexuality, and gender identity providing the student with a common body of knowledge agreed upon by experts in the field of Gender, Sexuality and Women's Studies. The course functions as the foundation for future courses in Gender, Sexuality and Women's Studies. Students will study the works of historical contributors to feminist thought such as Sojourner Truth, Elizabeth Cady Stanton, Betty Friedan, Simone de Beauvoir, Kate Millet, bell hooks, Angela Davis, Judith Butler and others. Though this course is designed particularly with the needs of Gender, Sexuality and Women's Studies majors in mind, it will introduce to both majors and non-majors the intellectual issues, topics, and figures that embody the history of feminist struggle from its first wave in the 19th and early 20th centuries to the present day.

Repeatability: This course may not be repeated for additional credits.

GSWS 2000. Special Topics. 3 Credit Hours.

Specific cultural or social studies in gender and sexuality issues with an emphasis on interdisciplinary analyses. NOTE: A variable topics course.

Repeatability: This course may be repeated for additional credit.

GSWS 2001. Women in Religion and Society. 3 Credit Hours.

Study of both the roles and the understanding of women in primitive and major modern religious traditions, particularly of the West, including an investigation of the authoritative writings and practices of the various traditions.

Repeatability: This course may not be repeated for additional credits.

GSWS 2002. Gender in the Cinema. 3 Credit Hours.

This course uses feminist and queer film theories to critically explore how gender, queer and trans identities are depicted in Hollywood, independent, documentary, international, and experimental films. The course examines feminism's relationship to racial, class, sexuality, gender identity and other differences through the medium of film. NOTE: Students who earned credit for "Sexual Differences in the Cinema" will not receive additional credits for "Gender in the Cinema."

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

GSWS 2003. Gender in Classical Antiquity. 3 Credit Hours.

What can we learn about the lives of ancient Greek and Roman women from ancient literature - literature written primarily by men? Can we piece together the everyday lives of Greek or Roman women of any social class? Even if we believe in the equality of the sexes, would a word like "equality" have had any meaning to the ancients? In this class, we will find answers to these questions by reading Greek and Latin sources in translation as well as the works of modern Classicists. While focusing on women's lives, we will gain a greater understanding of what was expected of both genders in the ancient world.

Repeatability: This course may not be repeated for additional credits.

GSWS 2007. Creative Writing: Fiction: LGBTQ Lives. 3 Credit Hours.

In this course, students will grapple with all areas essential to the craft of writing fiction, especially as they are used to tell LGBTQ-centered stories. As LGBTQ identities have not always been accepted in the mainstream, we will also examine the use of subtext to inform plot and/or character development. Through the use of class discussion, individual and group writing activities, and workshopping peer drafts, students will hone their writing tools. By class' end, students will achieve stronger reading and writing skills as well as develop a deeper appreciation and understanding of how to apply elements of fiction to LGBTQ subject matter. Last: this classroom is a brave space, in which writers - regardless of how they identify in terms of gender or sexuality - should feel welcome to work with material that speaks their truth; as such, as peers, we will listen and respond without judgment to the various work we discuss. NOTE: Students can receive credit only once for either GSWS 2007 or LGBT 2007.

Repeatability: This course may not be repeated for additional credits.

GSWS 2022. Gender, Race, Class, and the City. 3 Credit Hours.

This course will focus on the ways that race, class, and gender significantly shape US cities and urban life. The course will explore how urban spaces reflect and perpetuate different relations of power, inequity, and identity. How do multiple and contradictory identities shape one's experience of the city? How are economic, social, and political processes interacting with public policy (or the lack thereof) to determine how resources and power are unequally distributed? How are contemporary urban sustainability initiatives imbued with racial, gender, and class politics? First, we explore critical geographic frameworks for urban analysis that help to explain the social and spatial organization of US cities. We will develop a framework for urban analysis that integrates race, class, and gender, and draws upon the geographic concepts of place and scale. Second, we will use qualitative methods to apply our integrated framework to contemporary metropolitan processes and problems in the Philadelphia area. Key topics that we will address include: everyday experiences of urban life in public and private spaces; environmental (in)justice; neoliberal urban governance; urban social movements; and urban policy and planning. NOTE: The following course numbers are cross-listed: GUS 2022, ENST 2022, or GSWS 2022; students may receive credit for only one of these instances.

Repeatability: This course may not be repeated for additional credits.

GSWS 2051. Critical Race Feminist Theory. 3 Credit Hours.

Building from the ground breaking critical race theory texts that emerged within legal academia during the early 1990s this course will consider the historical underpinnings of this literature and its implications for future feminist theory and practice. The course will investigate the limits of liberal legal remedies in addressing the severe social realities faced by many women, men, trans and non-binary people of color of various sexual identities. We will pay particular attention to the persistence of structural, institutional and everyday racism despite the rejection of race as a viable biological human concept, and its intersection with gender, gender identity and sexuality. The course will also consider how core concepts from critical race theory are deployed within transnational feminist thought and activism. Note: Students who earned credit for "Critical Race Theory and Feminist Implications" will not receive additional credits for "Critical Race Feminist Theory."

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in GSWS 1301.

GSWS 2128. Men and Masculinities. 3 Credit Hours.

This course examines and interrogates masculinity by drawing upon the diverse voices and experiences of men and boys across age, race, ethnicity, class, sexuality, ability and religion. This course will explore the social and personal meanings of "manhood" and its impact on relationships, institutions and in our public and private lives.

Repeatability: This course may not be repeated for additional credits.

GSWS 2152. Introduction to Feminist Philosophy. 3 Credit Hours.

This course covers major themes in feminist philosophy through canonical and recent texts. Themes include the sex/gender distinction; oppression, equality and justice; work and family; feminist care ethics; pornography and prostitution; sex-positivity and sex-negativity; feminist epistemology and feminist critiques of science. Throughout the course, discussions will consider the intersection of gender with race, class, disability, global location, sexuality, and age.

Repeatability: This course may not be repeated for additional credits.

GSWS 2159. Sex/Gender/Film/History. 3 Credit Hours.

Students will analyze mainstream, popular films produced in the post-WWII 20th century U.S., treating them as cultural texts that shed light on the ongoing historical struggles over gender identity and appropriate sexual behaviors.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

GSWS 2160. Topics in Women's Literature. 3 Credit Hours.

Variable content course which examines the representation of women and the literature created by English, American, or other countries' women writers. This course has been offered with many specific topics combining biography and literary texts; neglected masterpieces of American literature by black and white women; woman as hero/woman as heroine; the questions of love, marriage, and vocation for women from 1850 to 1940 and other thematic motifs of 20th and 21st century women's literature. Note: Formerly known as Women in Literature WMST 2197 and ENG 2197. Students may earn up to 6 credits of coursework taken from the following courses: ENG 2160, ENG 2197, GSWS 2160, WMST 2160, WMST 2197.

Course Attributes: SI

Repeatability: This course may be repeated for a total of 6 credit.

GSWS 2202. Religion and Human Sexuality. 3 Credit Hours.

The goal of this course is to examine the attitudes and practices of the major world religions regarding human sexuality. Topics to be covered will include marriage and procreation, and such controversial issues as abortion, homosexuality and sexual activity outside of marriage. Note: Religion and Human Sexuality is taught as a cross-listed course in Religion; Gender, Sexuality & Women's Studies; and LGBT Studies. Students may receive credit for only one of the following courses: REL 2002, LGBT 2002, GSWS 2202, WMST 2202.

Repeatability: This course may not be repeated for additional credits.

GSWS 2207. Creative Writing: Non-Fiction: Queer Lives. 3 Credit Hours.

For people who identify as members of the LGBTQIA community, queer stories carry a particular significance. In part, these stories allow members of the community to process how their sexuality has influenced their lives but also how these stories have influenced the degree to which they accept and express their sexuality. To people outside the LGBTQIA community, these stories offer a glimpse into what queer individuals have experienced. Because writing about queer lives is inherently political, these stories have often been fashioned into confining structures, such as the "coming out" story. And although this particular approach to telling these stories is important, queer lives often extend well beyond this particular moment in the development of their sexual identity - and some individuals even lack such a "moment" to serve as the core of their story. This course examines a variety of ways to approach telling these stories, for both people without and within the LGBTQIA community. NOTE: Students can receive credit only once for either LGBT 2207 or GSWS 2207.

Repeatability: This course may not be repeated for additional credits.

GSWS 2305. LGBTQ Film: The Coming of Age Genre. 3 Credit Hours.

A number of films examine how queer youth do grapple with their LGBTQIA identity in their adolescent years, thus representing the typical sociological understanding of "coming-of-age." But a number of films instead explore how members of the LGBTQIA community explore their queer identity later in life. These films focus on the more psychological understanding of "coming-of-age", a point when people, mentally, fully accept who they are, inclusive of their sexual identity. Regardless of the timing in a person's life, this life stage focuses on a shift from innocence to a more "adult" or "realistic" take on the world around us. This course explores how the queer coming of age genre renders the often-unique approach queer individuals face as they come of age. NOTE: Students can receive credit only once for either GSWS 2305 or LGBT 2305.

Repeatability: This course may not be repeated for additional credits.

GSWS 2306. LGBTQ Film: Queer Representation. 3 Credit Hours.

This course explores the way in which film has portrayed LGBTQ individuals. Drawing from a diverse slate of films, the class examines not just the various ways in which LGBTQ sexual expression has been rendered but also the political and sociological implications of this depiction over various decades. In addition, the class explores the ways in which those who have fought for LGBTQ visibility and equal rights have been framed through various films, whether they are recognizable figures in LGBTQ history or not. The class explores the ways in which these films have accomplished their goals and discusses the ways in which these films have been received. NOTE: Students can receive credit only once for either GSWS 2306 or LGBT 2306.

Repeatability: This course may not be repeated for additional credits.

GSWS 2405. Queer Lives. 3 Credit Hours.

In this course we will read autobiographical accounts (memoirs, essays, diaries, and poems) in which a significant portion of the narrative focuses on same-sex erotic attraction and/or gender difference, identified in contemporary society by the label Lesbian/Gay/Bisexual/Transgender/Intersex or the generic (and contested) Queer. The works were selected both to examine how gay and lesbian lives have been defined and altered over the course of the last sixty years and to provide a perspective of national, ethnic, religious, and racial diversity. Our main focus in the classroom will be discussion of these texts and their contexts. The classroom will be augmented by a research assignment focused on a gay or lesbian life we have not examined together in class. NOTE: This course was previously titled "Gay and Lesbian Lives." Students can earn credit only once for either "Queer Lives" or "Gay and Lesbian Lives."

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

GSWS 2406. LGBTQ Social Movements. 3 Credit Hours.

Starting in the 1950s forward, using a social science lens, this class examines the collective experience of LGBTQ-identifying lives. Focusing on various LGBTQ social movements, the course explores the various perspectives, targets, strategies, and goals of these various movements. The course also examines issues impacting the various factions within the LGBTQ community and how these factions have employed various tactics to effect social change. Starting with a basic foundation in social movement theory, class readings will explore the various targets addressed by social movements - such as science (medicine), culture, courts (legal), and states (not physical states, per se). The course will also address various ideologies (such as assimilation versus liberation). Students will leave the class with a clear sense of how to define a social movement, understand how it coalesces as a movement, how it operates, how it effects change, as the lasting impact of these various changes within society. Because not every moment that happens within the LGBTQ community happens as a consequence of one prior, the various movements we explore will not be examined chronologically. NOTE: Students can receive credit only once for either GSWS 2406 or LGBT 2406.

Repeatability: This course may not be repeated for additional credits.

GSWS 2815. Love, Marriage, and Family. 3 Credit Hours.

It is easy to assume that love, marriage, and family go together, but this has not always been the case. These concepts have a history. This course is a comparative examination of love, marriage, and family and the related themes of gender and sexuality in different historical periods and geographical areas. It includes ancient, medieval, and modern texts and materials and covers both western (European and American) and non-western (Asian, African, and perhaps Middle Eastern and Latin American) case studies. NOTE: Each instructor may place a different emphasis among those topics and regions.

Repeatability: This course may not be repeated for additional credits.

GSWS 3000. Special Topics. 3 Credit Hours.

Specific cultural, social, or political studies in gender and sexuality issues with an emphasis on interdisciplinary analyses.

Repeatability: This course may be repeated for additional credit.

GSWS 3003. Women Writers In Black Literature. 3 Credit Hours.

Examines the concerns of black women writers: philosophical overtones, universal statements, literary structures, dominant themes. Will be taught from a comparative perspective by examining representative black women writers in the United States, the Caribbean and Africa. Will include the poetry, drama, short stories and the novels of major writers including Zora Neale Hurston, Buchi Emecheta, Lorraine Hansberry, Eflia Sutherland, Sonia Sanchez, and many others. The readings will attempt to demonstrate that, notwithstanding the diversity in cultural, historical, and political backgrounds of the writers, a common thread runs through the works of black women writers.

Repeatability: This course may not be repeated for additional credits.

GSWS 3006. The American Woman: Visions and Revisions. 3 Credit Hours.

An examination of images and roles of women in American culture. Using fiction, poetry, and autobiography, we develop an understanding of stereotypes and myths and we relate these images to the real-life experiences of American women. The readings include all classes and many ethnic groups, and focus primarily on the 20th century. NOTE: Students will receive credit only once for either AMST 3096, AMST 3006, GSWS 3096, or GSWS 3006.

Repeatability: This course may not be repeated for additional credits.

GSWS 3015. Sexuality and Disability. 3 Credit Hours.

This course explores the relationship between sexuality and disability, both visible and invisible. It focuses on gender identity, sexual orientation, wellness, pleasure, technology, inequality, and sexual and erotic agency in relation to the sexual lives of persons living with disabilities. Drawing on critical disability and critical sexuality studies, the course examines historical and modern approaches to understanding how sexuality and disability intersect to impact everyone, both disabled and able-bodied.

Repeatability: This course may not be repeated for additional credits.

GSWS 3016. Sexuality Education. 3 Credit Hours.

When, where and how do we learn about sex? How does what we know about sex shape the way we understand ourselves and our relationship with others? This course explores current and historical approaches to sexuality education and its impact on constructing individual and societal sociosexual and gendered scripts and norms. We will analyze and critique formal K-12 and adult sex education programs as well as the informal ways we learn about sexuality from family, friends and the media. Students will have the opportunity to examine a range of sexuality education curricula that are in use within and outside of the United States as well as to develop their own sexuality education curriculum.

Repeatability: This course may not be repeated for additional credits.

GSWS 3017. Social Perspectives on Digital Pornography: The Other Sex Ed. 3 Credit Hours.

In the 2003 hit Broadway musical, Avenue Q, characters excitedly sing, "The Internet is for Porn!" Over the last 20 years, despite the proliferation and increasing availability of digital pornography, or pornography accessed via the internet, little is known about its impact on sociosexual and gender scripts, gender-based violence, relationships, and sexual pleasure. Using an intersectional, feminist framework, this course explores how and what pornography teaches us about, for example, gender, sexual orientation, consent, and sexual behavior. Additionally, it examines and critiques the newly emerging fields of pornography literacy and pornography studies as well as the rapidly changing legal landscape of digital privacy and censorship and their effect on consumers, creators, and distributors. Note: This course is regularly cross-listed with LGBT 3017; please be advised students can receive credit only one time for either LGBT 3017 or GSWS 3017.

Repeatability: This course may not be repeated for additional credits.

GSWS 3031. Women in Chinese Literature. 3 Credit Hours.

This course focuses on women writers and women as characters in premodern, modern, and contemporary Chinese literature. Texts will include poetry, novels, short stories, and drama. Gender, representation, and women's roles in the history of Chinese literature are among the topics that will be covered. Knowledge of Chinese is not required. The class will be conducted in English, and all readings will be in English translation. Note: This course is cross-listed with Chinese 3031 and Asian Studies 3031. Students may only receive credit once for these courses: ASST 3031, CHI 3031, or GSWS 3031.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

GSWS 3040. Special Topics. 4 Credit Hours.

Specific cultural, social, or political topics in gender and sexuality issues with an emphasis on interdisciplinary analyses.

Repeatability: This course may be repeated for additional credit.

GSWS 3082. Independent Study. 1 to 6 Credit Hour.

For students who would like to pursue topics on gender and sexuality not offered within existing courses. Original research and projects encouraged. Students will work closely with faculty in designing and carrying out the independent study. NOTE: Students must have selected a faculty advisor and submitted a formal proposal approved by their faculty advisor before registering for the course.

Repeatability: This course may be repeated for additional credit.

GSWS 3097. Feminist Theory. 3 Credit Hours.

An examination of contemporary feminist theory as it applies to various fields of academic and social discourse. The course encourages critical analysis of the foundation of knowledge. NOTE: Students will earn credit only one time for either ENG 3097 or GSWS 3097.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Course Attributes: SI, WI

Repeatability: This course may not be repeated for additional credits.

GSWS 3124. Politics of Sexual Orientation and Gender Identity. 3 Credit Hours.

This course examines the emergence and development of the movement to secure rights for gays, lesbians and bisexuals; how gays, lesbians and bisexuals are socially constructed and the influence this has on political discourse; how political issues that are relevant to the lives of gays and lesbians reach the political agenda; and the patterns of conflict and cooperation that exist among actors in and outside of government over issues such as employment discrimination, marriage, child adoption, and military service. Note: Prior to Summer 2019, this course was offered as "Politics, Rights, and Sexual Orientation." Students who earned credit for this course number under that title will not earn additional credits under the new title "Politics of Sexual Orientation and Gender Identity." This course is cross-listed with Political Science and LGBT Studies; students may only receive credit for one of the following course numbers: POLS 3124, GSWS 3124, LGBT 3124.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

GSWS 3205. Queer Novels of the 20th Century. 3 Credit Hours.

In this course, we will investigate what LGBT-themed novels of the 20th century convey about gender identity, how individuals form this identity, how an understanding (both conscious and unconscious) of this identity impacts individuals, and how the expression of sexuality dictates behavior, particularly in the LGBTQIA community. Beginning with a foundation in queer theory and various literary devices, students will build a theoretical vocabulary and lens through which to analyze a series of novels from both the US and International. The chosen novels reflect authors or works considered part of the literary LGBT "canon." Note: Students can receive credit only once for either GSWS 3205 or LGBT 3205.

Repeatability: This course may not be repeated for additional credits.

GSWS 3206. Queer Novels of the 21st Century. 3 Credit Hours.

In this course, we will investigate what various LGBTQ-themed novels tell us about LGBTQ life in the 21st Century. Starting with a historical approach of how LGBTQ novels were shaped by attitudes about LGBTQ life in the 20th century, we will determine how the representation of LGBTQ lives have evolved in novels. Our novels will explore the lives of people from across the LGBTQ spectrum. A number of the protagonists' identities also represent important intersectional identities as well, such as nationality, religion, and race. Beginning with a foundation in LGBTQ theory and various literary devices, students will build a theoretical vocabulary and lens through which to analyze a series of contemporary LGBTQ novels. NOTE: Students can receive credit only once for either GSWS 3206 or LGBT 3206.

Repeatability: This course may not be repeated for additional credits.

GSWS 3225. Women in U.S. History. 3 Credit Hours.

Explores the ways in which women have both been affected by, and helped to shape, this nation's history. Emphasis will be on how women of different socio-economic backgrounds, races, and ethnic groups have experienced colonization, American expansion, sectionalism, the industrial revolution, urbanization, immigration, war, economic depression, cultural transformations and political change. Commonalities and differences among women, as well as conflicts between them, in a society based on male supremacy will be explored. Issues on how race, ethnicity, and class affect the experience of gender will be highlighted. NOTE: Students will receive credit only once for either GSWS 3225 or HIST 3225.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

GSWS 3231. German Minority Identities: Gendered and Cultural Dimensions (in English). 3 Credit Hours.

Germany has vibrant migrant communities with ethnic and racial groups from places as diverse as Turkey, Italy, Greece, Morocco, East Africa, and Russia. This course looks at the presence of minority communities in Germany today, their history and cultural influences as well as economic contributions. Our main analytical lens will be gender - how the German host culture is shaped by concepts of femininity and masculinity, sexuality, family, and a gendered division of labor and how these concepts are challenged (and/or shored up) by the various ethnic communities. We will look at both the perception of migrants by white/native Germans (how are they portrayed in the media, film, and politics?) and we will explore the voice of the "other," i.e. the experience of minority communities living in Germany and how this influences their own cultural identities. Questions we will ask include: How does the experience of immigration affect the identity of minorities living in Germany? What does "Deutsche Kultur" (German culture) mean today? Our focus will be on how gender shapes and underlies much of these discussions on minorities in Germany as well as their negotiations of conflicting expectations of community and larger "German" culture. Course material will include critical readings, films, and other cultural texts. Taught in English. Note: Students who earned credit for "German Minorities and Cultural Identities: Gendered Dimensions" will not receive additional credits for "German Minority Identities: Gendered and Cultural Dimensions."

Repeatability: This course may not be repeated for additional credits.

GSWS 3235. Weimar Culture: Race, Gender, Sexuality and Nation (in English). 3 Credit Hours.

This class explores the contradictions in German culture during the Weimar Republic (1918-33), with particular attention to its urban centers. Berlin was considered the European capital of artistic and experimental subcultures as well as the hotbed for radical politics, whose decadent Bohemian culture of sexual experimentation, drug use, women's liberation and cabaret existed side by side with abject poverty and street violence. We will ask questions such as how Hitler could come to power in a Germany that was considered to have the most advanced science, technology, literature, philosophy and art of its time, and whose Jewish citizens contributed to all areas of society? How did a new consumerism contribute to the complacency of many Germans in the face of a violent fascism? Thereby we will pay attention to how concepts of race, gender, sexuality and nation shaped the debates of the time. We will watch movies, read literature and graphic novels, and learn about the Weimar Republic's political landscape and history. This course is conducted in English. All films are subtitled and readings are in English. Note: Students who earned credit for "Race, Gender, Sexuality, and Nation in Weimar Culture" will not receive additional credits for "Weimar Culture: Race, Gender, Sexuality and Nation."

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

GSWS 3236. Technology in Popular Culture: A Gender Analysis. 3 Credit Hours.

The wider context of this seminar is how science and technology influence and shape the world we live in. The focus is on gender related approaches - in what way does technology and its representations shape gender identity - and how this is reflected in popular culture, such as in the science fiction novel and film. Some points of discussion will be feminist critiques of technology, reproductive technologies, virtual reality, and alternative technologies as they are developed as theoretical concepts on the one hand, and are mirrored in science fiction, on the other. Note: Students who earned credit for "Gender and Technology in Popular Culture" will not receive additional credits for "Technology in Popular Culture: A Gender Analysis."

Repeatability: This course may not be repeated for additional credits.

GSWS 3259. Women and Poverty. 3 Credit Hours.

This course focuses on women's poverty in the U.S. and the social welfare policies designed to address it. We begin with an overview of poverty in the U.S., ways to measure poverty, and how to read census tables on poverty and income. We then dive into the history of the welfare state in America, starting with the Poorhouse Era and moving through 1996's welfare reform legislation. The second part of the course addresses major issues and themes in poverty scholarship: the culture of poverty thesis, low-wage work, teenage motherhood effects, marriage and single motherhood, social capital, and neighborhood effects. We conclude with a comparative analysis of U.S. and international welfare states.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

GSWS 3431. Women's Lives Modern Europe. 3 Credit Hours.

This course treats issues related to women's status and power in modern European history from the 18th century to the present. The emphasis of the course will be on the experiences of women in England, France, Germany, and Russia where many economic and political changes have occurred in the last few centuries. The purpose of this course is to discuss important issues that women have confronted in the past, and that continue to influence problems that women face today such as: personal, economic, and political power, education, sexuality, psychology, and social esteem, women's position in the home and the workplace plus the continuing question of conventional versus unconventional gender roles in Western societies. To supplement a general text and several published sources in European history, students will be reading memoirs and essays written by women on economic, political, and social issues pertaining to women, work, and the family during the past two centuries.

Repeatability: This course may not be repeated for additional credits.

GSWS 3542. Women and Society in Japan. 3 Credit Hours.

This course analyzes the changing position of women in Japanese society from ancient times to the present. Through discussions, lectures, and audiovisual materials, students learn about goddesses, female diviners, empresses, the classical female writers, women in warrior culture, women in industrializing Japan, and Japanese women's movements. NOTE: Students will receive credit only once for either GSWS 3542, ASST 3542, ASST 3942, or HIST 3542.

Repeatability: This course may not be repeated for additional credits.

GSWS 3546. Sexuality and Gender. 3 Credit Hours.

This is a historically oriented course focused on competing views of sexuality, in particular, essentialist theories and those which take a social constructionist approach. The first part of the course will lay the groundwork for the analysis of particular areas of sexuality by focusing on the transition from 19th century views of sexuality to the 20th century and on the learning of sexual scripts. The second part of the course will apply these perspectives to a variety of issues including rape, pornography, abortion, and prostitution.

Repeatability: This course may not be repeated for additional credits.

GSWS 3548. Intimate Partner Violence: Gender and Social Justice. 3 Credit Hours.

This course addresses gender-based violence, in particular, intimate partner violence. We will use intersectionality as a feminist tool in understanding how violence is mediated through the nexus of social power and control in which race, ability, sexuality, class, and other variables play a big part. Students will learn the impact of this gender-based violence on young girls, immigrants, women of color, elderly women, trans populations, lesbians and other marginalized groups within the U.S. NOTE: Students can receive credit only once for either LGBT 3548 or GSWS 3548.

Repeatability: This course may not be repeated for additional credits.

GSWS 3551. Critical Race Feminist Theory. 3 Credit Hours.

Building from the ground breaking critical race theory texts that emerged within legal academia during the early 1990s this course will consider the historical underpinnings of this literature and its implications for future feminist theory and practice. The course will investigate the limits of liberal legal remedies in addressing the severe social realities faced by many women, men, trans and non-binary people of color of various sexual identities. We will pay particular attention to the persistence of structural, institutional and everyday racism despite the rejection of race as a viable biological human concept, and its intersection with gender, gender identity and sexuality. The course will also consider how core concepts from critical race theory are deployed within transnational feminist thought and activism. Note: Students who earned credit for "Critical Race Theory and Feminist Implications" will not receive additional credits for "Critical Race Feminist Theory." This course was formerly known as GSWS 2051; students who have received credit for GSWS 2051 will not receive additional credits for GSWS 3551. Please be advised that students who have already received credit for SOC 3551 cannot receive duplicate credit for GSWS 3551.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in GSWS 1301 and (GSWS 3097 or ENG 3097)

GSWS 3559. Health and Reproduction. 3 Credit Hours.

This course will focus on health and human reproduction in the United States. We will view reproduction as both a biological and social event and will be particularly concerned with the medical and health aspects of reproduction. Decisions about child bearing, the medicalization of child bearing, fecundity, birth control, fetal and neonatal health, maternal health and new reproductive technologies are among the topics that will be considered in the research-intensive course. The course will also cover technical, methodological and statistical issues arising in the study of reproduction. NOTE: This is a research-intensive course.

Repeatability: This course may not be repeated for additional credits.

GSWS 3606. Asian Women in Transition. 3 Credit Hours.

This course introduces and compares the experiences of women in Asia and Asian women in migration to the United States in the modern period, including rural and urban women, and ordinary and elite women in the late 19th and 20th centuries. Topics include women in households, women and work, and women's activism. Duplicate credit warning: Students may only receive credit for one of the following: ASST 3696, HIST 3696, GSWS 4696, HIST 3606, GSWS 3606, or ASST 3606.

Repeatability: This course may not be repeated for additional credits.

GSWS 3722. Women and Political Violence. 3 Credit Hours.

This course examines debates on gender and political violence that usually present violence as masculine, while femininity is associated with non-violence. Particular focus is on the participation of women in left terrorist and other militant groups in the U.S. and Europe between the 1960s and 1980s, and in the Middle East in the 2000s. Female terrorists and militants in various cultural settings are generally demonized as being more dangerous and violent than their male counterparts or their roles are de-politicized as misguided, seduced lovers of the "real" male terrorist. In this course we examine gendered cultural assumptions about women's "natural" role as mothers and peacemakers and how these cultural beliefs have been translated into a feminist definition of women's political activism as non-violent. We will discuss this contradiction.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

GSWS 3900. Honors: Special Topics. 3 Credit Hours.

A variable topics course. Additional work arranged by the instructor.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

GSWS 4000. Seminar in Gender, Sexuality, and Women's Studies. 3 Credit Hours.

A variable content course which selects one of the topics necessary for a comprehensive understanding of women in society and studies it in depth. The course may focus on a particular group of women, the study of women from a specific perspective, or the position of women in a particular institution.

Repeatability: This course may be repeated for additional credit.

GSWS 4004. Women and Criminal Justice. 3 Credit Hours.

The aims are to develop an understanding of the status of women in the Criminal Justice System as offenders, victims, and workers. We will examine the extent to which status is a reflection of stereotypes of women currently in vogue or a reflection of social structural arrangements in society. Patterns of female crime, treatment within the criminal justice system, victimization, and career opportunities will be studied and compared with those of males, as well as within other societies, where data is available.

Repeatability: This course may not be repeated for additional credits.

GSWS 4389. Field Work. 3 Credit Hours.

An internship in a public or private organization or company whose mission includes advocacy on the basis of gender, sexuality and/or gender identity. This course is required for Gender, Sexuality and Women's Studies majors, but is also open to non-majors in the College of Liberal Arts. Students must write a paper or create a project related to their internship. NOTE: Placement and faculty advisors arranged prior to registration. Requires a designated supervisor at the field placement, a minimum of 7.5 internship hours per week, and a faculty advisor.

Repeatability: This course may be repeated for additional credit.

GSWS 4396. Research Seminar. 3 Credit Hours.

This course serves as the capstone for the Gender, Sexuality and Women's Studies major. Students write a substantial research paper (5000-6250 words) either drawn from and expanding upon their Gender, Sexuality and Women's Studies internship, or on another selected topic. They work closely with the instructor and each other in increasing and applying their understanding of the writing process, scholarly research, and feminist and queer methodologies. NOTE: Capstone writing course. For majors only. Note: Students who earned credit for "Research Seminar in Women's Studies" will not receive additional credits for "Research Seminar."

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Gender/Sexuality/Womens St, Lesbian Gay Bi and Transgender.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

GSWS 4411. Secularism: Jewish and Muslim Women. 3 Credit Hours.

In its three-hundred-year history as a Western concept, secularism is often defined as the opposite of religion. Religious women have alternately found western secularism to be a source of liberation (as it grants them greater civil rights) and a source of oppression (as it putatively shrinks the religious sphere). In creating feminisms through Jewish and Muslim experience, feminisms that are both secular and religious, these religious women have complicated the meanings of secularism. They have also challenged the notion that feminism is necessarily secular. This course looks at examples of Jewish and Muslim women's lives and feminist thought in the US, Europe, and the Middle East. The course will compare and contrast the feminism of these two groups of religious women, in order to more fully understand the role of concepts like secularism, feminism, and religion. NOTE: Students will earn credit only one time for either GSWS 4411, REL 4411, or JST 4411.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

GSWS 4999. Honors Thesis. 3 Credit Hours.

Individually supervised research and writing, in partial fulfillment of the requirements for graduating with Honors in Gender, Sexuality and Women's Studies. NOTE: Permission of program director required.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

Geography and Urban Studies (GUS)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

GUS 0821. Digital Mapping: From Mercator to Mashups. 4 Credit Hours.

Almost all of us interact with digital maps regularly for finding directions and the locations of services, like the nearest coffee shop. Yet for most, the inner workings of digital maps remain a mystery. This course provides an in-depth exploration of how digital maps work - what technologies support location tracking, where do the mapped data come from, and how digital maps are used to analyze geographic problems in urban and environmental planning and policy, health, and business. Along the way, you will develop quantitative literacy by learning how to acquire spatial data, make digital maps, and critically evaluate mapping applications. NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed CTRP 0821, CRP 0821 or GUS 0921.

Course Attributes: GQ, SI

Repeatability: This course may not be repeated for additional credits.

GUS 0829. The History & Significance of Race in America. 3 Credit Hours.

Why were relations between Native Americans and whites violent almost from the beginning of European settlement? How could slavery thrive in a society founded on the principle that "all men are created equal"? How comparable were the experiences of Irish, Jewish, and Italian immigrants, and why did people in the early 20th century think of them as separate "races"? What were the causes and consequences of Japanese Americans' internment in military camps during World War II? Are today's Mexican immigrants unique, or do they have something in common with earlier immigrants? Using a variety of written sources and outstanding documentaries, this course examines the racial diversity of America and its enduring consequences. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: African American Studies 0829, Africology and African American Studies 0829, Anthropology 0829, Geography and Urban Studies 0829, History 0829, Political Science 0829/0929, Sociology 0829, 0929, 1376, 1396, R059, or X059.

Course Attributes: GD, SI

Repeatability: This course may not be repeated for additional credits.

GUS 0831. Global Cities. 3 Credit Hours.

As globalization accelerates, the world becomes smaller and is transformed to an extended urban network. Even though there are places and people off the global grid in both rich and poor countries, we live in a single, interdependent urban world. This course seeks to understand this urban world. We ask questions like: How do changes in the global economy affect the lives of people from Cairo to Chicago? As 50 million people per year move into cities around the world how do those cities change? How will the massive rural to urban migration in China and India affect resources and the global environment? What is life like in cities for the majority of the world's poor? What types of plans and policies could improve cities in this century? Are wages in Philadelphia being influenced by what happens in Beijing and Bangalore? The answers will come from a wide range of perspectives, from geographers, urban planners, sociologists, and economists. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core.

Course Attributes: GG, SI

Repeatability: This course may not be repeated for additional credits.

GUS 0842. Sustainable Environments. 3 Credit Hours.

Humans are at a critical juncture in their relationship with the environment. Many of the global changes occurring in the atmosphere, climate, and oceans can be attributed to human activity. While the standard of living has increased for many people across the globe, the technological advancements that have made this possible endanger future generations because of their environmental impacts. Environmental toxins and air pollution are increasing, and fossil fuels and forests are being depleted at unsustainable rates. Now more than ever, the viability of human life depends on the scientific understanding of global environmental change, and on developing science-based policies to both protect the environment and promote human well-being in a just and sustainable manner. Course mission: enhance your capability to be environmentally informed consumers and citizens based on a sound understanding of the ecological, technological, economic, political, and ethical dimensions of environmental sustainability. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot receive credit for this course if they have successfully completed EES/Geology 0842, ENST 0842/0942, or GUS 0942.

Course Attributes: GS, SE, SF, SP, SS

Repeatability: This course may not be repeated for additional credits.

GUS 0861. Urban Dynamics: Global, Regional, and Local Connections. 3 Credit Hours.

Cities are a study in contrast - both a source of opportunity and a place where great wealth and poverty coincide. U.S. cities face enormous challenges as globalization has sparked a new era of urban innovation, yet has also intensified inequality and spurred new technologies of social control. This course asks: How have U.S. cities changed over the last century? How is globalization impacting the lives and opportunities of city dwellers? How do gender, age, race/ethnicity, class, and citizenship affect urban residents' experiences? How do urban policies and social movements advance or impede social justice across groups and places? Course topics include the social, economic, and political forces restructuring cities, inequality and diversity in the city, cities in the global economy, and the future of cities. Students cannot receive credit for this course if they have successfully completed CTRP 0861, CRP 0861 or SOC 0861.

Course Attributes: GU, SI

Repeatability: This course may not be repeated for additional credits.

GUS 0862. Development & Globalization. 3 Credit Hours.

Use historical and case study methods to study the differences between rich and poor nations and the varied strategies available for development in a globalizing world. Examine the challenges facing developing countries in historical and contemporary context and analyze the main social, cultural, and political factors that interact with the dynamic forces of the world economy. These include imperialism/colonialism, state formation, labor migration, demographic trends, gender issues in development, religious movements and nationalism, the challenges to national sovereignty, waves of democratization, culture and mass media, struggles for human rights, environmental sustainability, the advantages and disadvantages of globalization, and movements of resistance. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: History 0862, POLS 0862/0962, or SOC 0862/0962.

Course Attributes: GG, SI

Repeatability: This course may not be repeated for additional credits.

GUS 0867. World Regions and Cultures: Diversity & Interconnections. 3 Credit Hours.

What is globalization? Are we now all citizens of a global capitalist economic and truly international political order? Or do we still live mostly under the economic constraints and governmental policies of the nation states of which we are citizens? How do different regions of the world experience and negotiate cultural continuity and change in different ways due to their distinctive historical and political-economic experiences? Focusing on different regions of the world, we will investigate how cultures and societies are connected to each other, how they relate to each other, and how they compare or contrast with each other. In particular, we will examine topics such as economic development, urbanization, immigration, labor, neoliberalism, citizenship, religion, gender, democracy and human rights. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: Anthropology 0867, 1061, C061 or Geography and Urban Studies 0867.

Course Attributes: GG, SF

Repeatability: This course may not be repeated for additional credits.

GUS 0921. Honors Digital Mapping: From Mercator to Mashups. 4 Credit Hours.

Almost all of us interact with digital maps regularly for finding directions and the locations of services, like the nearest coffee shop. Yet for most, the inner workings of digital maps remain a mystery. This course provides an in-depth exploration of how digital maps work - what technologies support location tracking, where do the mapped data come from, and how digital maps are used to analyze geographic problems in urban and environmental planning and policy, health, and business. Along the way, you will develop quantitative literacy by learning how to acquire spatial data, make digital maps, and critically evaluate mapping applications. NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed CTRP 0821, CRP 0821 or GUS 0821.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GQ, HO, SI

Repeatability: This course may not be repeated for additional credits.

GUS 0942. Honors Sustainable Environments. 3 Credit Hours.

Humans are at a critical juncture in their relationship with the environment. Many of the global changes occurring in the atmosphere, climate, and oceans can be attributed to human activity. While the standard of living has increased for many people across the globe, the technological advancements that have made this possible endanger future generations because of their environmental impacts. Environmental toxins and air pollution are increasing, and fossil fuels and forests are being depleted at unsustainable rates. Now more than ever, the viability of human life depends on the scientific understanding of global environmental change, and on developing science-based policies to both protect the environment and promote human well-being in a just and sustainable manner. Course mission: enhance your capability to be environmentally informed consumers and citizens based on a sound understanding of the ecological, technological, economic, political, and ethical dimensions of environmental sustainability. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot receive credit for this course if they have successfully completed EES/Geology 0842, ENST 0842/0942 or GUS 0842.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GS, HO, SE, SF, SP, SS

Repeatability: This course may not be repeated for additional credits.

GUS 1021. Urban Society: Race, Class, and Community. 3 Credit Hours.

This course provides an introduction to the contemporary American city, emphasizing the major social trends and public issues that affect individuals and communities in urban settings. We emphasize a cross-disciplinary approach that includes examination of political, economic, spatial, social and historical aspects of city life. We also pay special attention to how racial, ethnic, and social class divisions shape the fabric of urban life. NOTE: This course can be used to satisfy the university Core Studies in Race and Individual & Society (RN) requirements. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: RN, SI

Repeatability: This course may not be repeated for additional credits.

GUS 1022. Urban Society. 1 Credit Hour.

This course provides an introduction to the contemporary American city, emphasizing the major social trends and public issues that affect individuals and communities in urban settings. We emphasize a cross-disciplinary approach that includes examination of political, economic, spatial, social and historical aspects of city life.

Repeatability: This course may not be repeated for additional credits.

GUS 1025. World Urban Patterns. 3 Credit Hours.

This course provides an introduction to cities around the world. We begin by asking basic questions about the nature of cities and the different approaches to studying them. We explore factors driving urban growth and how this growth affects urban environments. We examine questions of social organization and governance and topics related to planning and the future of the city. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors.

Course Attributes: IS

Repeatability: This course may not be repeated for additional credits.

GUS 1031. Geography of World Affairs. 3 Credit Hours.

This course examines environmental, social, demographic and economic issues in selected world regions. The course may change from semester to semester as we select a range of current topics from each part of the world, which may include, for example, the impact of drought in Africa, tourism in the Caribbean, and rapid economic growth in East Asia. We also address geopolitical themes that reflect the interaction of culture and territory, such as the conflict between ethno-religious groups for control of places that range from Sri Lanka or the Sudan. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors.

Course Attributes: IS

Repeatability: This course may not be repeated for additional credits.

GUS 1052. Introduction to the Physical Environment. 4 Credit Hours.

An environmental approach to the study of earth as a globe, earth-sun relations, weather, climate, vegetation, soils, and the hydrosphere. Abundantly illustrated by slides and films, this course brings to life the causal connections among climate, vegetation, and soils. Natural and human-induced climate change, groundwater and surface water management, and soil erosion are among the environmental problems covered. The laboratories provide hands-on experience on most topics. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement.

Course Attributes: SB

Repeatability: This course may not be repeated for additional credits.

GUS 1171. Urban Affairs. 2 Credit Hours.

A special topic of current interest in American cities frequently taught by a special lecturer from outside Temple University. Emphasis on a timely public policy issue confronting Philadelphia or its region. NOTE: Topics vary each semester. Contact the department for offerings.

Course Attributes: SI

Repeatability: This course may be repeated for additional credit.

GUS 1172. Urban Affairs. 2 Credit Hours.

A special topic of current interest in American cities frequently taught by a special lecturer from outside Temple University. Emphasis on a timely public policy issue confronting Philadelphia or its region. NOTE: Topics vary each semester. Contact the department for offerings.

Course Attributes: SI

Repeatability: This course may be repeated for additional credit.

GUS 1173. Urban Affairs. 2 Credit Hours.

A special topic of current interest in American cities frequently taught by a special lecturer from outside Temple University. Emphasis on a timely public policy issue confronting Philadelphia or its region. NOTE: Topics vary each semester. Contact the department for offerings.

Course Attributes: SI

Repeatability: This course may be repeated for additional credit.

GUS 1174. Urban Affairs. 2 Credit Hours.

A special topic of current interest in American cities frequently taught by a special lecturer from outside Temple University. Emphasis on a timely public policy issue confronting Philadelphia or its region. NOTE: Topics vary each semester. Contact the department for offerings.

Course Attributes: SI

Repeatability: This course may be repeated for additional credit.

GUS 1175. Urban Affairs. 2 Credit Hours.

A special topic of current interest in American cities frequently taught by a special lecturer from outside Temple University. Emphasis on a timely public policy issue confronting Philadelphia or its region. NOTE: Topics vary each semester. Contact the department for offerings.

Course Attributes: SI

Repeatability: This course may be repeated for additional credit.

GUS 1176. Urban Affairs. 2 Credit Hours.

A special topic of current interest in American cities frequently taught by a special lecturer from outside Temple University. Emphasis on a timely public policy issue confronting Philadelphia or its region. NOTE: Topics vary each semester. Contact the department for offerings.

Course Attributes: SI

Repeatability: This course may be repeated for additional credit.

GUS 1177. Urban Affairs. 2 Credit Hours.

A special topic of current interest in American cities frequently taught by a special lecturer from outside Temple University. Emphasis on a timely public policy issue confronting Philadelphia or its region. NOTE: Topics vary each semester. Contact the department for offerings.

Course Attributes: SI

Repeatability: This course may be repeated for additional credit.

GUS 1651. Environment and Society. 3 Credit Hours.

This course emphasizes the human dimensions of the relationship between societies and their natural environments. Students will be introduced to those ecological principles that are necessary to understand cultural, social, political, and economic questions at a variety of geographic scales. The course will consider several global, national, and local issues such as siting of noxious facilities, land use conflicts, equality of access to resources, and environmental justice.

Repeatability: This course may not be repeated for additional credits.

GUS 1961. Honors World Urban Patterns. 3 Credit Hours.

This is an honors section of World Urban Patterns. This course surveys urbanization as a global phenomenon. We examine urbanization in different cultures and societies and the analysis of problems of urban areas and related to urbanization in developed and developing countries, both western and non-western. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, IS

Repeatability: This course may not be repeated for additional credits.

GUS 2001. Cities. 3 Credit Hours.

This course is an interdisciplinary introduction to U.S. cities in the context of contemporary globalization. Students will be introduced to key concepts in the field of urban studies. We will explore different theoretical frameworks for analyzing urban patterns, processes, and daily life. In addition to globalization we will explore social justice.

Repeatability: This course may not be repeated for additional credits.

GUS 2002. Space and Place. 3 Credit Hours.

This course is an introduction to the fundamental principles of human geography and examines the relationships among space, place, environment, and culture in an effort to understand why events and processes occur at specific locations, as well as how those events and processes influence activities elsewhere. Human geography studies flows of people, money, information, cultures, and biophysical processes across space and time especially as these flows are becoming global. The unique convergence of flows in a certain location is what geographers call place. This course will explore some of the key drivers of geographic outcomes including human migration, citizenship, cultural identity, political participation or exclusion, urban life, various understandings of nature and environment, and the effects of global networks and capital on local practices and people.

Repeatability: This course may not be repeated for additional credits.

GUS 2012. Urban Ethnicity. 3 Credit Hours.

This course examines the diversity of ethnic enclaves in American cities, with a special emphasis on experiences from communities and neighborhoods in Philadelphia. This course examines sources of prejudice and discrimination, and the impact of the changing economic structure and social organization on the emergence of ethnic groups in the city. NOTE: Formerly known as GUS 4012, Urban Ethnicity. Students may receive credit for only one of the following courses: GUS 2012 or GUS 4012.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

GUS 2014. Urban Geography. 3 Credit Hours.

This course seeks to familiarize students with the new urban geography - emphasizing ecological (sustainable cities, urban donuts), economic (post Fordist accumulation), cultural (images of the city), and post modern perspectives (hi-tech corridors, mass produced aesthetic/architectural styles). It explores contemporary urban crises and challenges and examines how cities are responding. The course is designed to provide students with an understanding of (a) the new geographical patterns forming in cities; (b) the economic and cultural transformations currently underway in urban areas; (c) how geographers are responding to the transformations; (d) urban responses to global challenges; and (e) how economic systems impact the lives of urban residents, images of the cities, and spatial patterns.

Course Attributes: SF

Repeatability: This course may not be repeated for additional credits.

GUS 2017. Population Geography. 3 Credit Hours.

This course provides an introduction to human populations with respect to size, composition and spatial distribution, and the issues surrounding the geographic distribution of populations at the world, regional, and local level. Emphasis will be placed on the role of population processes (mortality, fertility, migration), and population structures (age, gender, ethnicity), on economic, social, technological and political development and changes in different parts of the world. Topics covered in this course include: population policies, theories of population change, international and domestic migration flows, cultural and economic influences on population processes, urbanization, and population related issues such as food insecurity, political conflict, poverty, health and disease, and environmental degradation. Lectures and exercises will also familiarize students to publicly available population data and introduce basic analytical techniques used to measure fertility, mortality and migration.

Repeatability: This course may not be repeated for additional credits.

GUS 2021. Philadelphia Neighborhoods. 3 Credit Hours.

This course provides an introduction to Philadelphia, its history, its people, and its problems as seen in a cross-section of urban neighborhoods. It combines lectures, readings, and slides with frequent field trips to different parts of the city.

Repeatability: This course may not be repeated for additional credits.

GUS 2022. Gender, Race, Class, and the City. 3 Credit Hours.

This course will focus on the ways that race, class, and gender significantly shape US cities and urban life. The course will explore how urban spaces reflect and perpetuate different relations of power, inequity, and identity. How do multiple and contradictory identities shape one's experience of the city? How are economic, social, and political processes interacting with public policy (or the lack thereof) to determine how resources and power are unequally distributed? How are contemporary urban sustainability initiatives imbued with racial, gender, and class politics? First, we explore critical geographic frameworks for urban analysis that help to explain the social and spatial organization of US cities. We will develop a framework for urban analysis that integrates race, class, and gender, and draws upon the geographic concepts of place and scale. Second, we will use qualitative methods to apply our integrated framework to contemporary metropolitan processes and problems in the Philadelphia area. Key topics that we will address include: everyday experiences of urban life in public and private spaces; environmental (in)justice; neoliberal urban governance; urban social movements; and urban policy and planning. NOTE: The following course numbers are cross-listed: GUS 2022, ENST 2022, or GSWS 2022; students may receive credit for only one of these instances.

Repeatability: This course may not be repeated for additional credits.

GUS 2025. American Place. 3 Credit Hours.

This course explores several basic themes on the variety of human landscapes that characterize the United States. A representative selection of places across the country is examined in lectures, readings, film, slides, and short field trips to learn about the cultures and social characteristics of the American people.

Repeatability: This course may not be repeated for additional credits.

GUS 2031. Geography of the Global Economy. 3 Credit Hours.

This course introduces students to the complex economic patterns of the world. It examines why economic activities are distributed in particular ways and the consequences of economic location decisions. It examines a variety of economic activities and geographic perspectives on economic and settlement diversity. Note: This course was previously offered under the title "Economic Geography." Please note that students can receive credit only one time for either "Economic Geography" or "Geography of the Global Economy."

Repeatability: This course may not be repeated for additional credits.

GUS 2032. Urban Systems in a Global Economy. 3 Credit Hours.

This course looks at how the global economy shapes urban society, and how people adapt to the changing global urban world. We begin examining theories, facts and debates on globalization and the development of the global economy. We then look at how cities function within an interdependent global urban system and how people actively respond to the changing economic conditions in cities around the world.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

GUS 2051. Urban Environment. 3 Credit Hours.

This course examines the interactions between theory, policy, and the urban environment. Students have the opportunity to study the urban environment not only as a physical landscape or natural ecosystem, but also as a constructed landscape shaped by local, regional and global social, economic and political processes. The course addresses issues that continue to challenge urban society, including environmental injustice and racism, degradation of local environmental quality, the impact of local-global relationships on community-scale environments and the commodification of nature.

Course Attributes: SE, SF, SP, SS

Repeatability: This course may not be repeated for additional credits.

GUS 2061. Map Interpretation. 3 Credit Hours.

This course provides students with the basic principles of mapping and spatial data handling. Topics covered include geographic scale, projections and coordinate systems, cartographic generalization, spatial data encoding, and map design and production. Emphasis will be on a variety of geographic data technologies, including cartographic production, geographic information systems, global positioning systems, environmental remote sensing, and photogrammetry.

Repeatability: This course may not be repeated for additional credits.

GUS 2071. Geography of the United States and Canada. 3 Credit Hours.

An introduction to the major regions of the United States and Canada with emphasis on changing population and economic activity patterns, the distribution of important resources, and the characteristics of major cities and metropolitan areas. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AC

Repeatability: This course may not be repeated for additional credits.

GUS 2073. African Development. 3 Credit Hours.

This course begins with a historical synopsis of the different forms of development that have taken place on the African continent. Moving beyond preconceived notions of the continent, students will delve into the social, political, economic, and biophysical realms of Africa. Students will read and debate about issues concerning African development, including, colonialism, independence movements, political conflict, globalization, neo-liberalism, society, and health. Ultimately, in this course, students will gain a deeper appreciation of the social, economic, environmental, and political development of Africa and the challenges and opportunities it faces in the future. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors.

Course Attributes: IS, SI

Repeatability: This course may not be repeated for additional credits.

GUS 2074. East and South Asia. 3 Credit Hours.

Introduction to the natural environments and diverse contemporary societies that comprise East, Southeast, and South Asia. Emphasis on such topics as poverty, economic development, and social conditions in India, Thailand, and the Philippines, as well as China, Japan, and Korea. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Note: This course is cross-listed with Asian Studies 2074. Students may only receive credit for one of these courses: GUS 2074 or ASST 2074.

Course Attributes: IS, SF

Repeatability: This course may not be repeated for additional credits.

GUS 2096. Problems of Environmental Quality. 3 Credit Hours.

Specific environmental problems, especially in the Philadelphia area. Students acting as research teams seek better understanding of such problems and practical solutions to them. Duplicate credit warning: This course was previously taught under GUS and ENST 4096. Students who have earned credit under the prior number will not earn additional credit if the course is repeated.

Course Attributes: SF, WI

Repeatability: This course may not be repeated for additional credits.

GUS 2121. Russian Cities. 3 Credit Hours.

In this course we will study the Russian city, analyzing the nexus of physical geography, climate, natural resources, ethnography, history, commerce, politics and culture on the development of urban centers in Russia. The study of Moscow and St. Petersburg will occupy much of our attention in this course, but we will also examine Russia's medieval cities ("the Golden Ring"), as well as cities in Siberia and the Far East. We will read works from the disciplines of geography, history, anthropology, and sociology, as well as works of fiction; we will also view Russian films in which a city (or the city) plays an important role.

Repeatability: This course may not be repeated for additional credits.

GUS 2197. Research Design in Geography and Urban Studies. 3 Credit Hours.

This course is an introductory survey of research design in Geography and Urban Studies. It is designed to allow students to explore what it means to conduct social science research, particularly around urban and other geographic topics of study. Students have the opportunity to learn how to collect and analyze primary and secondary data. Methods covered include case study research, interview design and technique, analysis of spatial quantitative data, and tools commonly used in community and participatory action research. Individual assignments will focus on researching urban social and cultural topics. This is a writing intensive course and will require extensive writing and revision of your assignments in a semester long assignment sequence.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

GUS 3000. Special Topics in Geography and Urban Studies. 3 Credit Hours.

Seminars on special topics that vary according to the instructor. Check the course schedule for specific seminar topics.

Repeatability: This course may be repeated for additional credit.

GUS 3001. Images of the City in Popular Culture. 3 Credit Hours.

This course examines the representations of the city in the film, fiction, art, and music of the twentieth century. We look at images of cities in general as well as images of specific cities, especially Los Angeles and New York. (When taught in Rome or Tokyo the course focus changes to take advantage of the setting.) Imaginings about the city rely on metaphors - using a work or phrase to describe by referring to another thing not literally appropriate, e.g. urban jungle. We will discuss these metaphors and become familiar with their resonance in popular culture. A large part of the course will focus on methods of visual analysis. Active participation is required.

Repeatability: This course may not be repeated for additional credits.

GUS 3005. The City in History. 3 Credit Hours.

This course looks at the city as a product of human creativity in which the goals of collective life are debated and fought out. The workings of the city are examined in history by focus on the cultural, economic, and political significance of cities as well as on urban design. The course includes visual examples from cities in Europe, West Africa, India, and Southeast Asia as well as a walking tour in the Manayunk section of Philadelphia.

Repeatability: This course may not be repeated for additional credits.

GUS 3011. Historical Geography of North America. 3 Credit Hours.

This course examines the evolution of the spatial structure of North America from the early stage of predominantly rural, localized economies to conditions that could be characterized as interconnected and urbanized. Several themes will be emphasized: 1) changes in the structure of rural settlements, 2) the expansion of the transport network, 3) the emergence of an industrial economy, and 4) changes in both the internal structure of urban places and the distribution of such places.

Repeatability: This course may not be repeated for additional credits.

GUS 3013. African Americans in Philadelphia. 3 Credit Hours.

This course examines the historical and contemporary circumstances and roles of African Americans in the Philadelphia context. A critical look at African American migration to Philadelphia, the emergence of African American ethnicity, and the nature and workings of predominantly African American institutions in the city (e.g., families, churches, education, media, cultural and recreational institutions, gangs, political movements, and organizations).

Repeatability: This course may not be repeated for additional credits.

GUS 3014. Urban Social Geography. 3 Credit Hours.

This course is designed to introduce students with the major issues in urban social geography. The general questions addressed in the course include (a) how do racial and income groups come to occupy certain sections of the city?; (b) who decides who lives where?; (c) how does a person's area of residence affect his/her behavior?; (d) what are the constraints on choosing where one lives?; and what groups are able to manipulate the geography of the city and who benefits? The course highlights interpretations associated with the cultural turn in geography and accordingly focuses on the cultural/ social vs. the "economic." Duplicate credit warning: This course was previously taught under GUS 4014. Students who have earned credit under the prior number will not earn additional credit if the course is repeated.

Repeatability: This course may not be repeated for additional credits.

GUS 3015. The Geographic Basis of Land Use Planning. 3 Credit Hours.

An examination of the forces that influence land use planning in and around American metropolitan regions. Considers economic perspectives (land values), public interest perspectives (zoning subdivision, housing and building codes, redevelopment and renewal programs, etc.), and social perspectives of land use. Also examines separately housing, commercial locations, and industrial development. Duplicate credit warning: This course was previously taught under GUS and ENST 4015. Students who have earned credit under the prior number(s) will not earn additional credit if the course is repeated.

Repeatability: This course may not be repeated for additional credits.

GUS 3016. Contemporary Issues in City Planning. 3 Credit Hours.

Detailed analysis of a specific issue affecting cities and metropolitan areas, usually with a focus on the Philadelphia metropolitan area. Issues such as sprawl, redevelopment, and sustainability are often the focus of the course.

Course Attributes: SE, SI, SS

Repeatability: This course may not be repeated for additional credits.

GUS 3018. Economic Development Planning for Cities. 3 Credit Hours.

Causes of economic decline in American cities, the history of governmental policies to promote urban economic development, and the major tools available to economic planners. Duplicate credit warning: This course was previously taught under GUS 4018. Students who have earned credit under the prior number will not earn additional credits if the course is repeated.

Repeatability: This course may not be repeated for additional credits.

GUS 3019. Community Development Workshop. 3 Credit Hours.

Students apply the insights, skills and techniques acquired during undergraduate coursework to a number of case studies and assignments drawn from different planning contexts. As in a professional office, students will work in teams to obtain experience in cooperative action and in the management of time and effort. Projects will be selected in order to expose students to the complexity of real problems, and to suggest the range of policy and planning issues which students might encounter after graduation. Senior practitioners in the Philadelphia region work with students in the workshop. Duplicate credit warning: This course was previously taught under GUS 4019. Students who have earned credit under the prior number will not earn additional credit if the course is repeated.

Repeatability: This course may not be repeated for additional credits.

GUS 3021. International Urbanization. 3 Credit Hours.

Each year the cities of the world increase by about 50 million people with most of the increase coming from cities in middle and lower income countries in Asia, South Asia and Africa. This course provides an opportunity for students to focus specifically on urbanization outside the mature urban societies of the United States, Europe and Japan. This course examines issues confronted by planners, policy makers and citizens in rapidly urbanizing areas, as well as the social and cultural tensions related to urban change. NOTE: This course is generally offered every other year. Prior to Spring 2009, the course title was "Urbanization in Developing Areas." Duplicate credit warning: This course was previously taught under GUS 4021. Students who have earned credit under the prior number will not earn additional credit if the course is repeated.

Repeatability: This course may not be repeated for additional credits.

GUS 3023. Police, Prisons, and Pollution. 3 Credit Hours.

In 2001, a group of farmworkers, environmental justice activists, and anti-prison organizers in California held a conference called "Joining Forces: Environmental Justice and the Fight against Prison Expansion." The goal was to interrogate prisons as forms of environmental racism and injustice and to build coalitions between the anti-prison and environmental justice movements. This course takes as a starting point an insight made by a group of youth participants at that conference: that the greatest threats to their communities constituted "three Ps," police, prisons, and pollution. We will explore critical texts and organizing surrounding police, prisons, and pollution. How do struggles for environmental justice intersect with organizing against police and prisons? How are racial and class disparities heightened through overlapping geographies of policing, incarceration, and environmental pollution? How do policing and imprisonment operate as environmental toxins themselves, much like pesticides and greenhouse gas emissions? As a major component of the course, students will work on group projects examining the intersections of policing, incarceration, and pollution.

Course Attributes: SE, SF, SS

Repeatability: This course may not be repeated for additional credits.

GUS 3025. Urban Crime Patterns. 3 Credit Hours.

The spatial dimensions and patterns of crime and how they vary with respect to other variables in the urban environment. Possible explanations of crime, using both current literature and Philadelphia statistics.

Repeatability: This course may not be repeated for additional credits.

GUS 3044. Urban Housing. 3 Credit Hours.

An overview of the economic, social, physical, and political forces that structure current urban housing conditions and prospects. Examination of the implications of present trends for the future and the development of rational housing policies, emphasizing the Philadelphia metropolitan area. Duplicate credit warning: This course was previously taught under GUS 4044. Students who have earned credit under the prior number will not earn additional credit if the course is repeated.

Repeatability: This course may not be repeated for additional credits.

GUS 3051. Environmental Policy Issues. 3 Credit Hours.

How are environmental policies formulated and implemented in the U.S.? Topics include the role of citizen participation in decision-making, the place of environmental impact assessment, environmental justice and equity, intergovernmental relations, and environmental obligations of the U.S. toward less developed countries.

Course Attributes: SF, SS

Repeatability: This course may not be repeated for additional credits.

GUS 3052. Environmental Problems in Asia. 3 Credit Hours.

Japan is used as an introduction and model for examining environmental issues in several East and Southeast Asian countries. Emphasis is on deforestation, river basin development, urban planning, ecotourism, and the role of non-governmental organizations. Note: This course is cross-listed with Asian Studies 3052 and Environmental Studies 3052. Students may only receive credit once for these courses: ASST 3052, ENST 3052, or GUS 3052.

Course Attributes: SE, SF, SP, SS

Repeatability: This course may not be repeated for additional credits.

GUS 3053. Climatology. 3 Credit Hours.

In this course, we study global climate patterns and the underlying processes that shape them. Among the specific topics we examine are: global distribution of individual climate elements, upper-atmospheric waves and jet streams, use of web-based maps and data, construction of climate models, U.S. climate regions, and major global climatic regions. In the course's final weeks, we consider historic climates, climate change mechanisms, and forecasted future climates.

Course Attributes: SE, SI

Repeatability: This course may not be repeated for additional credits.

GUS 3054. Energy, Resources and Society. 3 Credit Hours.

Vital nonrenewable resources are identified and their global and North American distribution, character, and utilization studied. Special attention to energy sources now in short supply and to benign renewable sources for future needs. NOTE: This course was previously titled "Energy, Resources, and Conservation" and students can receive credit only once for GUS 3054 or ENST 3054.

Repeatability: This course may not be repeated for additional credits.

GUS 3055. Environmental Hazards and Disasters. 3 Credit Hours.

This course provides a synthesis of the social and natural dimensions of disasters. Students become familiar with the concept that disasters emerge when the specific characteristics of hazards (e.g. volcanoes, droughts, floods, tsunamis) intersect with social vulnerability (e.g. class, race, gender). Case studies from around the world are used to elaborate and explore this concept. Duplicate credit warning: This course was previously taught under GUS and ENST 4051 and was previously titled "Geography of Hazards." Students who have earned credit under the prior number(s)/title will not earn additional credit if the course is repeated.

Repeatability: This course may not be repeated for additional credits.

GUS 3056. Political Ecology. 3 Credit Hours.

This course addresses the broad themes of political ecology as an academic discipline as well as a set of theoretical and methodological tools. Historically political ecology has focused on the rural developing world, but more recent work has branched out into environmental justice and resource use in industrialized societies. The course covers the concepts that have distinguished political ecology from other types of analysis like cultural and human ecology. It also introduces students to the construction of theory including a consideration of space, scale, justice, feminism, property, and nature. Finally, the course presents students with diverse case studies that may include topics like resource use, mining, bio-prospecting, forestry, conservation, fisheries, "sustainable" development, and eco-tourism. Duplicate credit warning: This course was previously taught under GUS and ENST 4056. Students who have earned credit under the prior number(s) will not earn additional credit if the course is repeated.

Course Attributes: SE, SI, SS

Repeatability: This course may not be repeated for additional credits.

GUS 3057. Sustainable Cities. 3 Credit Hours.

This course introduces the concept of urban sustainability and explores environmental problems linked to urbanization, drawing on historical analysis, social theory, landscape ecology, and city planning/design practice. Can we make cities sustainable places to live? If so, how? The goal of this course is to provide students with an opportunity to learn about the major environmental challenges facing cities in the developed and developing world and to learn about innovative solutions that cities are adopting to address them. We will also explore how the political, social, and environmental context affects a city's ability to implement sustainable policies. The course will cover topics such as sustainable city strategies, ecological footprints, urban metabolism, mega-cities, urban ecology, cities and climate change adaptation and mitigation, water management, urban gardening/farming, measuring sustainability, planning strategies, smart growth, carbon neutral cities, metropolitan governance, green buildings, environmental justice, green infrastructure, and green investment strategies, etc.

Course Attributes: SE, SF, SS

Repeatability: This course may not be repeated for additional credits.

GUS 3058. Environment and Development. 3 Credit Hours.

Is capitalism at the heart of environmental change? What does it mean to divide nations into "developed" and "developing" countries? Whose definition of progress guides policy promoting sustainable urbanization and development? How do we create parks and green infrastructure without displacing people? This course will contextualize these and related questions to understand and think critically about environment and development. By the end of the semester, you will be able to speak, read and write with fluency about contemporary nature-society relations using concrete examples drawn from historical and contemporary contexts. This course is cross-listed with ENST 3058. Duplicate Credit Warning: This course was previously offered as ENST 3097. Students may receive credit for one of the following course numbers: ENST 3097, GUS 3097, ENST 3058 or GUS 3058.

Course Attributes: SE, SF, SP

Repeatability: This course may not be repeated for additional credits.

GUS 3061. Fundamentals of Cartography. 3 Credit Hours.

This course is designed to introduce students to cartography and computer mapping. Through hands-on exercises, students will manipulate data, compare map projections, design, execute, and reproduce small-scale thematic maps suitable for publication using computer software. A final project involves the production of maps in color. NOTE: No prior computer knowledge is necessary.

Repeatability: This course may not be repeated for additional credits.

GUS 3062. Fundamentals of Geographic Information Systems. 3 Credit Hours.

This course teaches the theory and practical use of Geographic Information Systems (GIS). Major components of the course include vector and raster spatial data models and operations, including vector overlay and raster map algebra. At the end of the course students are expected to have an understanding of elementary GIS theory, working knowledge of a GIS software package, and the ability to develop GIS-based solutions to geographic modeling and analysis tasks. Note that students who take ENST 3062 will not receive duplicate credit if they register for GUS 3062.

Repeatability: This course may not be repeated for additional credits.

GUS 3063. Environmental Remote Sensing. 3 Credit Hours.

This course will teach the basic principles of environmental remote sensing using aerial photography and satellite imagery. Topics covered include the mechanics of aerial photography and satellite remote sensing systems, photointerpretation, image rectification, and image processing and classification. Emphasis will be on urban and environmental applications.

Course Attributes: SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ENST 3062 or GUS 3062)

GUS 3064. Qualitative Methods. 3 Credit Hours.

This class is designed to expose students to the purpose, scope and procedures of qualitative research, applied in different disciplines but especially in environmental studies, geography, and urban planning. It provides an opportunity for students to create qualitative research design schemes, and critically analyze research using these methods. Note: This course is equivalent to ENST 3064; students may receive credit for either ENST 3064 or GUS 3064.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GUS 2197 or ENST 2097)

GUS 3065. Census Analysis with GIS. 3 Credit Hours.

Introduction to analysis with Census data products for the US, including Decennial Census and American Community Survey. Methods for analyzing segregation, environmental justice, migration and mobility, commuting trends, etc. Students will learn how to combine Census data with data from other sources using incommensurate geographies. Heavy emphasis on open source tools. Note: Formerly offered as GUS/ENST 4068. Students who have received credit for GUS 4068, ENST 4068 or ENST 3065 will not receive additional credits for this course.

Repeatability: This course may not be repeated for additional credits.

GUS 3067. GIS and Location Analysis. 3 Credit Hours.

This course examines the concepts and techniques of location analysis - how to 1) describe the spatial arrangements of features on the earth's surface and 2) prescribe the best location or spatial arrangement of features for a particular activity - for economic and social service applications. The course introduces concepts in Geographic Information Systems (GIS) and spatial statistics to address issues of location.

Repeatability: This course may not be repeated for additional credits.

GUS 3069. GIS for Health Data Analysis. 3 Credit Hours.

Geographic Information Systems (GIS) has emerged as an essential tool for health researchers and practitioners. This course provides an introduction to the most common geographic methods utilized in health research and spatial epidemiology for mapping and analyzing health disparities, disease risk factors, health services and geographic variation in health outcomes and disease. Through lecture and laboratory exercises students will learn how to create and edit spatial data, create disease maps, develop neighborhood-based measures, conduct geographic cluster detection and point pattern analysis, map geographic health disparities, measure access to health services, and critically assess potential study bias introduced from missing geographic data or positional accuracy. Selected case studies will be presented in order to highlight methods and techniques and hands-on experience will be gained through laboratory exercises and real-world applications. Guest speakers will be invited to share their real-world examples of GIS in health research and practice.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GUS 3161, ENST 3161, SOC 3201, STAT 2103, PBHL 2219, CJ 2602, or ANTH 3771)

GUS 3071. Health Geography. 3 Credit Hours.

Health geography applies concepts and methods from the discipline of geography to study medical and health related events and topics. Health geography has a close disciplinary tie with epidemiology, biostatistics, medical ecology and medical anthropology, but it is differentiated by its focus on the spatial distributions of health/medical related events. Duplicate credit warning: This course was previously taught under ENST and GUS 4071. Students who have earned credit under the prior number(s) will not earn additional credit if the course is repeated. NOTE: This course was previously titled "Medical Geography." Students who completed the course under the prior title will not earn additional credit if the course is repeated.

Repeatability: This course may not be repeated for additional credits.

GUS 3073. Geography of Travel and Tourism. 3 Credit Hours.

This course examines the fastest growing industry in the world from a geographic perspective. Among the topics to be covered are spatial tourism models, tourism landscapes and the built environment and the impact of tourism on local cultures and economies. Several types of tourism are compared, including rural vs. urban travel, heritage tourism and ecotourism. There is also a special project that focuses on the problems of developing a tourist industry in areas that are prone to political or environmental crises. The course presents examples of both domestic and international travel destinations.

Repeatability: This course may not be repeated for additional credits.

GUS 3074. Sicily: The Land, People and Identity. 3 Credit Hours.

An introduction to the physical and social geography of Sicily, looking at its land, history, culture, and current problems as represented in literature and on film.

Repeatability: This course may not be repeated for additional credits.

GUS 3075. Comparative Regional Development. 3 Credit Hours.

This course examines the transformations that, beginning with the European expansion 500 years ago, have, to a large extent, created much of the regional variation we see in the world today. We consider theoretical approaches to understanding "modernization" and "development" and build on this foundation to look at the historic factors that have shaped different parts of the world. We also examine the political, economic, social, spatial and environmental processes that have influenced those countries that share a colonial past (our primary focus) but also may examine the transition economies of Eastern Europe, Asia and North America and Japan. NOTE: This course is generally offered every other year. Prior to Spring 2009, the course title was "Regional Development in the Third World." Duplicate credit warning: This course was previously taught under GUS 4075. Students who have earned credit under the prior number will not earn additional credit if the course is repeated.

Repeatability: This course may not be repeated for additional credits.

GUS 3076. Metropolitan Tokyo. 3 Credit Hours.

The growth and development of Tokyo, Japan, past and present. The course includes a profile of the city's many neighborhoods, economic activities, architecture, and challenges for urban planners. NOTE: Usually offered at Temple Japan.

Repeatability: This course may not be repeated for additional credits.

GUS 3085. Internship in Geography and Urban Studies. 3 Credit Hours.

This course provides coursework during both the fall and spring semester to accompany on-the-job training with local consulting firms, planning agencies, private companies, non-profits, and various state, local and federal agencies of government, mostly but not exclusively in the Philadelphia metro area. Students apply the knowledge and skills they have acquired in such courses as GIS, cartography, data handling, land use analysis, economic development of cities and others. Students need to arrange their own positions, usually after consulting with the department's internship coordinator. The search for a placement should start several months in advance of the semester or summer session when the internship will take place. The course is available to GUS majors and minors only. NOTE: Must arrange internship independently. Duplicate credit warning: This course was previously taught under GUS 4085/ENST 4085. Students who have earned credit under the prior number(s) will not earn additional credit if the course is repeated.

Repeatability: This course may not be repeated for additional credits.

GUS 3161. Spatial Statistics. 3 Credit Hours.

This course provides an introduction to statistical analysis with an emphasis on urban applications. The course covers basic statistical principles of sampling, probability, and tests of significance, measures of association; ordinary least squares regression; factor, principal component and cluster analysis and an introduction to spatial applications of these tools. The course is focused on the practical application of these techniques through exposure to the rationale and principles underpinning them. Students will attend lectures and complete problem sets that provide practical experience in the application of the theoretical concepts and methodologies. Note: This course is equivalent to ENST 3161; students may receive credit for either ENST 3161 or GUS 3161.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 0701, MATH 0702, MATH 1021, MATH 1022, MATH 1041, 'Y' in MC3, any course with attribute "QA", any course with attribute "QB", 'Y' in MC3A, 'Y' in MC3S, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC6A, 'Y' in MATW, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

GUS 3221. Land System Science. 3 Credit Hours.

This course will provide scientific and theoretical foundations and practical applications of land system science. The course will include a description of the main theories and conceptual frameworks used to understand complex interactions between human decisions and ecological processes that derive into changes in the land system. The course also explores the sustainability implications of such changes for biodiversity conservation and people's wellbeing across different locations and scales. Students will become familiar with available technologies for monitoring, modeling and predicting land system change. The course will also draw on concepts and techniques from landscape ecology, land system modeling and scenario building to teach students how to assess social and ecological consequences of land system change and to inform land use decisions. This course is cross-listed with ENST 3221.

Repeatability: This course may not be repeated for additional credits.

GUS 3307. Transportation & Culture. 3 Credit Hours.

Students will learn to approach the modern geography of transportative possibility from a critical standpoint. Rather than accepting this contemporary geography as being the outcome of supposedly "superior" transport technologies' rendering marginalized technologies obsolete, students will examine how processes of cultural, political, and environmental struggle have shaped, opened up, and in some cases limited the modern array of possibilities for human mobility. Waterborne, animal-based, and human-powered modes of transportation will receive special attention, as will ongoing debates and struggles over automobile planning and mass transit. The history of transportation will be presented as necessarily entangled with parallel histories of public protest, working-class knowledge, emergency logistics, human-animal relations, guerrilla warfare, unrealized technologies, and political oppression. The course readings will look at many parts of the world: the United States, Canada, Southeast Asia, North Africa, the Middle East, China, Western Europe, the Caribbean, and Polynesia.

Course Attributes: SF, SS

Repeatability: This course may not be repeated for additional credits.

GUS 3314. Food Studies: A Geographical Perspective. 3 Credit Hours.

This course introduces students to key issues in food studies from a geographical and environmental perspective. The course includes an overview of the agricultural transitions, and examines issues of food security, access and control, ultimately focusing attention on the question of how to produce more just food systems. A major goal of this course is to give students a basic foundation from which to understand and interpret food systems as well as to familiarize students with today's major issues in research on food. Note: This course is equivalent to ENST 3314; students may receive credit for either ENST 3314 or GUS 3314.

Course Attributes: SF, SS

Repeatability: This course may not be repeated for additional credits.

GUS 3900. Honors Special Topics. 3 Credit Hours.

Variable Honors offerings on special topics that are not part of the standard roster of courses.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

GUS 3928. Honors Metropolitan Tokyo. 3 Credit Hours.

This is an honors version of Metropolitan Tokyo. The course looks at the growth and development of Tokyo, Japan, past and present. It includes a profile of the city's many neighborhoods, economic activities, architecture, and challenges for urban planners. NOTE: Usually offered at Temple Japan.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

GUS 4000. Special Topics in Geography and Urban Studies. 3 Credit Hours.

Seminars on special topics that vary according to the instructor. Check the course schedule for specific seminar topics.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

GUS 4013. Drugs in Urban Society. 3 Credit Hours.

This course will provide an introduction to and overview of how illicit drugs have affected communities and individuals in American cities. It will focus on the history of drug use in America, the individual and social consequences of drug use, the lifestyles of crack and heroin addicts, the relationship between drugs and crime, as well as an examination of public policy options to address this problem.

Repeatability: This course may not be repeated for additional credits.

GUS 4017. Health and Environment Seminar. 3 Credit Hours.

This course addresses the relationship between community-level characteristics, such as neighborhood socioeconomic disadvantage, with health outcomes, with an emphasis on health behaviors such as substance use, exercise, and healthy eating. Access to resources such as health services and nutritious food will be examined, as will exposure to harmful or risky environment conditions that can promote disease. A methodological focus will address how environmental influence on health is analyzed, as well as how individual-level characteristics such as age, sex, and race/ethnicity may moderate such influences. The role of community level factors in health disparities will also be examined. NOTE: Students can receive credit only once for either: ENST 4017, GUS 4017, ENST 4917, or GUS 4917.

Course Attributes: SE, SF, SS

Repeatability: This course may not be repeated for additional credits.

GUS 4061. Cartographic Production. 3 Credit Hours.

A course concerned with aspects of storage, retrieval, and display of information within geographic data systems. Emphasis will be placed on computer mapping. NOTE: This course is cross-listed with ENST 4061; students will only receive credit for one course from GUS 4061 and ENST 4061.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GUS 3061 or ENST 3061)

GUS 4064. Web Mapping and GIS. 3 Credit Hours.

In this course, students will explore theoretical and practical concepts of Web Mapping (GIS and spatial data visualization on the Internet). From a theoretical perspective they will study advantages and techniques for publishing, visualizing and accessing maps and data on the Internet. This entails examining architectures of Web GIS/Web mapping systems, markup languages (e.g. HTML, XML, SVG, and KML), scripting languages, screen cartography, data sharing and geoportals, as well as social and critical perspectives toward web mapping. From a practical perspective they will learn to develop Web mapping applications including static and interactive platforms. They will also learn and work with some well-known open source software and libraries.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GUS 3062 or ENST 3062)

GUS 4065. Urban Geographic Information Systems. 3 Credit Hours.

The purpose of this course is to build on the basic principles of the introductory GIS course to demonstrate how GIS may be applied to the analysis of physical and human systems. Topics of the course include vector and raster data integration; address matching, geocoding, and network analysis; terrain and hydrological analysis; and interpolation of environmental and population data. At the end of the course the student is expected to grasp advanced GIS analysis and modeling concepts.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GUS 3062 or ENST 3062)

GUS 4066. Environmental GIS. 3 Credit Hours.

Geographic Information Systems are widely used to investigate environmental processes and to develop solutions to environmental issues. This course will build upon concepts introduced in Fundamentals of GIS to investigate how the techniques, data, and interpretations from GIS analysis are applied across a variety of environmental fields. Topics to be covered include natural hazard vulnerabilities, global climate change, renewable energy potential, environmental health, and conservation. NOTE: Students who received credit for ENST 4066 will not receive duplicate credit for completing GUS 4066.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GUS 3062 or ENST 3062)

GUS 4068. Census Analysis with GIS. 3 Credit Hours.

Introduction to analysis with Census data products for the US, including Decennial Census and American Community Survey. Methods for analyzing segregation, environmental justice, migration and mobility, commuting trends, etc. Students will learn how to combine Census data with data from other sources using incommensurate geographies. Heavy emphasis on open source tools.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GUS 3062 or ENST 3062)

GUS 4072. Advanced Remote Sensing. 3 Credit Hours.

This hands-on course will provide skills and knowledge for the effective and efficient processing and analysis of satellite data for advanced applications with emphasis in the application of remote sensing for detecting and monitoring social and environmental changes. The course will include a semester-long project where students will apply the concepts and procedures learned to their own research or a particular topic of their interest.

Course Attributes: SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GUS 3062 or ENST 3062) and (GUS 3063 or ENST 3063)

GUS 4073. Geovisualization. 3 Credit Hours.

Maps can be powerful devices for communication, but also tools for exploration of relationships among social and physical processes manifesting in space. This computer-intensive course will focus on this dual purpose of maps as tools for visual communication and visual thinking. You will create data-driven products that combine geographic and statistical visualizations for static, interactive, and animated display. Previous experience with a programming language will be helpful. A previous course in cartography is recommended but not required. Heavy emphasis on open source tools.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GUS 3161 or ENST 3161)

GUS 4078. Research Methods in Environmental Studies. 3 Credit Hours.

This course covers basic research design and methods for environmental research, consulting, and practice. We build this around the theme of environmental impact assessment (EIA). During the course of your environmental careers, most of you will be expected to conduct, reference, evaluate, or otherwise incorporate EIA into your work. Most EIA's incorporate a diverse set of research methods - and an understanding of a wide-ranging set of research methodologies, and when and how to deploy them - is a central objective for this course. The first third of the course covers project design and methods; the second third addresses the environmental impact assessment process and especially its methodological components; and the final section is a highly interactive (with much peer review) approach to the development and defense of the methodologies you employ in the research prospectus that you develop for this course.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GUS 1051, GUS 1951, ENST 1051, or ENST 1951) and (SOC 1167, PSY 1167, MATH 1013, STAT 2101, GUS 3161, or SOC 1967)

GUS 4082. Independent Study Environmental Geography. 3 Credit Hours.

Reading and/or papers undertaken by the student wishing to study a specific topic, under the active supervision of a faculty member.

Repeatability: This course may be repeated for additional credit.

GUS 4087. Mapping Practicum I. 3 Credit Hours.

Complements theoretical studies by directing advanced students through real-world cartographic experiences. The student is assigned cartographic projects and is encouraged to plan, design, and execute them for University faculty and outside firms and agencies.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GUS 3061.

GUS 4182. Independent Study Research. 1 to 3 Credit Hour.

Reading and/or papers undertaken by the student wishing to study a specific topic, under the active supervision of a faculty member.

Repeatability: This course may be repeated for additional credit.

GUS 4198. Senior Seminar in Geography and Urban Studies. 3 Credit Hours.

A topically organized seminar for senior majors or those obtaining a concentration in Geography and Urban Studies. NOTE: This course is for majors only. Students should take this course during their last semester.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Environmental Studies, Geography/Urban Studies.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in GUS 2197.

GUS 4282. Independent Study Human Geography. 1 to 3 Credit Hour.

Reading and/or papers undertaken by the student wishing to study a specific topic, under the active supervision of a faculty member.

Repeatability: This course may be repeated for additional credit.

GUS 4382. Independent Study Urban Policy. 1 to 3 Credit Hour.

Reading and/or papers undertaken by the student wishing to study a specific topic, under the active supervision of a faculty member.

Repeatability: This course may be repeated for additional credit.

GUS 4917. Honors: Health and Environment Seminar. 3 Credit Hours.

This course addresses the relationship between community-level characteristics, such as neighborhood socioeconomic disadvantage, with health outcomes, with an emphasis on health behaviors such as substance use, exercise, and healthy eating. Access to resources such as health services and nutritious food will be examined, as will exposure to harmful or risky environment conditions that can promote disease. A methodological focus will address how environmental influence on health is analyzed, as well as how individual-level characteristics such as age, sex, and race/ethnicity may moderate such influences. The role of community level factors in health disparities will also be examined. NOTE: Students can receive credit only once for either: ENST 4017, GUS 4017, ENST 4917, or GUS 4917.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: UHONORS, UHONORSTR.

Course Attributes: HO, SE, SF, SS

Repeatability: This course may not be repeated for additional credits.

GUS 4982. Honors Independent Study Environmental Geography. 1 to 3 Credit Hour.

Reading and/or papers undertaken by the student wishing to study a specific topic, under the active supervision of a faculty member.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

German (GER)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

GER 0868. World Society in Literature & Film. 3 Credit Hours.

Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindi, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

GER 0968. Honors World Society in Literature & Film. 3 Credit Hours.

Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindi, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. (This is an Honors course.) NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GG, HO

Repeatability: This course may not be repeated for additional credits.

GER 1001. Introduction to German I. 4 Credit Hours.

Classroom work devoted to understanding and speaking German and the reading of graded texts. Laboratory and videotape work stress pronunciation, aural, and oral drills based on an elementary workbook, aimed at communication.

Course Attributes: LA

Repeatability: This course may not be repeated for additional credits.

GER 1002. Introduction to German II. 4 Credit Hours.

Emphasis on understanding, speaking, reading, and writing German. Laboratory and videotapes stress communication skills.

Course Attributes: LA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GER 1001, 'C1002' in LCGE, 'B1002' in LCGE, 'C1003' in LCGE, 'B1003' in LCGE, or 'EXMPT' in LCGE)

GER 1941. Honors Literature and Culture of Central Europe in the 20th Century. 3 Credit Hours.

An introduction to the principal issues, ideas, and genres in the literature of Central Europe since 1900. Through the study of literature, cinema, and the artistic avant-garde, it explores a unique cultural history. Readings include works from Austrian, Croatian, Czech, Hungarian, and Serbian fiction. Course materials will also include the screening of feature films from the region. NOTE: (1) Offered in English. (2) This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, IS

Repeatability: This course may not be repeated for additional credits.

GER 2001. Intermediate I. 3 Credit Hours.

Review of grammar. Reading and discussion of texts of intermediate difficulty.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GER 1002, 'C2001' in LCGE, 'B2001' in LCGE, 'C1003' in LCGE, 'B1003' in LCGE, or 'EXMPT' in LCGE)

GER 2002. Intermediate II. 3 Credit Hours.

Continued refinement of grammar. Reading and discussion of textbook and newspaper articles. Increasing vocabulary and practice of basic writing skills.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GER 2001, GER 1003, or 'EXMPT' in LCGE)

GER 2011. Immersion in German. 1 to 3 Credit Hour.

A one-credit course for students who participate in our Summer Intensive German Program in Leipzig after the German II [German 1002 (0052)] level in order to reward the extra time and exposure they receive during the program.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (GER 1002, 'C1003' in LCGE, 'B1003' in LCGE, or 'EXMPT' in LCGE)

GER 2041. Reading I. 3 Credit Hours.

This course focuses on developing reading strategies for the advanced intermediate student. Through theory and practice using a broad range of documents, this course provides a bridge from foundation courses to those dealing with more sophisticated primary texts.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in GER 2001.

GER 2122. Conversation I. 3 Credit Hours.

Study of German language with intensive work in skills required for understanding and speaking. Stress on pronunciation, practical vocabulary, idioms, and useful sentence structures. At the end of the course, students should be able to converse at the Intermediate Mid level (ACTFL Rating Scale).

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in GER 2001.

GER 2131. The Contemporary German-Speaking World. 3 Credit Hours.

This course concentrates on familiarizing the student with the German-speaking countries: Germany, Switzerland, and Austria. Students explore contemporary history, geography, provinces, products, industries, customs, and cuisine of these countries. Use of the computer facilitates mapmaking, visualizing famous people and places, and accessing immediate events. Communication will be in German on such topics as contemporary politics, the environment, history, film, music, art, literature, and technology--and will improve reading, writing, speaking, and listening skills at the same time.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in GER 2001.

GER 2141. Hesse, Kafka, Mann, and Rilke. 3 Credit Hours.

This course focuses on the literary giants of modern German literature. A reading knowledge in German is required since all primary and most secondary texts will be in German, although English translation of the texts may also be used. Course readings will focus on selected stories and novels by Franz Kafka; Rainer Maria Rilke; and Nobel Prize winners Hermann Hesse and Thomas Mann.

Repeatability: This course may not be repeated for additional credits.

GER 2501. German for Business I. 3 Credit Hours.

German for Business is an advanced language course for students who wish to continue their study of German while focusing on current issues in economics and business in the German-speaking countries of Europe. The goal of the course is to advance communication and comprehension skills and to introduce the specialized vocabulary of business. Some of the topics include: German unification, the European Union, transportation and infrastructure, labor unions, the major industries and companies in Germany, taxes, workers' benefits, banking and environmental policy, travel industry, and office procedures.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in GER 2001.

GER 3011. Intensive German in Germany. 3 Credit Hours.

A course intended for German Language students who are enrolled to study abroad in a German-speaking country for a semester of the year, and need to obtain credit for courses taken at that German University.

Repeatability: This course may not be repeated for additional credits.

GER 3021. Conversation II. 3 Credit Hours.

This second level course is designed to build on skills in German oral expression acquired in German Conversation I through special focus on expanding vocabulary and idiomatic fluency, honing listening skills, improving pronunciation and awareness of different linguistic registers, and increasing the ease of oral expression through frequent practice.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in GER 2122.

GER 3096. Composition I. 3 Credit Hours.

Improvement in using the language through intensive written practice, grammar review, and study of problems in syntax and style. Use of current materials from German-speaking countries. NOTE: Capstone writing course. Required for major, minor, and language certificate in German.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in GER 2001.

GER 3101. Introduction to German Literature I. 3 Credit Hours.

This is an introduction to German literature through analysis and discussion of selected texts within the context of German literary and cultural history. The course provides an overview of significant periods, authors, genres, and topics in German literature from the earliest periods, Old High German through Middle High German to Early Modern German of the Renaissance. The course is taught in German with discussion, reading and writing components. Students are encouraged to formulate their interpretations of literary texts both orally and in written form. The course provides ample opportunity for students to strengthen their speaking and writing skills in the German language. NOTE: Conducted in German.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GER 2041 or GER 3096)

GER 3102. Introduction to German Literature II. 3 Credit Hours.

This course is a continuation of the introduction to German literature through analysis and discussion of selected texts within the context of German literary and cultural history. The course provides an overview of significant periods, authors, genres, and topics in German literature from the "Baroque" period through the Golden Ages of the 18th and 19th centuries to Modern German Literature. The course is taught in German with discussion, reading and writing components. Students are encouraged to formulate their interpretations of literary texts both orally and in written form. The course provides ample opportunity for students to strengthen their speaking and writing skills in the German language. It is recommended that the courses be scheduled in succession.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GER 2041 or GER 3096)

GER 3140. Special Topics in German Culture. 3 Credit Hours.

Unique topics arranged each term; subtitle and course description is added to each section for students to review. For more information, consult with the instructor.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GER 2001.

GER 3182. Independent Study I. 3 Credit Hours.

Supervised study of a topic area agreed upon by the student and instructor.

Repeatability: This course may be repeated for additional credit.

GER 3201. Culture and Civilization I. 3 Credit Hours.

This course will examine the German-speaking peoples through the broad spectrum of their culture, history, art and literature; explore the great events and personalities who contributed to German Culture, from the Romans and earliest records of the Germanic tribes up to the Renaissance and Reformation; and continue efforts to understand, speak, read and write German with increasing proficiency and facility. NOTE: Required for major, minor, and language certificate in German.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GER 2041 or GER 3096)

GER 3202. Culture and Civilization II. 3 Credit Hours.

This course continues the examination of the German-speaking peoples through the broad spectrum of their culture, history, art and literature; explores the great events and personalities who contributed to German Culture, from the religious wars of the 17th Century and Baroque period up to Post-War modern Germany; and continues efforts to understand, speak, read and write German with increasing proficiency and facility.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GER 2041 or GER 3096)

GER 3220. Topics in German History and Culture (taught in English). 3 Credit Hours.

This course is designed to deepen understanding of history, culture, ethnicity, and other universal themes as they are portrayed in various German-language cultural texts, including film and literature. It explores commonality and difference between different forms of creative expression, and the ways in which historical events are portrayed and discussed in culture. Topics vary. Viewing of films, readings. Taught in English. Can be taken as a cognate course for the German major.

Repeatability: This course may be repeated for additional credit.

GER 3221. German Culture through Film. 3 Credit Hours.

The course examines German cinema in the context of its relationship to German culture and history. Because film is an art form of creative expression as well as a vehicle for promoting awareness of social concerns, the course will introduce techniques of viewing, analyzing, and evaluating films as expressions of the contemporary culture. Basing our work on films of historical significance and those by premier directors, the course will explore the beginnings of the film industry, Nazi propaganda, the impact of the Oberhausen Manifesto, New German Films, and issues of gender and politics since the Wende.

Repeatability: This course may not be repeated for additional credits.

GER 3231. German Minority Identities: Gendered and Cultural Dimensions (in English). 3 Credit Hours.

Germany has vibrant migrant communities with ethnic and racial groups from places as diverse as Turkey, Italy, Greece, Morocco, East Africa, and Russia. This course looks at the presence of minority communities in Germany today, their history and cultural influences as well as economic contributions. Our main analytical lens will be gender - how the German host culture is shaped by concepts of femininity and masculinity, sexuality, family, and a gendered division of labor and how these concepts are challenged (and/or shored up) by the various ethnic communities. We will look at both the perception of migrants by white/native Germans (how are they portrayed in the media, film, and politics?) and we will explore the voice of the "other," i.e. the experience of minority communities living in Germany and how this influences their own cultural identities. Questions we will ask include: How does the experience of immigration affect the identity of minorities living in Germany? What does "Deutsche Kultur" (German culture) mean today? Our focus will be on how gender shapes and underlies much of these discussions on minorities in Germany as well as their negotiations of conflicting expectations of community and larger "German" culture. Course material will include critical readings, films, and other cultural texts. Taught in English. Note: Students who earned credit for "German Minorities and Cultural Identities: Gendered Dimensions" will not receive additional credits for "German Minority Identities: Gendered and Cultural Dimensions."

Repeatability: This course may not be repeated for additional credits.

GER 3235. Weimar Culture: Race, Gender, Sexuality and Nation (in English). 3 Credit Hours.

This class explores the contradictions in German culture during the Weimar Republic (1918-33), with particular attention to its urban centers. Berlin was considered the European capital of artistic and experimental subcultures as well as the hotbed for radical politics, whose decadent Bohemian culture of sexual experimentation, drug use, women's liberation and cabaret existed side by side with abject poverty and street violence. We will ask questions such as how Hitler could come to power in a Germany that was considered to have the most advanced science, technology, literature, philosophy and art of its time, and whose Jewish citizens contributed to all areas of society? How did a new consumerism contribute to the complacency of many Germans in the face of a violent fascism? Thereby we will pay attention to how concepts of race, gender, sexuality and nation shaped the debates of the time. We will watch movies, read literature and graphic novels, and learn about the Weimar Republic's political landscape and history. This course is conducted in English. All films are subtitled and readings are in English. Note: Students who earned credit for "Race, Gender, Sexuality, and Nation in Weimar Culture" will not receive additional credits for "Weimar Culture: Race, Gender, Sexuality and Nation."

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

GER 3275. Fin-de-Siecle Vienna: Birthplace of Modernity around 1900. 3 Credit Hours.

An interdisciplinary approach to the cultural and political transformations taking place in Vienna around 1900 (art, architecture, literature, psychoanalysis, music). The common contexts and interconnections between writers such as Schnitzler, Hofmannsthal, Altenberg, and Kraus, Freud's psychoanalysis, Klimt and Schiele's "Jugendstil," the architectural innovations of Wagner, Loos and the Ringstrasse, and the music of Mahler, R. Strauss, and Schoenberg. Focus on issues such as sexuality, disease, desire, and modernity. The rise of mass politics and modern anti-Semitism will also be discussed.

Repeatability: This course may not be repeated for additional credits.

GER 3282. Independent Study II. 3 Credit Hours.

The theme for this course will be decided by the Core-Coordinators based on the needs and interests of the students enrolled. The course is intended for German majors/minors.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GER 2001.

GER 3363. Diabolical Dilemmas: The Faust Theme in German Literature. 3 Credit Hours.

What is meant by the term "Faustian"? Since ancient times, western societies have fostered the idea that one should strive constantly to achieve all that is in one's power. At the same time, we have been careful to set ethical and cultural limits and punish those who have overstepped these boundaries. Focusing on tracing the development and permutations of the themes of the Faust legend in Germany over the past 200 years, this course investigates literary treatments of such transgressors in German literature and film, and compares them to actual situations presenting ethical dilemmas. NOTE: (1) The course is conducted in German. (2) In Fall 2010, this course will focus on historical, literary, and philosophical aspects of the concept Faustian through literary works including Goethe's Faust, Duerrenmatt's Physicists, and Thomas Mann's Mario and the Magician, as well as representations in art, music, and film. Discussion, reports, periodic examinations.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in GER 3102.

GER 4140. Seminar in Special Topic. 3 Credit Hours.

Topic varies each semester. NOTE: Offered in English.

Repeatability: This course may be repeated for additional credit.

GER 4141. German Expressionism. 3 Credit Hours.

German Expressionism (ca. 1910-1920) is certainly one of the most innovative artistic movements in the history of German culture; it is certainly the most revolutionary. The course will trace the development of Expressionism in the arts with the major emphasis on literature. Authors such as Kafka, Trakl, Wedekind, and Werfel, will be read. The course also focuses on the beginnings of German cinema as seen in the works of F. Lang, E. Lubitsch, and F. Murnau. The rich art production of Beckmann, Kandinsky, Marc, and others will add to our understanding of the revolutionary nature of German Expressionism. This course is conducted in German.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in GER 3102.

GER 4142. Novelle. 3 Credit Hours.

By reading, discussing, and writing about novellas recognized as significant representative works of the genre, the course aims to provide students with tools to: locate the novella's place in German literature within cultural settings; become acquainted with research into the genre; and practice, refresh and expand all language skills, especially reading, writing, and vocabulary development skills. All of the selected texts share thematic aspects of the supernatural or surreal as integral to development of the hallmark novella twist of plot. NOTE: The course is conducted in German.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in GER 3102.

GER 4144. The Golden Age: Goethe and Schiller. 3 Credit Hours.

The course provides an introduction to the literary and philosophical developments of the classical period in German literature through an intensive reading and analysis of the prose, plays, and poems of Goethe and Schiller. The examination of this critical period in German literature/culture will be carried out by also scrutinizing representative works from the Storm and Stress period, as well as Early Romanticism. NOTE: The course is conducted in German.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in GER 3102.

GER 4145. Twentieth Century Drama: From Expressionism to the Absurd and Beyond. 3 Credit Hours.

A selection of representative German theatrical works from Expressionism to the present (Hauptmann, Hofmannsthal, Brecht, Goering, Kaiser, Duerrenmatt, Frisch, Peter Weiss, Handke, Turrini), focusing on historical and cultural contexts as well as literary and linguistic analysis. Discussion, reports, and videos. NOTE: The course is conducted in German.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in GER 3102.

GER 4146. Twentieth Century Prose: Searching for Identity. 3 Credit Hours.

In various types of writing - novel, novelle, short story, epistolary literature - German-speaking poets of the past century revealed a continuing, but not necessarily satisfying, search for identity. This course aims to trace that trajectory by studying representative works from Germany, Austria, and Switzerland. Readings include works by Thomas Mann, Hesse, Kafka, Seghers, Brussig, Borchert, Boell, Heym, Grass, Oezdamar, and Werfel. Discussion, videos, oral and written reports. NOTE: The course is conducted in German.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GER 2041 or GER 3096)

GER 4147. Kafka. 3 Credit Hours.

Franz Kafka is justly regarded as one of the seminal writers of the 20th century. The simplicity of his language, combined with fantasy-based situations, produces texts with surprising twists, dark humor, and great spiritual depth. They capture the deliberations of a man both fascinated and imprisoned by language and life. Issues of freedom/restrictions and imprisonment/liberation are central to Kafka's writings. Works to be read are: Amerika, Der Prozess, Gesammelte Erzaehlungen, etc. NOTE: This course is conducted in German.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in GER 3102.

GER 4182. Advanced Independent Study I. 3 Credit Hours.

Supervised reading, research, and reports on an advanced level in German language, literature, and civilization.

Repeatability: This course may be repeated for additional credit.

GER 4220. Topics in German History and Culture (taught in German). 4 Credit Hours.

This course is designed to deepen understanding of German history, culture, ethnicity, and universal themes as they are portrayed in various cultural texts, including film and literature. It explores commonality and difference between different forms of creative expression, and the ways in which historical events are portrayed and discussed in culture. Topics vary. Viewing of films, readings. Three hours taught in English, with the fourth hour taught in German. Written work and readings in German for Majors, Minors, Certificate Students.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (GER 3096 or GER 2041)

GER 4221. German Culture Through Film. 4 Credit Hours.

This course examines German cinema in the context of its relationship to German culture and history. Because film is an art form of creative expression as well as a vehicle for promoting awareness of social concerns, the course will introduce techniques of viewing, analyzing, and evaluating films as expressions of the contemporary culture. Basing our work on films of historical significance and those by premier directors, the course will explore the beginnings of the film industry, Nazi propaganda, the impact of the Oberhausen Manifesto, New German Film, and issues of gender and politics since the Wende. It includes an additional hour of instruction in German for German Majors and Minors.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GER 2041 or GER 3096)

GER 4231. German Minority Identities: Gendered and Cultural Dimensions. 4 Credit Hours.

Germany has vibrant migrant communities with ethnic and racial groups from places as diverse as Turkey, Italy, Greece, Morocco, East Africa, and Russia. This course looks at the presence of minority communities in Germany today, their history and cultural influences as well as economic contributions. Our main analytical lens will be gender - how the German host culture is shaped by concepts of femininity and masculinity, sexuality, family, and a gendered division of labor and how these concepts are challenged (and/or shored up) by the various ethnic communities. We will look at both the perception of migrants by white/native Germans (how are they portrayed in the media, film, and politics?) and we will explore the voice of the "other," i.e. the experience of minority communities living in Germany and how this influences their own cultural identities. Questions we will ask include: How does the experience of immigration affect the identity of minorities living in Germany? What does "Deutsche Kultur" (German culture) mean today? Our focus will be on how gender shapes and underlies much of these discussions on minorities in Germany as well as their negotiations of conflicting expectations of community and larger "German" culture. Course material will include critical readings, films, and other cultural texts. This course includes a tutorial hour conducted in German. Note: Students who earned credit for "German Minorities and Cultural Identities: Gendered Dimensions" will not receive additional credits for "German Minority Identities: Gendered and Cultural Dimensions."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GER 2041 or GER 3096)

GER 4235. Weimar Culture: Race, Gender, Sexuality and Nation. 4 Credit Hours.

This class explores the contradictions in German culture during the Weimar Republic (1918-33), with particular attention to its urban centers. Berlin was considered the European capital of artistic and experimental subcultures as well as the hotbed for radical politics, whose decadent Bohemian culture of sexual experimentation, drug use, women's liberation and cabaret existed side by side with abject poverty and street violence. We will ask questions such as how Hitler could come to power in a Germany that was considered to have the most advanced science, technology, literature, philosophy and art of its time, and whose Jewish citizens contributed to all areas of society? How did a new consumerism contribute to the complacency of many Germans in the face of a violent fascism? Thereby we will pay attention to how concepts of race, gender, sexuality and nation shaped the debates of the time. We will watch movies, read literature and graphic novels, and learn about the Weimar Republic's political landscape and history. This course includes a tutorial hour that will be conducted in German. Note: Students who earned credit for "Race, Gender, Sexuality, and Nation in Weimar Culture" will not receive additional credits for "Weimar Culture: Race, Gender, Sexuality and Nation."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GER 3096 or GER 2041)

GER 4282. Advanced Independent Study II. 3 Credit Hours.

Supervised reading, research, and reports on an advanced level in German language, literature, and civilization.

Repeatability: This course may be repeated for additional credit.

GER 4296. Composition II. 3 Credit Hours.

This course builds on the skills mastered in German 3096 (W231) (Composition I) by fostering more sophisticated use of the language through written practice and study of advanced problems in syntax and style. Use of contemporary materials from German-speaking countries. NOTE: The course is conducted in German.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in GER 3096.

GER 4301. History of the German Language. 3 Credit Hours.

Origins and development of the German language, including changes in sounds, grammar and vocabulary. NOTE: Taught in English.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GER 2041 or GER 3096)

GER 4940. Honors: Special Topics. 3 Credit Hours.

This course requires an advanced level of proficiency in German. Prerequisite is the successful completion of a 2000-level German course, an intensive writing experience, or with instructor approval. The topic will be an advanced study of various literary genres to be selected by the Core-Coordinators, and to be announced before enrollment.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GER 2000.

Global Studies (GBST)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

GBST 2000. Special Topics in Global Studies. 3 Credit Hours.

Topics vary each semester; please consult with the instructor for more information. Note: This course will count towards an elective for students declared in the Global Studies major.

Repeatability: This course may be repeated for additional credit.

GBST 2001. Introduction to Global Studies. 3 Credit Hours.

The 21st century is an age of globalization. Individuals no longer live their lives exclusively within local and national communities, but are touched by, and interact with, states, groups, firms and individuals across the world. In the area of international security, states have always fought, and prepared to fight, wars with other states, but in the 21st century these interstate wars have been joined by both increasingly destructive civil wars within countries, and by international and global terrorism perpetrated by non-state actors. In the economic realm, recent decades have witnessed a dramatic opening of almost all the world's economies to flows of international trade, finance, and people, such that all of us are now touched, in one way or another, by developments in the global economy. In the realm of culture, centuries-old national cultures, languages and traditions that have shaped people's world views are increasingly coming into contact - via increased travel, mass communications, and the internet - with cultural impacts from other countries.

Repeatability: This course may not be repeated for additional credits.

GBST 2010. Special Topics in Global Security. 3 Credit Hours.

Topics vary each semester; please consult with the instructor for more information. Note: This course will count towards an elective for students declared in the security track of the Global Studies major.

Repeatability: This course may be repeated for additional credit.

GBST 2020. Special Topics in Global Economy. 3 Credit Hours.

Topics vary each semester; please consult with the instructor for more information. Note: This course will count towards an elective for students declared in the economy track of the Global Studies major.

Repeatability: This course may be repeated for additional credit.

GBST 2030. Special Topics in Global Cultures. 3 Credit Hours.

Topics vary each semester; please consult with the instructor for more information. Note: This course will count towards an elective for students declared in the cultural track of the Global Studies major.

Repeatability: This course may be repeated for additional credit.

GBST 2082. Independent Study. 1 to 6 Credit Hour.

Arranged each semester; please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

GBST 2096. Introduction to Global Studies. 3 Credit Hours.

The 21st century is an age of globalization. Individuals no longer live their lives exclusively within local and national communities, but are touched by, and interact with, states, groups, firms and individuals across the world. In the area of international security, states have always fought, and prepared to fight, wars with other states, but in the 21st century these interstate wars have been joined by both increasingly destructive civil wars within countries, and by international and global terrorism perpetrated by non-state actors. In the economic realm, recent decades have witnessed a dramatic opening of almost all the world's economies to flows of international trade, finance, and people, such that all of us are now touched, in one way or another, by developments in the global economy. In the realm of culture, centuries-old national cultures, languages and traditions that have shaped people's world views are increasingly coming into contact - via increased travel, mass communications, and the internet - with cultural impacts from other countries.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

GBST 2197. Research Skills for Global Studies. 3 Credit Hours.

This is an introductory course on research skills. It is designed to provide an overview of the research process and a broad introduction to a range of research methods used in the liberal arts. The goal is to acquaint students with the key aspects of research design: thinking and learning about a problem, defining a specific answerable question, situating the question in theory and existing research, identifying relevant data sources (primary and secondary), and devising a method to find an answer to that problem. Given the interdisciplinary foundations of Global Studies, this course is decidedly interdisciplinary, drawing on methods from several disciplines in the liberal arts, including Anthropology, Economics, English, Geography, History, Political Science, and Sociology.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

GBST 2900. Honors Special Topics. 3 Credit Hours.

Topics vary each semester, please consult with the instructor for more information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

GBST 3000. Special Topics in Global Studies. 3 Credit Hours.

Topics vary each semester; please consult with the instructor for more information. Note: This course will count towards an elective for students declared in the Global Studies major.

Repeatability: This course may be repeated for additional credit.

GBST 3010. Special Topics in Global Security. 3 Credit Hours.

Topics vary each semester; please consult with the instructor for more information. Note: This course will count towards an elective for students declared in the security track of the Global Studies major.

Repeatability: This course may be repeated for additional credit.

GBST 3020. Special Topics in Global Economy. 3 Credit Hours.

Topics vary each semester; please consult with the instructor for more information. Note: This course will count towards an elective for students declared in the economy track of the Global Studies major.

Repeatability: This course may be repeated for additional credit.

GBST 3030. Special Topics in Global Cultures. 3 Credit Hours.

Topics vary each semester; please consult with the instructor for more information. Note: This course will count towards an elective for students declared in the cultural track of the Global Studies major.

Repeatability: This course may be repeated for additional credit.

GBST 3082. Independent Study. 1 to 6 Credit Hour.

Arranged each semester; please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

GBST 3083. Directed Readings. 1 to 6 Credit Hour.

Arranged each semester; please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

GBST 3085. Internship. 1 to 6 Credit Hour.

Arranged each semester; please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

GBST 3089. Fieldwork. 1 to 6 Credit Hour.

Arranged each semester; please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

GBST 3900. Honors Special Topics. 3 Credit Hours.

Topics vary each semester, please consult with the instructor for more information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

GBST 4096. Capstone Seminar in Global Studies. 3 Credit Hours.

This capstone research seminar is designed for seniors in Global Studies, with the specific aim of helping students carry out and complete an independent research project in their areas of concentration. Over the course of this semester, you will select a research topic, formulate a research question, engage with the scholarly literature on this question, generate hypotheses for empirical testing (if appropriate), and set out a research design and methodology that will allow you to test and present compelling findings about your chosen research question. Whether you are coming to the seminar with well established ideas about the possible topic of your research paper, or are starting from scratch, the course will give you the skills you need to select a research question and move, step by step, to a completed work of original global studies scholarship.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in GBST 2096.

Graphic Arts and Design (GAD)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

GAD 0822. Human Behavior and the Photographic Image. 3 Credit Hours.

How do photographs become more than just a pile of disparate images? Is there more to photography than that single "decisive moment" in the hunt and capture of an image? How do photographers comment on issues that are important to them? How can photographs tell a story? Is there a way one can use the art of photography to elicit change? In this class, students will use their digital cameras to investigate individual photographs, as well as series of photographs. We will look at photography in its historical context -- at the advent of documentary photography and photojournalism, and at narrative photography in its more contemporary form, as photographers use it to chronicle their own lives and to tell a story. Through the exercises of looking at and making photographic images, several core concepts of social work, along with theories of human behavior in the social environment, will be introduced. Students will learn not only about the place photography holds in our culture, but our culture itself, and the students' place in that culture. Students will critically analyze published photographs, as well as photographs made during the class. The semester will culminate in a class exhibition where students will be given the opportunity to present their photographs to the public, demonstrating their understanding of human behavior in the social environment. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed SSWU 0822 or PHOT 0822.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

GAD 2001. Graphic Design. 3 Credit Hours.

This course introduces students to graphic design as a conceptual and visual discipline. Projects focus on solving visual problems from a wide range of topics in a variety of media. Graphic Design 2001 is the prerequisite for the Graphic and Interactive Design (GAID) major.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (FDPR 1521, FDPR 1522, or VS 1651)

GAD 2002. Graphic Design. 3 Credit Hours.

In this advanced sophomore level course students work on a variety of projects focusing on visual communication through type and image.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GAD 2001.

GAD 2021. Computers for Design. 3 Credit Hours.

This course introduces students to the computer as a tool for design. Students learn the fundamentals of software most commonly found in design and imaging studios. Students work primarily in Adobe Photoshop, Illustrator and InDesign (Mac platform). Basic working knowledge of Adobe Photoshop and Illustrator is required. Students will be tested for basic competency in these programs on the first day of class.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Science Educ.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (FDPR 1521, FDPR 1522, or VS 1651)

GAD 2071. Mac Design Programs I. 3 Credit Hours.

This course introduces students to the computer as a tool for graphic design and image making. Students learn the fundamentals of software most commonly found in graphic design studios and used for both print and interactive/web applications: Adobe Photoshop, Illustrator and InDesign (MAC platform). This course is not recommended for students who plan to major in Graphic & Interactive Design. Those students should contact an advisor for information about the appropriate alternative. NOTE: Prior to spring 2011, the course title was "Introduction to Computers for Design" and prior to fall 2015, the title was "Introduction to Mac Design Programs."

Repeatability: This course may not be repeated for additional credits.

GAD 2073. Introduction to Web Design. 3 Credit Hours.

This course instructs students in the fundamentals of interactive design with a focus on the use of interactive software, layout, typography, hierarchy and organization. Basic working knowledge of Adobe Photoshop and Illustrator required (MAC platform). Students will be tested for basic competency in these programs on the first day of class.

Repeatability: This course may be repeated for additional credit.

GAD 2075. Communication Through Graphic Design. 3 Credit Hours.

This course introduces students to creative thinking processes and techniques as they relate to visual communication. Students will present ideas and information on a wide range of topics through visual rather than verbal language. Very basic drawing skills will be needed for this course.

Repeatability: This course may be repeated for additional credit.

GAD 2076. Introduction to Web Programming and Production. 3 Credit Hours.

Students will learn how to program and produce a simple web site from provided design templates. The web site will be completed using Adobe Dreamweaver as the main production tool, and will also include an introduction to the programming languages, CSS, HTML, and Javascript fundamentals. Students will complete a fully functioning web site, programmed in the professional, industry-standard model. NOTE: A strong basic knowledge of Photoshop and Illustrator is required. Students will be tested on the first day of class to ensure that they have sufficient knowledge to succeed in the class. This course is open to Tyler students only from all BA, BS and BFA majors. It can be taken for graduate credit with permission of an advisor. Permission from the GAID Area Head is required for students outside of Tyler.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

GAD 2077. Introduction to Illustration. 3 Credit Hours.

This course introduces students to concept and technique in illustration. Basic drawing skills will be needed for this course. Priority will be given to students outside the Graphic & Interactive Design major.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Science Educ.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

GAD 2078. The Art of Infographics. 3 Credit Hours.

This course is an introduction to data visualization and infographic design. It explores the history of data visualization and infographic design, from cave paintings to contemporary design, covering static, animated and interactive solutions. Lectures on visual literacy and graphic design foundations will help the students develop the vocabulary necessary to critically analyze contemporary infographics. Students receive basic instruction in the creation of infographics and develop their own infographic utilizing supplied data. This course will include readings from Edward Tufte's *The Visual Display of Quantitative Information*. Tutorials may also be used for outside software instruction.

Repeatability: This course may not be repeated for additional credits.

GAD 2079. Mobile Apps: Design/Prototype. 3 Credit Hours.

This course will walk students through the creative process of concept development, design and prototyping a mobile application. The audience for this class includes, but is not limited to: entrepreneurs, business students, computer science/programming majors, advertising students, and anyone interested in design thinking and creative problem solving. Students do not need any prior design knowledge, though some basic Adobe Photoshop skills would be helpful. The course will work through the creative process of identifying a problem, conducting research, brainstorming a solution, studying the user experience, creating a wireframe and executing many iterations to design a working prototype. This course will not involve the actual development of the app. After engaging in group brainstorming and concept development sessions, students will understand how group work can help them arrive at the best possible solution for a problem. User experience exercises investigate how a user interacts with a product to create a positive experience. Wireframe exploration and design iterations will establish an overall plan for the mobile app. A study of color, composition and typography will also enhance the visual execution of the app. The final apps will be created as working prototypes.

Repeatability: This course may not be repeated for additional credits.

GAD 2401. Introduction to Photography (Online Digital Course). 3 Credit Hours.

This is an introductory course in photography. We will concentrate on learning the basic camera functions, proper exposure of an image, and the formal and conceptual considerations in composition. Although there will be an emphasis on the technical aspects of photography, this course will also introduce students to many contemporary artists working in photography, as well as the history of the photographic medium and how to appropriately approach the critique setting.

Repeatability: This course may not be repeated for additional credits.

GAD 2441. Photo I: Digital. 3 Credit Hours.

An introduction to the fundamental vocabulary and techniques of digital photography with an emphasis on developing skills of perception and visual competence in both the creation and consumption of lens-based imagery. Students will explore the complex relationship between content, composition, technical execution, and visual ideas that communicate with intent. Course topics include digital workflow methods for exhibition quality output using digital cameras, scanners, contemporary imaging software, and printers. Projects will include both color and black and white imagery. Prior to fall 2016, the course title was "Photography I."

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

GAD 2451. Photo I: Digital. 3 Credit Hours.

In this class, students will explore the visual language of digital photography using Rome as their studio. Rome's many layered history juxtaposed with its current global urban landscape offers a unique opportunity to photograph an important European city. The technical component of the class consists of mastering manual digital camera operation and exposure. Students also learn to use contemporary imaging software and to produce digitally-generated output. Students will gain an understanding of the aesthetic possibilities of photography through assignments, lectures on both historic and contemporary photographers, photo field trips in Rome, and visits to photo galleries and museums. Critiques are conducted through a shared website. Students will be expected to complete a final project in which they choose one aspect of Rome's multi-layered landscape to visually explore in depth. Prior to fall 2016, the course title was "Photography I."

Repeatability: This course may be repeated for additional credit.

GAD 2461. Digital Imaging. 3 Credit Hours.

This course deals with photographic images and how ideas can be expressed through the manipulation of these images using the computer as a tool for creative expression. Excellent basic course in image software use and introduction to the use of the computer.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

GAD 2701. Survey of Printmaking Techniques. 3 Credit Hours.

A beginning survey of basic techniques of lithography and screenprinting. The course introduces a number of short projects designed to give a broad experience with the media. Additional topics include print presentation, care of tools and materials, and a historical survey in slides and actual examples.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Science Educ.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

GAD 2702. Survey of Printmaking Techniques. 3 Credit Hours.

A beginning survey of the basic techniques of etching and relief printing. The course introduces a number of short projects designed to give a broad experience with the media. Additional topics include print presentation, care of tools and materials, and a historical survey in slides and actual examples.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Science Educ.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

GAD 2703. Book Structures. 3 Credit Hours.

This course introduces a variety of hand bookbinding techniques, including folded, sewn and adhesive binding structures as well as a variety of protective enclosures and custom boxes. Projects will allow students to explore the book as a means to organize, structure, and present visual information in a variety of media.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (FDPR 1521, FDPR 1522, or VS 1151)

GAD 2704. Book Structures. 3 Credit Hours.

This course is an introduction to the art of the book: a significant format for the expression of information and creativity. Bookbinding has a long history in Europe and a particularly rich history in Rome. Students will engage first hand with the historical tradition and contemporary possibilities of this craft. The course will cover traditional binding techniques including folded, sewn, and adhesive structures, as well as custom portfolio design. Emphasis will be placed on utilizing the unique format of the hand-bound book to engage with students' visual and psychological experience of Rome. Course projects will incorporate a range of media including drawing, photography, collage, graphic design and printmaking in the execution of both traditional and modern book structures. Each project will provide an opportunity for students to plan and execute unique book designs reflecting their personal Roman experience.

Repeatability: This course may be repeated for additional credit.

GAD 2711. Serigraphy. 3 Credit Hours.

The fundamentals of screenprinting as a fine art print medium. This course introduces various handmade stencil methods as well as the photo processes. Students use non-toxic acrylic inks with projects that emphasize color organization and conceptual challenge.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

GAD 2731. Etching. 3 Credit Hours.

The beginning level course in intaglio and relief printing processes. This course covers traditional methods of platemaking, such as etching, drypoint, and aquatint, as well as explorations into photo transfer and color viscosity printing.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

GAD 2741. Intaglio Printmaking. 3 Credit Hours.

This introductory studio course engages students in historic and contemporary printmaking concepts and technologies, while encouraging a multi-disciplinary approach to fine art print production. Students are introduced to a broad range of ideas, methods and materials that focus upon the intaglio printmaking processes, but also include monoprints and monotypes. Initial projects are structured around the more traditional drawing, plate making and printing processes. As students become more comfortable with the fundamentals of the medium, they are encouraged to develop a more personal approach to concept, subject, scale, material and process. Studio projects will be supplemented by field trips to museums, galleries and artist studios to give students first hand experience of the historic and contemporary context of printmaking in Italy. Field trips may include the National Print Cabinet, where students may closely examine original prints by Italian masters, which may include Da Carpi, Canaletto, Tiepolo, Piranesi and others.

Repeatability: This course may be repeated for additional credit.

GAD 2751. Lithography. 3 Credit Hours.

A basic course in metal plate lithography. Preparation, processing, and printing are studied with the intention of giving the beginning student control over a medium that is often thought to be complicated. Students work with traditional hand-drawn imagery as well as transfer and photo-litho, in black and white and color.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

GAD 2761. Lithography. 3 Credit Hours.

A basic course in metal plate lithography. Preparation, processing, and printing are studied with the intention of giving the beginning student control over a medium that is often thought to be complicated. Students work with traditional hand-drawn imagery as well as transfer and photo-litho, in black and white and color.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

GAD 2961. Honors Digital Imaging: Seeing Photographically. 3 Credit Hours.

Life is full of wonder when you simply open your eyes to it. All it takes is an open mind and a shift in your way of seeing. The primary objective of this course is to introduce students to the act of seeing photographically, creative problem solving, and thinking visually while learning contemporary digital technology and practices. Students will be instructed on the use of a variety of input and output devices (cameras, scanners, printers) and software applications. Lecture and research on historical and contemporary artwork inform creative approaches to visual thinking and assignments build on creative problem-solving skill sets. Emphasis is placed on image making, proper workflow, interpretation, and output. Students produce a portfolio that demonstrates critical visual thinking and effective skill development.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

GAD 3001. Advanced Graphic Design. 3 Credit Hours.

Class assignments focus on visual communication in a variety of forms: logo design, packaging, brochures, invitations, posters, magazine illustration and layout, and/or environmental design. NOTE: GAD 3001 and 3002 must be taken in sequence and are required for all graphic design majors. GAD 3001 (0253) is offered in the fall semester only; GAD 3002 (0254) is offered in the spring semester only. Both courses are open to GAID majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (GAD 2001 and GAD 2021)

GAD 3002. Advanced Graphic Design. 3 Credit Hours.

Class assignments focus on visual communication in a variety of forms: logo design, packaging, brochures, invitations, posters, magazine illustration and layout, and/or environmental design. NOTE: GAD 3001 and 3002 must be taken in sequence and are required for all graphic design majors. GAD 3001 (0253) is offered in the fall semester only; GAD 3002 (0254) is offered in the spring semester only. Both courses are open to GAID majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design, Grphc + Intrctv Dsgn w Entr St.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GAD 3001.

GAD 3010. Special Topics. 3 Credit Hours.

This course introduces students to various areas of design practice. Areas of focus in a given semester could include one of the following: animation, art direction, branding, corporate communications, design for the public good, environmental design, exhibition design, game design, motion graphics, publication design, sustainability, typographic design, etc. The topic(s) for the course will be determined by the expertise of the instructor(s).

Course Attributes: SI

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in GAD 3001, (GAD 3011 or 'Y' in CRGA02), and (GAD 3021 or 'Y' in CRGA03)

GAD 3011. Typography. 3 Credit Hours.

This course focuses on the expressive and functional use of typography in design, one of the most important tools in visual communication for both print and interactive media. This course includes instruction in Adobe InDesign, (Mac platform), a standard typesetting program in the design industry. NOTE: This course is open to Graphic and Interactive Design majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (GAD 2001 and GAD 2021)

GAD 3012. Typographic Principles. 3 Credit Hours.

This course will focus on the fundamentals of typography in design - typefaces, their history, development and characteristics, typographic hierarchy, layout, rhythm, proportion and harmony, and the technical aspects of working with type in software that meets industry standards (Adobe InDesign/Mac platform). Specific topics include the formal characteristics of typography; historic typography; information hierarchies and layout; typographic systems; punctuation and special characters; setting text; legibility and readability; setting charts and tables; and preparation of typographic files for print. NOTE: This course is open to Graphic and Interactive Design majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (GAD 2001 and GAD 2021)

GAD 3013. Advanced Typography. 3 Credit Hours.

This course focuses on advanced applications of typography in design. Projects include logo design, book covers, posters, brochures and/or catalogues. NOTE: This course is open to Graphic and Interactive Design majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (GAD 3001 and GAD 3011)

GAD 3015. Advanced Typography. 3 Credit Hours.

This course focuses on advanced applications of typography in design. Projects include logo design, book covers, posters, brochures and/or catalogues. NOTE: This course is open to Graphic and Interactive Design majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (GAD 3001 and GAD 3011)

GAD 3021. Intermediate Computer Graphics. 3 Credit Hours.

This course for Graphic and Interactive Design majors focuses on the computer as an essential tool in both print and digital media. (Mac platform) NOTE: This course is open to Graphic and Interactive Design majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (GAD 2001 and GAD 2021)

GAD 3023. Interactive Design. 3 Credit Hours.

This course focuses on design for web and motion graphics. A good working knowledge of Adobe Photoshop and Illustrator (Mac Platform) is necessary. Flash and After Effects will be explored from basic to intermediate levels. While staying current with the latest technologies, the emphasis will be on design for communication through interactive media. NOTE: This course is open to Graphic and Interactive Design majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (GAD 3001 and GAD 3021)

GAD 3025. Interactive Design. 3 Credit Hours.

This course focuses on design for web and motion graphics. A good working knowledge of Adobe Photoshop and Illustrator (Mac Platform) is necessary. Flash and After Effects will be explored from basic to intermediate levels. While staying current with the latest technologies, the emphasis will be on design for communication through interactive media. NOTE: This course is open to Graphic and Interactive Design majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (GAD 3001 and GAD 3021)

GAD 3027. Digital Narratives. 3 Credit Hours.

The purpose of this course is to focus on the creation of a short digital animation/movie based on a supplied narrative. Strong conceptual and technical skills as well as a solid grasp of typography will be necessary for this course. Students will learn one vector based and one video based application to create this design. This course is not cell based animation. NOTE: This course is open to Graphic and Interactive Design majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- (except where noted) in GAD 3001 and (GAD 3021 (C or higher) or 'Y' in CRGA03)

GAD 3029. Programming and Production for Web Sites. 3 Credit Hours.

The focus of this course is the technical production and programming aspects of producing a fully functioning web site. Topics covered will be the best-practices use of Dreamweaver for site production with an emphasis on CSS, HTML and Javascript programming languages. Students will also be introduced to the fundamentals of the ActionScript language. Students will cover the process of creating a web site and its many considerations such as flowcharts, sitemaps, and wireframes. Students will be introduced to fundamentals of information architecture and search engine optimization (SEO) for use within their site and discuss best-practices for uploading and maintaining their final site. Open to Graphic & Interactive Design BFA and MFA majors only.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GAD 2001, GAD 2021, and GAD 3021)

GAD 3031. Illustration. 3 Credit Hours.

This course introduces students to concept and technique in illustration. NOTE: This course is open to students in all studio majors.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (FDPR 1511, FDPR 1512, or VS 1651), GAD 2001, and GAD 2021.

GAD 3033. Illustration. 3 Credit Hours.

This course introduces students to concept and technique in illustration. NOTE: This course is open to Graphic and Interactive Design majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (GAD 2001 and GAD 2021)

GAD 3041. Advertising Design. 3 Credit Hours.

Students will develop overall strategies as well as specific visual and verbal content for advertising campaigns. Strong conceptual ability and writing skills are necessary in addition to a solid grasp of typography and layout. NOTE: This course is open to Graphic and Interactive Design majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GAD 3001 and (GAD 3011 or GAD 3021)

GAD 3045. Introduction to Visual Communication. 3 Credit Hours.

This course introduces students to creative thinking processes and techniques as they relate to visual communication. Students will present ideas and information on a wide range of topics through visual rather than verbal language. NOTE: This course is open to all students sophomore through senior level.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

GAD 3053. Art Careers Promotion. 3 Credit Hours.

This course offers instruction in the design and content of materials needed by fine artists in professional practice. This course will cover a number of topics including: resume content and design, personal stationery packages for business communication (cover letters, professional inquiries, etc.), presentation formats for print and web. NOTE: Open to all studio majors to include: GAD, Art, and Art Education.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

GAD 3096. The Business of Design. 3 Credit Hours.

The focus of this course is the practice of design for communication in a business context. This course will cover a number of topics, including: personal marketing, freelance practice, working with artists and vendors, business models for design entrepreneurs, sustainability, and presentation skills. This course fulfills a studio elective requirement for juniors and seniors in the GAID major. NOTE: This course is open to Graphic and Interactive Design majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Course Attributes: SI, WI

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GAD 3001 and (GAD 3011 or GAD 3021)

GAD 3097. Graphic Design Theory. 3 Credit Hours.

This course will introduce students to contemporary design theories and discourse. It will examine the theoretical aspects of artifacts through their making, reading and dissemination. Graphic design and visual communication theories will be compared to those in literature and architecture. Students will use discussion, writing, presentations and design to investigate contemporary design issues. Emphasis will be placed on forming and articulating an individual point-of-view (POV) in discussion and writing.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

GAD 3101. Collaborative Design Workshop in Rome. 3 Credit Hours.

The six week course is geared toward design students interested in immersing themselves in the culture of Italy and producing, by the end of the workshop, a printed project about design, art, and culture in Rome. Students will have a choice of topics to research, design, and produce. Among the many topics that students could focus on are Roman decorative arts, cuisine, theatre, architecture, fashion, music, and film. Students will also be encouraged to study how the Italian design aesthetic and philosophy might be applied to their own work. An integral part of this project will be both digital and traditional image making. Students will photograph and/or illustrate an article that will be incorporated into the final collaboratively produced printed piece. NOTE: Open to majors in the following disciplines - Graphic and Interactive Design, Photography, Illustration, Fashion Design, Interior Design, Industrial Design, Landscape Architecture, Architecture, Journalism, Advertising.

Repeatability: This course may be repeated for additional credit.

GAD 3111. Graphic Design Workshop in Japan. 3 or 6 Credit Hours.

The six week course is geared toward graphic design students interested in immersing themselves in the culture of Japan and producing a design project about this experience. Students will have a choice of projects to design and produce. They will be encouraged to study how Japanese design aesthetic and philosophies might be applied to their own work. NOTE: A basic knowledge of design industry-standard print software is required for this course.

Repeatability: This course may be repeated for additional credit.

GAD 3123. Introduction to Interactive. 3 Credit Hours.

This studio elective instructs students in the fundamentals of interactive design with a focus on the use of interactive software, layout, typographic principles, including typographic hierarchy and organization as well as the balance of aesthetic and functional considerations in layout and typography. NOTE: The course is open to students from all majors at Tyler. It fulfills a studio elective requirement.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Science Educ.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

GAD 3182. Independent Study. 1 to 3 Credit Hour.

The proposal for a large-scale independent project must be approved by a faculty member who agrees to oversee the project prior to registration for the course. For photography students justification for course work outside the Photography curriculum will be required.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

GAD 3185. Field Internship. 3 Credit Hours.

A field internship must provide practical professional experience in a setting which is relevant to the student's course of study, such as in a gallery, museum, design studio or agency, or community art center, etc. A comprehensive paper must be written. An internship is designed to give the student valuable real world career experience. Guidelines for specific area requirements are available through the GAD office. NOTE: The GAID Internship Coordinator must receive and approve a written proposal prior to the start of the internship, describing the setting and the time commitment, which must equal at least 10 hours per week for a full semester.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

GAD 3282. Independent Study. 1 to 3 Credit Hour.

The proposal for a large-scale independent project must be approved by a faculty member who agrees to oversee the project prior to registration for the course. For photography students justification for course work outside the Photography curriculum will be required.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

GAD 3400. Special Topics in Photography. 3 Credit Hours.

This course explores special topics in photographic and imaging practices including new and emerging methods of research and production. Special topics courses can include lectures, demonstrations, readings, and student presentations in support of field and studio research. Both individual and collaborative practices may be addressed.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (GAD 2441, GAD 2461, GAD 2961, GAD 2401, ARTU 2811, ARCH 1011, or ARCH 1017)

GAD 3401. Color Photography I. 3 Credit Hours.

An introduction to basic skills in color photography. This course includes camera work and understanding of light, processing and printing with an emphasis on color theory, the development of personal imagery and the history of color photography.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GAD 2441.

GAD 3402. View Camera. 3 Credit Hours.

This course provides an introduction to large format photography using a 4x5 view camera. Basic camera operation, various functions, specific uses, and potential as a creative tool are studied. A variety of specific exercises lead the student to proficient use of the view camera. Emphasis is on creative use as well as technical development. NOTE: Open to Photo majors only - special authorization required for non-majors.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GAD 3412.

GAD 3411. Digital Photography. 3 Credit Hours.

Digital photography explores advanced applications in digital imaging with an emphasis on photographic output. Emphasis will be placed on more sophisticated methods of capture and production including large format printing, advanced color management, cataloging, and archival storage practices. The development of a personal vision and lines of inquiry will be central. A professional portfolio will be required.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (GAD 2441 or GAD 2451)

GAD 3412. Darkroom Photography. 3 Credit Hours.

An introduction to the fundamental vocabulary and techniques of darkroom photography. Skills of perception, visual competence, and black and white film-based photographic practice will be emphasized with an introduction to digital and darkroom hybrid techniques. Projects will address technical development as well as the development of personal vision through the photographic medium. Prior to fall 2016, the course title was "Photography II."

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

GAD 3413. Photographic Lighting. 3 Credit Hours.

At the core of any commercial or fine art photographer's practice is an in-depth understanding of lighting. This course is a thorough investigation of artificial lighting techniques (strobe and continuous) both in the studio and on location. Additional topics include advanced methods of exposure and the different approaches required in lighting for digital and film based images. A final portfolio is required. This course is repeatable for credit.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (GAD 2441 or GAD 2451)

GAD 3414. Darkroom Photography. 3 Credit Hours.

This course will introduce students to the historic methods and materials of pre-digital black and white darkroom photography on location in Rome. Students will become familiar with Italian culture and with the techniques they are using to capture it deepening their understanding of the city and the creative process. Along with photo field trips the class will consist of lectures, demonstrations and group discussions. Weekly assignments will be given and a final portfolio of silver gelatin prints will be completed by the end of the semester. Images will be printed from negatives produced during the course. NOTE: Students are strongly encouraged to bring their own 35mm camera. A small number of basic film cameras will be available for limited student use.

Repeatability: This course may not be repeated for additional credits.

GAD 3421. Digital Projects. 3 Credit Hours.

The emphasis of this course will be on creating a professional digital portfolio. Throughout the semester, students will learn a series of multimedia software applications and develop interactive presentations that will promote themselves as artists with contemporary and professional portfolios. NOTE: The course is limited to seniors and graduate students.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GAD 2461.

GAD 3422. Contemporary Photography. 3 Credit Hours.

We live in an extraordinary moment in the history of photography, a moment much hoped for and anticipated by many champions of the medium. Finally one can say without qualification that photography is a medium fully embraced by the contemporary art world. While there has always been a movement to look at and discuss photography as art, photography has never played a more central, critical and vital role in contemporary art than it does now. This course will look at both the role that photography plays in contemporary art and the role that contemporary art plays in photography. By surveying contemporary trends in photography, students in this class will develop an understanding of what exactly photography is now. At the same time the class will attempt to answer questions about what it means to be contemporary, about what the relationship between the contemporary and the historical is, and why this might be important. Through these problems students will be encouraged to develop personal work that addresses themes and ideas discussed in the class. NOTE: Open to Junior/Seniors. Special authorization required for non-majors.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (GAD 2441 or GAD 2451)

GAD 3431. Color Photography I. 3 Credit Hours.

An introduction to basic skills in color processing and printing with an emphasis on development of personal imagery and the history of color picture making.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GAD 2441.

GAD 3432. Color Photography II. 3 Credit Hours.

Advanced projects in color photography to include either chemical processes or digital technology. Research will focus on contemporary trends in color photography with an emphasis on the development of a personal portfolio.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GAD 3431.

GAD 3441. Advanced Photo Workshop. 3 Credit Hours.

A continuation of advanced black and white photography with an introduction to the zone system and a variety of professional techniques. Emphasis will be on the development of a professional portfolio, classical black and white photographic history, and focused development of personal vision. Digital photographic techniques may also be included.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (GAD 2441 or GAD 2451) and GAD 3412.

GAD 3451. Advanced Photography Workshop. 3 Credit Hours.

This course is for students who have previously studied photography and who wish to use historic methods to complement their ideas. The primary medium will be black and white film and will emphasize the development of a personal vision of each student. Projects may also include the production and use of pin-hole or other alternative cameras and investigate their relationship to 16th and 17th century optical devices and images found in Rome. There will be experimentation and investigation with a variety of methods and materials that are not commonly used such as lumen prints, contact printing, and large format film. Along with studio time the class will consist of lectures, technical demonstrations, field trips and group critiques. Students will produce a series of printed images for their final portfolio.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (GAD 2441 or GAD 2451) and (GAD 3412 or GAD 3414)

GAD 3461. Photo Process Workshop. 3 Credit Hours.

This course is a survey covering a wide range of experimental and historical photographic processes that extend beyond traditional silver printing. Workshop orientation emphasizes a diverse exposure to many creative possibilities from hand applied photographic emulsions to artists' book production, culminating in a professional final project.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (GAD 2441 or GAD 2451) and GAD 3412.

GAD 3471. Photo Process Workshop. 3 Credit Hours.

Studio orientation to a wide range of experimental and historical photographic processes beyond traditional silver printing. Workshop orientation emphasizes a diverse exposure to many creative possibilities from hand applied photographic emulsions to artists' book production.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (GAD 2441 or GAD 2451) and GAD 3412.

GAD 3711. Advanced Serigraphy. 3 Credit Hours.

Advanced screen printing with emphasis on expanding the students' stencil making and printing skills as well as personal artistic growth. Students work with non-toxic acrylic inks in projects that emphasize scale, color, and use of material.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GAD 2711.

GAD 3731. Advanced Etching. 3 Credit Hours.

Advanced problems in intaglio and relief processes. While the emphasis is on personal artistic development, the students are also encouraged to work toward professional standards in platemaking and printing skills. Projects often include, multi-plate color printing, copper engraving, mezzotint, various relief methods, and embossing.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GAD 2731 or GAD 2741)

GAD 3751. Advanced Lithography. 3 Credit Hours.

This course is designed to improve the students' technical skills toward professional standards and to develop the students' personal vision through the use of lithography. Study will include stone and plate lithography, color theory and practice, photo processes and editing.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (GAD 2751 or GAD 2761)

GAD 3811. Printmaking Workshop. 3 Credit Hours.

Studies in all printmaking media, emphasizing individual instruction for students of varied backgrounds.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (GAD 2701 or GAD 2702) and (GAD 3711, GAD 3731, or GAD 3751)

GAD 3821. Printmaking Workshop. 3 Credit Hours.

Students will expand upon the historic and contemporary printmaking concepts and technologies through a multi-disciplinary approach to studio practice that emphasizes individual conceptual and technical growth. Rome is rich with examples of innovative and dynamic printmaking: from the traditional Italian masterworks housed at the National Cabinet of Prints and Drawings, to the exciting prints produced by contemporary Italian artists. This course will draw upon these uniquely Italian art forms to strengthen the content of students' work and hone their technical abilities. As students develop a more personal approach to concept, subject, scale, material and process, they are introduced to more advanced printmaking topics. Frequent off-site expeditions, discussion and research will further engage students with the concepts and aesthetics underlying each process.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (GAD 2731 or GAD 2741)

GAD 3831. Relief and Monoprint Workshop. 3 Credit Hours.

The directness of both relief printing and monotype give the artist a unique opportunity to concentrate on the image possibilities. Students will work with non-traditional and traditional cutting methods, materials, and printing methods.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

GAD 3841. Color Print Workshop. 3 Credit Hours.

A methodical study of color printing problems as they are presented by the intaglio, relief, lithographic and screen printing media. Color theory and practical techniques are combined, giving experience in all phases of multicolor and intermedia graphic production.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GAD 2701 or GAD 2702), (GAD 3711, GAD 3731, or GAD 3751), and Two Introductory Printmaking: (GAD 2711, GAD 2731, GAD 2741, GAD 2751, or GAD 2761)

GAD 3896. Art Career Workshop. 3 Credit Hours.

Creative and practical solutions to career problems of the artist; preparation of the art student for postgraduate challenges.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Course Attributes: WI

Repeatability: This course may be repeated for additional credit.

GAD 4000. Senior Design: Special Topics. 3 Credit Hours.

This course focuses on topics in design not covered in the regular senior level course offerings. Topics may include, but are not limited to, Environmental Design and Signage, Type Design, Promotion Design, etc. Classroom instruction and assignments will include projects appropriate to the specific topic being offered. NOTE: This course is open to GAID majors only. It can fulfill the studio requirement in the major or a studio elective requirement.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GAD 3001, GAD 3002, GAD 3011, and GAD 3021.

GAD 4001. Senior Graphic Design: Senior Design Workshop. 3 Credit Hours.

Students work on projects for the Tyler Design Incubator. This includes project development and management, research on topics specific to entrepreneurial design practice, and assigned tasks for Incubator activities and events.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GAD 3001, GAD 3002, GAD 3011, and GAD 3021.

GAD 4002. Senior Graphic Design: Hybrid Design. 3 Credit Hours.

Students work on large assignments that have components in both print and interactive media. Instruction in the advanced use of software applications for print and/or interactive media is a significant part of the course. NOTE: This course is for GAID majors only. It can fulfill the studio requirements in the major or a studio elective requirement.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GAD 3001, GAD 3002, GAD 3011, and GAD 3021.

GAD 4003. Senior Graphic Design: Art Direction. 3 Credit Hours.

This course focuses on concept development with an emphasis on image making and image editing in a variety of forms including, book publishing, advertising and signage. NOTE: This course is for GAID majors only. It can fulfill the studio requirement in the major or a studio elective requirement.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GAD 3001, GAD 3002, GAD 3011, and GAD 3021.

GAD 4004. Senior Graphic Design: Packaging. 3 Credit Hours.

This course focuses on package design for a variety of products. Students work with concept, surface design, typography, materials and the physical construction of three-dimensional forms. NOTE: This course is for GAID majors only. It can fulfill the studio requirement in the major or a studio elective requirement.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GAD 3001, GAD 3002, GAD 3011, and GAD 3021.

GAD 4005. Senior Graphic Design: Publishing. 3 Credit Hours.

Students work on large-scale publications with a strong emphasis on the development of typographic formats and the inventive use of illustration and/or photographic imagery to create periodicals and/or books that are functional, conceptually sophisticated and visually distinctive. NOTE: This course is for GAID majors only. It can fulfill the studio requirement in the major or a studio elective requirement.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GAD 3001, GAD 3002, GAD 3011, and GAD 3021.

GAD 4006. Senior Graphic Design: Brand Identity. 3 Credit Hours.

In this course students develop two large scale identities that include logo design, stationary and collateral materials in a variety of forms that can include booklets, brochures, posters, advertising, signage and/or packaging. NOTE: This course is for GAID majors only. It can fulfill the studio requirement in the major or a studio elective requirement.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GAD 3001, GAD 3002, GAD 3011, and GAD 3021.

GAD 4007. Senior Interactive Design. 3 Credit Hours.

The focus of this course is interactive design for a large-scale website. This project will involve in-depth exploration of interface design, navigation, audio, digital animation and organization of information. Includes instruction in intermediate through advanced programming skills and the use of video composition. A strong grasp of the fundamentals of interactive design is required. NOTE: This course is for GAID majors only. It can fulfill the studio requirement in the major or a studio elective requirement.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GAD 3001, GAD 3002, GAD 3011, GAD 3021, and (GAD 3023, GAD 3025, or GAD 3029)

GAD 4008. Senior Graphic Design: Projects in Authorship. 3 Credit Hours.

This course encourages students to express perceptions and positions on current issues and events through large-scale projects. Parameters of assignments are generated by individual approaches, challenging each student to engage in decision making to develop unique content and form. The work from this class expands the boundaries of the design discipline beyond traditional client-based practice. NOTE: This course is for GAID majors only. It can fulfill the studio requirement in the major or a studio elective requirement.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GAD 3001, GAD 3002, GAD 3011, and GAD 3021.

GAD 4009. Senior Graphic Design: Projects in Authorship. 3 Credit Hours.

In this course, the designer as author creates a large-scale Senior Thesis on a topic and in the form(s) of his or her choice. The Senior Thesis is required for all Graphic and Interactive Design majors.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GAD 3001, GAD 3002, GAD 3011, GAD 3021, and Two Senior Specialized Courses: (GAD 4000, GAD 4010, GAD 4011, GAD 4111, GAD 4112, GAD 3013, GAD 3015, GAD 3027, GAD 3041, GAD 4001, GAD 4002, GAD 4003, GAD 4004, GAD 4005, GAD 4006, GAD 4007, or GAD 4008)

GAD 4010. Senior Design: Special Topics. 3 Credit Hours.

This course focuses on topics in design not covered in the regular senior level course offerings. Topics may include, but are not limited to, Environmental Design and Signage, Type Design, Promotion Design, etc. Classroom instruction and assignments will include projects appropriate to the specific topic being offered. NOTE: This course is open to GAID majors only. It can fulfill a studio elective requirement or a required studio course in the major.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GAD 3001, GAD 3002, GAD 3011, and GAD 3021.

GAD 4011. Senior Graphic Design: Design for the Public Good. 3 Credit Hours.

Students work on a wide variety of projects for arts and educational groups, social welfare and environmental organizations, and other clients in the nonprofit sector. Projects done in the class will actually be produced--either in print or, in the case of web sites, posted online. Students will be responsible for production preparation and supervision for course projects which could include identities, brochures, posters, invitations, and advertising campaigns. NOTE: This course is for GAID majors only. It can fulfill the studio requirement in the major or a studio elective requirement.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GAD 3001, GAD 3002, GAD 3011, and GAD 3021.

GAD 4111. Senior Illustration. 3 Credit Hours.

Assignments focus on image-making for communication. Strong concepts, the development of a personal visual approach or style and professional process will be the focus of this course. NOTE: This course can fulfill an elective requirement or a senior course requirement for GAID majors.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in GAD 3001, (GAD 3002 or 'Y' in CRGA01), (GAD 3011 or 'Y' in CRGA02), and (GAD 3021 or 'Y' in CRGA03)

GAD 4112. Senior Illustration. 3 Credit Hours.

Assignments focus on image-making for communication. Strong concepts, the development of a personal visual approach or style and professional process will be the focus of this course. NOTE: This course can fulfill an elective requirement or a senior course requirement for GAID majors.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in GAD 3001, (GAD 3002 or 'Y' in CRGA01), (GAD 3011 or 'Y' in CRGA02), and (GAD 3021 or 'Y' in CRGA03)

GAD 4113. Senior Illustration Portfolio. 3 Credit Hours.

This course offers students from disciplines outside of the Graphic and Interactive Design area the opportunity to develop illustration portfolios that meet professional standards and to develop strategies for promoting their work to art directors in agencies, studios and publications. This course covers several topics, including: developing stylistic consistency, conceptually driven assignments, presentation formats, pacing work within the portfolio, customizing portfolios to potential clients, and self promotional pieces.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (GAD 4111 or GAD 4112)

GAD 4196. Senior Portfolio. 3 Credit Hours.

This course focuses on the development of the senior portfolio in preparation for entering professional design practice. Students assemble and design the presentation of their work in electronic and print formats. Assignments also include personal marketing pieces and the development of writing skills specific to the design profession. NOTE: This course is offered in Spring semesters only and is open to GAID majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Course Attributes: WI

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GAD 3001, GAD 3002, GAD 3011, GAD 3021, and Two Senior Specialized Courses: (GAD 4000, GAD 4009, GAD 4010, GAD 4011, GAD 4111, GAD 4112, GAD 3013, GAD 3015, GAD 3027, GAD 3041, GAD 4001, GAD 4002, GAD 4003, GAD 4004, GAD 4005, GAD 4006, GAD 4007, or GAD 4008)

GAD 4441. Senior Photography. 3 Credit Hours.

Development of a contemporary theoretical and conceptual foundation for long-range involvement with professional photographic image-making and processes. The course includes research, field trips, critical theory and the organization of a final portfolio of work using various photographic materials. Career options within the field are emphasized.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Photography.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in 9 credits in 3400-level GAD courses.

GAD 4496. Senior Seminar in Photography. 3 Credit Hours.

The primary objective of this advanced writing intensive/studio course is to investigate the concept of photography both technically and conceptually. Students will research, revise, and present an extended, articulate, and professionally accomplished body of writings and artwork. Students will learn the professional standards of writing that are expected in the different avenues of photography. Writing and vocabulary skills appropriate to fine arts venues are different than those needed in a commercial endeavor. Students will learn how to identify and use the appropriate language, references, and resources in the photography world. This course is required for all photography majors.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Course Attributes: WI

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in 9 credits in 3400-level GAD courses.

GAD 4511. Senior Projects Workshop/Seminar. 3 Credit Hours.

A combination workshop/seminar course in which the senior printmaker, through classroom and individual discussion with the instructor, develops and produces a major print project. The course includes a formal presentation of all the projects.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may be repeated for additional credit.

Greek (Ancient) (GRKA)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

GRKA 1001. Ancient Greek 1. 4 Credit Hours.

Ancient Greek was spoken not just in Athens and Sparta but also on the shores of the Black Sea, in Egypt, Sicily, and Spain. Ancient Greek is the language of the first philosophers, the first scientists, the first dramatists, as well as the New Testament. At the end of a single year of Greek, students can read these texts, and this course, combined with 1002, will prepare them to do so. In addition to studying grammar and word forms, students learn Greek by reading it in a text that starts simply and gradually increases in difficulty until they are reading authentic Plato and Greek historians late in the second semester. Most of the early adapted readings are important texts from Greek mythology, literature, philosophy, and history. Students thus learn both the Greek language and about the ancient Greek world.

Repeatability: This course may not be repeated for additional credits.

GRKA 1002. Ancient Greek 2. 4 Credit Hours.

Building on Greek 1001, Greek 1002 continues to develop knowledge of the Greek language with readings of gradually increasing difficulty, mainly based on Herodotus, until students are reading authentic Plato and Greek historians late in the semester. By the end of the course, students are prepared to read a wide range of ancient Greek authors and the New Testament.

Course Attributes: LA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in GRKA 1001.

GRKA 1003. Intensive Ancient Greek. 7 Credit Hours.

This course provides the equivalent of a full year of the study of Ancient Greek in one semester. Students learn the fundamentals of Greek grammar and syntax and read progressively more difficult passages adapted from ancient authors. Upon completion of this course students will be able to enter second-year Greek.

Repeatability: This course may not be repeated for additional credits.

GRKA 2001. Ancient Greek 3. 3 Credit Hours.

This course consolidates the understanding of the language of the ancient Greeks through the close reading of unadapted texts. Readings in ancient Greek prose, usually Greek oratory (such as a political speech from the Athenian Assembly or a legal speech from a trial), a short dialogue by Plato, or a satirical piece by Lucian (a Syrian who lived during the Roman Empire).

Course Attributes: LB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GRKA 1002 or GRKA 1003)

GRKA 2002. Ancient Greek 4. 3 Credit Hours.

Readings in ancient Greek poetry: Homeric epic or a Greek tragedy by Euripides (Medea, Alcestis or Bacchae). The course will examine in detail not just the poetic language of each text but also their broader genres and the contexts of their performance.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in GRKA 2001.

GRKA 3002. Readings in Greek Literature II. 3 Credit Hours.

Arranged each semester. Please consult with the instructor.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in GRKA 2002.

GRKA 3096. Readings in Greek Literature I. 3 Credit Hours.

Arranged each semester. Please consult with the instructor.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in GRKA 2002.

GRKA 4082. Independent Study. 1 to 6 Credit Hour.

Concentrated work at an advanced level on a topic chosen by student and teacher. Weekly tutorial sessions.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GRKA 2002.

GRKA 4182. Independent Study. 3 Credit Hours.

Concentrated work at an advanced level on a topic chosen by student and teacher. Weekly tutorial sessions.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in GRKA 2002.

Greek (Modern) (GRKM)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

GRKM 1001. Modern Greek Elements I. 4 Credit Hours.

First semester of modern spoken Greek.

Course Attributes: LC

Repeatability: This course may not be repeated for additional credits.

GRKM 1002. Modern Greek Elements II. 4 Credit Hours.

Second semester of modern spoken Greek.

Course Attributes: LC

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GRKM 1001, 'C1002' in LCGR, 'B1002' in LCGR, 'C2001' in LCGR, 'B2001' in LCGR, or 'EXMPT' in LCGR)

GRKM 2001. Modern Greek Intermediate I. 3 Credit Hours.

Third semester of Modern Greek.

Course Attributes: LC

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (GRKM 1002, 'C2001' in LCGR, 'B2001' in LCGR, or 'EXMPT' in LCGR)

GRKM 2002. Modern Greek Intermediate II. 3 Credit Hours.

Fourth semester of Modern Greek.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in GRKM 2001.

Greek and Roman Classics (GRC)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

GRC 0803. The Art of Sacred Space. 3 Credit Hours.

From curse tablets to animal sacrifice to places where the divinity was approached, human beings in every period and culture have communicated with the divine. We will explore together how a given culture used art to communicate with the deity, interrogate the meaning of sacred space itself, and look closely at the literary and material evidence for rituals and beliefs. Through the lens of a chosen time period, we will analyze and critique practices and behaviors through topics such as festivals, burial practices, magical ceremonies, and rites of passage, with a view to understanding the place of sacred space in our own lives. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for GRC 0803 if they have successfully completed GRC 0903, REL 0803 or ARTH 0803.

Course Attributes: GA

Repeatability: This course may not be repeated for additional credits.

GRC 0804. Race in the Ancient Mediterranean. 3 Credit Hours.

Learn about ancient thinking about race and ethnicity and how ancient thinking remains current and influential today. Investigate how categories of race and ethnicity are presented in the literature and artistic works of Greece and Rome. Our case studies will pay particular attention to such concepts as: notions of racial formation and racial origins; ancient theories of ethnic superiority; and linguistic, religious and cultural differentiation as a basis for ethnic differentiation. We will also examine ancient racism through the prism of a variety of social processes in antiquity: slavery, trade and colonization, migrations, imperialism, assimilation, native revolts, and genocide. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for GRC 0804 if they have successfully completed GRC 0904.

Course Attributes: GD

Repeatability: This course may not be repeated for additional credits.

GRC 0811. Greek Theater & Society. 3 Credit Hours.

Through close readings of surviving texts, through viewings of modern productions of ancient theatrical works, and through your own recreations of Greek performative media, we will examine and experience ancient Greek drama both as a product of its own historical period and as a living art form. We will ask fundamental questions about the nature and purpose of theater in the ancient world: Is this art just entertainment or does it engage and comment on the problems of Athens? How and why did this society invent theater in the Western world? We will also investigate the relationship of Greek drama to the modern world: Why do new versions of plays about Oedipus, Antigone and Dionysus keep popping up in places as diverse as New York, Utah, South Africa and China? How can ancient drama be staged now in a way that is both responsible to the surviving texts and stimulating to contemporary audiences? NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for GRC 0811 if they have successfully completed GRC 0911.

Course Attributes: GA

Repeatability: This course may not be repeated for additional credits.

GRC 0829. Ancient War Games: Sport and Spectacle in Greece and Rome. 3 Credit Hours.

Every four years the world stages athletic contests that are based on the practices of ancient Greece. Every year the NFL assigns a Roman numeral to the Super Bowl and suggests its players are modern gladiators. Greek athletic games and Roman gladiatorial battles developed from the practice of warfare in their societies. American sports may be viewed as the descendants of these ancient "war games." This class examines the similarities and differences in such sports and the societies that enjoyed (and enjoy) them. The Greek games replaced the blood of the battlefield with dramatic displays of military physicality, while the Roman games replicated this blood with armed combat before crowds of thousands. We begin by examining the origins, events, architecture, and rules of the Greek games, from Homer's funeral contests to the development of the circuit of athletic festivals. Next we look at the "re-foundation" of the modern Olympics and its romanticized mythology in several important films. Then we turn to Roman blood-sports (animal fights, gladiatorial contests and spectacular criminal punishments) and chariot-racing, considering also the filters of modern Hollywood. We end with the rise of modern spectator sports, especially football.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

GRC 0903. Honors Art of Sacred Space. 3 Credit Hours.

From curse tablets to animal sacrifice to places where the divinity was approached, human beings in every period and culture have communicated with the divine. We will explore together how a given culture used art to communicate with the deity, interrogate the meaning of sacred space itself, and look closely at the literary and material evidence for rituals and beliefs. Through the lens of a chosen time period, we will analyze and critique practices and behaviors through topics such as festivals, burial practices, magical ceremonies, and rites of passage, with a view to understanding the place of sacred space in our own lives. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for GRC 0903 if they have successfully completed GRC 0803, REL 0803 or ARTH 0803.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GA, HO

Repeatability: This course may not be repeated for additional credits.

GRC 0904. Honors Race in the Ancient Mediterranean. 3 Credit Hours.

Learn about ancient thinking about race and ethnicity and how ancient thinking remains current and influential today. Investigate how categories of race and ethnicity are presented in the literature and artistic works of Greece and Rome. Our case studies will pay particular attention to such concepts as: notions of racial formation and racial origins; ancient theories of ethnic superiority; and linguistic, religious and cultural differentiation as a basis for ethnic differentiation. We will also examine ancient racism through the prism of a variety of social processes in antiquity: slavery, trade and colonization, migrations, imperialism, assimilation, native revolts, and genocide. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for GRC 0904 if they have successfully completed GRC 0804.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GD, HO

Repeatability: This course may not be repeated for additional credits.

GRC 0911. Honors Greek Theater & Society. 3 Credit Hours.

Through close readings of surviving texts, through viewings of modern productions of ancient theatrical works, and through your own recreations of Greek performative media, we will examine and experience ancient Greek drama both as a product of its own historical period and as a living art form. We will ask fundamental questions about the nature and purpose of theater in the ancient world: is this art just entertainment or does it engage and comment on the problems of Athens? How and why did this society invent theater in the Western world? We will also investigate the relationship of Greek drama to the modern world: why do new versions of plays about Oedipus, Antigone and Dionysus keep popping up in places as diverse as New York, Utah, South Africa and China? How can ancient drama be staged now in a way that is both responsible to the surviving texts and stimulating to contemporary audiences? NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for GRC 0911 if they have successfully completed GRC 0811.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GA, HO

Repeatability: This course may not be repeated for additional credits.

GRC 0929. Honors Ancient War Games: Sport and Spectacle in Greece and Rome. 3 Credit Hours.

Every four years the world stages athletic contests that are based on the practices of ancient Greece. Every year the NFL assigns a Roman numeral to the Super Bowl and suggests its players are modern gladiators. Greek athletic games and Roman gladiatorial battles developed from the practice of warfare in their societies. American sports may be viewed as the descendants of these ancient "war games." This class examines the similarities and differences in such sports and the societies that enjoyed (and enjoy) them. The Greek games replaced the blood of the battlefield with dramatic displays of military physicality, while the Roman games replicated this blood with armed combat before crowds of thousands. We begin by examining the origins, events, architecture, and rules of the Greek games, from Homer's funeral contests to the development of the circuit of athletic festivals. Next we look at the "re-foundation" of the modern Olympics and its romanticized mythology in several important films. Then we turn to Roman blood-sports (animal fights, gladiatorial contests and spectacular criminal punishments) and chariot-racing, considering also the filters of modern Hollywood. We end with the rise of modern spectator sports, especially football.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GB, HO

Repeatability: This course may not be repeated for additional credits.

GRC 2000. Special Topics. 3 Credit Hours.

Topics will be arranged each semester; please consult with the instructor for more information.

Repeatability: This course may be repeated for additional credit.

GRC 2002. Gender in Classical Antiquity. 3 Credit Hours.

What can we learn about the lives of ancient Greek and Roman women from ancient literature - literature written primarily by men? Can we piece together the everyday lives of Greek or Roman women of any social class? Even if we believe in the equality of the sexes, would a word like "equality" have had any meaning to the ancients? In this class, we will find answers to these questions by reading Greek and Latin sources in translation as well as the works of modern Classicists. While focusing on women's lives, we will gain a greater understanding of what was expected of both genders in the ancient world.

Repeatability: This course may not be repeated for additional credits.

GRC 2004. The City of Rome. 3 Credit Hours.

"The City of Rome" examines the features and development of the physical world of the ancient Romans. Beginning with the earliest evidence for material culture in and around the city of Rome, we examine how both the Roman city and the material objects associated with Roman life (including art, architecture, and technology), developed and changed as Roman influence expanded, Roman culture came into contact with neighboring cultures, and Roman rule came to dominate the Mediterranean basin.

Repeatability: This course may not be repeated for additional credits.

GRC 2011. Classical Greek and Roman Mythology. 3 Credit Hours.

An overview of the major myths of Greek and Roman antiquity including appropriate gods, heroes and heroines, and the stories told about them. The course examines the nature and social function of mythology, studying a number of different ancient and modern theories that attempt to account for this seemingly universal phenomenon. Also considered is the legacy of classical mythology in modern art and literature, including popular culture. This course provides students with the tools to understand other myths, both ancient and modern. Students encounter ancient myths through a variety of primary sources. NOTE: Formerly known as GRC 3001 Classical Greek and Roman Mythology. Students may receive credit for only one of the following courses: GRC 3001 or GRC 2011.

Repeatability: This course may not be repeated for additional credits.

GRC 2101. The Greeks. 3 Credit Hours.

This course explores who the ancient Greeks were, what they did, how they lived and what they believed. It focuses on both what we owe to the Greeks and how radically different they are from us. This is not a history of ancient Greece, but a journey through a series of connected units that explore different facets of ancient Greek civilization, from the Trojan War, to the ancient Olympics, to slavery, the family life and other topics. These topics are pursued in an interdisciplinary manner so that students examine evidence from Greek art, literature, history and philosophy. This course can serve the needs of students who seek a broad background in ancient Greek civilization and those who seek an introduction to this subject before pursuing more advanced work in Classics. NOTE: Prior to fall 2009, the course title was "Ancient Greek Civilization."

Repeatability: This course may not be repeated for additional credits.

GRC 2102. The Romans. 3 Credit Hours.

This course explores in an interdisciplinary manner who the ancient Romans were, what they did, how they lived and what they believed. Students will read some of the great works of Roman historians, poets and novelists, as well as study the physical and artistic culture of Rome, with a view to understanding the Romans' beliefs about themselves and their world. Each week, one class will be devoted to learning about larger issues of Roman daily life (education, spectacles), history (civil wars, the Augustan world) and people (men, women, slaves, Christians), and one class to learning about the authors who wrote on these subjects or during these historical periods. This course can serve the needs of students who seek a broad background in ancient Roman civilization and those who seek an introduction to this subject before pursuing more advanced work in Classics. NOTE: Prior to fall 2009, the course title was "Ancient Roman Civilization."

Repeatability: This course may not be repeated for additional credits.

GRC 2900. Honors Special Topics in Classical Culture. 3 Credit Hours.

Topics from classical antiquity which are of general and current interest based on reading Greek and Roman texts in translation. Lectures, audiovisual presentations, and large and small group work used to explore the significance of the texts.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

GRC 2902. Honors Gender in Classical Antiquity. 3 Credit Hours.

What can we learn about the lives of ancient Greek and Roman women from ancient literature - literature written primarily by men? Can we piece together the everyday lives of Greek or Roman women of any social class? Even if we believe in the equality of the sexes, would a word like "equality" have had any meaning to the ancients? In this class, we will find answers to these questions by reading Greek and Latin sources in translation as well as the works of modern Classicists. While focusing on women's lives, we will gain a greater understanding of what was expected of both genders in the ancient world.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

GRC 2911. Honors Classical Greek and Roman Mythology. 3 Credit Hours.

An overview of the major myths of Greek and Roman antiquity including appropriate gods, heroes and heroines, and the stories told about them. The course examines the nature and social function of mythology, studying a number of different ancient and modern theories that attempt to account for this seemingly universal phenomenon. Also considered is the legacy of classical mythology in modern art and literature, including popular culture. This course provides students with the tools to understand other myths, both ancient and modern. Students encounter ancient myths through a variety of primary sources. NOTE: Formerly known as GRC 3901 Honors Classical Greek and Roman Mythology. Students may receive credit for only one of the following courses: GRC 3901 or GRC 2911.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

GRC 3000. Topics in Classical Culture. 3 Credit Hours.

Topics from classical antiquity which are of general and current interest based on reading Greek and Roman texts in translation. Lectures, audiovisual presentations, and large and small group work used to explore the significance of the texts.

Repeatability: This course may be repeated for additional credit.

GRC 3002. Ancient City: Augustan Rome. 3 Credit Hours.

As first princeps (emperor of Rome) Augustus claimed to re-establish republican Rome after years of external and internal wars. We will study the city that emerged from the efforts of architects, engineers and artists of all kinds enlisted to assist Augustus in the new founding of Rome.

Repeatability: This course may not be repeated for additional credits.

GRC 3003. Ancient City: Byzantium. 3 Credit Hours.

The Greek colony Byzantium found new life as capital of the Christianized Roman Empire from the 4th century to the 15th century CE. This course explores the art, architecture, literature, military, political and social history of Constantinople from its re-founding by Constantine I through the early centuries of its eminence.

Repeatability: This course may not be repeated for additional credits.

GRC 3011. The History of Ancient Greek Theater. 3 Credit Hours.

This course traces the development of the ancient Greek theater, from its invention when Thespis stepped out of the chorus to sing solos, through the important tragedies of Aeschylus, Sophocles and Euripides that addressed the great questions of individual, the gods and society, through the early comedies of Aristophanes, to the final evolution of the ancient theater into something we would call melodrama and sit-com. We will study the development of the physical theaters in Athens and the wider Mediterranean, ancient staging techniques, the development of the early acting profession, the portrayal of women in Athenian theater, and the complex relationship between Athenian theater and democracy, as well as with religion. As the scholarly ground of the ancient Greek theater has shifted radically over the past forty years and continues to move, students will participate in the fundamental questions in this exciting field. Duplicate Credit Warning: This course is cross-listed with English 3011. Students who have earned credits for ENG 3011 will not earn additional credits for this course.

Repeatability: This course may not be repeated for additional credits.

GRC 3102. Comparative Mythology. 3 Credit Hours.

Materials from a variety of cultures will show how human beings deal with such ideas as the creation of the universe and mankind, the definition of the hero, order in the cosmos, and eschatology. Greek and Roman myths will serve throughout as the basis for comparison with a varying selection of myths from other cultures. This course was formerly known as GRC 3296 and GRC 3996. Students who have taken GRC 3296 or GRC 3996 may not receive additional credit for this course.

Repeatability: This course may not be repeated for additional credits.

GRC 3311. Ancient Greek Historians. 3 Credit Hours.

This course will survey Greek history from 800 BCE until the death of Alexander the Great (323 BCE) and the works of two of the most important Greek historians: Herodotus and Thucydides. A major component of the course will be an examination of the historiographical methods of these writers, but attention also will be paid to the other types of sources that are available.

Repeatability: This course may not be repeated for additional credits.

GRC 3312. Ancient Roman Historians. 3 Credit Hours.

This course will survey Roman history from the founding of Rome in the 8th century BCE through the fall of Rome in the 5th century CE. A major component of the course will be an examination of the texts and historiographical methods of important Roman historians such as Livy, Sallust and Tacitus, but attention also will be paid to other types of sources.

Repeatability: This course may not be repeated for additional credits.

GRC 3496. Writing Seminar. 3 Credit Hours.

Topics from classical antiquity which are of general and current interest based on reading Greek and Roman texts in translation. Lectures, audiovisual presentations, and large and small group work used to explore the significance of the texts.

Course Attributes: WI

Repeatability: This course may be repeated for additional credit.

GRC 3596. Ancient City: Periclean Athens. 3 Credit Hours.

This course will survey Athens in the 5th and 4th centuries BCE, examining the accomplishments and failures of one of the few truly participatory democracies the world has known. In addition to studying the history of the city as it gained and lost an empire, we will explore its arts (including theater, philosophy, and architecture) and the everyday life of its denizens.

Course Attributes: WI

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in any GRC course numbered 0800 to 3400.

GRC 3696. Ancient City: Hellenistic Alexandria. 3 Credit Hours.

At the death of Alexander his general Ptolemy moved the capital of Egypt from Memphis to Alexandria, which soon became renowned for buildings such as the Library and the Lighthouse, and as a center for commerce and arts. We will survey the art, literature, philosophy, social and economic foundations, and urban problems of this largest of Greek cities.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in any GRC course numbered 0800 to 3400.

GRC 3796. Ancient City: Augustan Rome. 3 Credit Hours.

Upon achieving mastery of the Roman world through key military victories, Octavian ostensibly returned control of the restored Republic to the Senate and People of Rome in exchange for the quasi-religious, honorific title Augustus (worthy of honor). But he retained command of Rome's armies and transformed himself into the first true emperor of a vast territory that encompassed the entire Mediterranean basin. To legitimate and raise popular support for his rule, he instituted a massive building and beautification program in Rome, promoted the literary arts, and instituted legal and religious reforms, all of which ushered in Rome's Golden Age. In this course we will study--and interact with--the influential history, physical structures, ideals, social institutions and arts of Augustan Rome.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in any GRC course numbered 0800 to 3400.

GRC 3897. Ancient City: Jerusalem. 3 Credit Hours.

This course will investigate the history, society, culture, topography and art of this immensely important city during one of its most historically significant periods, focusing mainly on the period after Jerusalem fell into the ambit of the Roman Empire (63 BCE) to its destruction by the armies of Titus (70 CE). It will also consider the development of the relationship between Jerusalem and Rome, and the important role played by ethnic, cultural, and religious differences in the ultimate failure of Romano-Judaean relations, with a view to understanding how overcoming such differences today is necessary to create a successful and functioning global community. Source material will include the historical writings, contemporary non-literary sources such as coins and inscriptions, and articles or videos by modern historians and archaeologists on relevant topics.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in any GRC course numbered 0800 to 3400.

GRC 3900. Honors Topics in Classical Culture. 3 Credit Hours.

Topics from classical antiquity which are of general and current interest based on reading Greek and Roman texts in translation. Lectures, audiovisual presentations, and large and small group work used to explore the significance of the texts.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

GRC 4082. Independent Study. 1 to 6 Credit Hour.

Intensive study under individual guidance in a specific area suggested by the student and approved by the department advisor.

Repeatability: This course may be repeated for additional credit.

GRC 4182. Independent Study. 3 Credit Hours.

Intensive study under individual guidance in a specific area suggested by the student and approved by the department advisor.

Repeatability: This course may be repeated for additional credit.

Health Information Management (HIM)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

HIM 1005. International Classification of Disease, 10 Revision, CM & PCS Coding Systems for Experienced Coders. 3 Credit Hours.

The course is designed to provide individuals with ICD-9-CM coding experience with the requisite knowledge and skills to be proficient with the ICD-10-CM and ICD-10-PCS code sets. An overview of diagnosis and procedural coding conventions and guidelines will be provided. Emphasis will be placed on application of coding guidelines and conventions to intermediate and advanced coding cases.

Repeatability: This course may not be repeated for additional credits.

HIM 1006. Electronic Documentation for Health Care Providers. 3 Credit Hours.

This course will explore introductory concepts related to electronic health record information and the use and importance of health care documentation as it related to research, reimbursement and continuum of care. Content related to electronic health record interoperability, privacy and security will be examined. Examples of various health care settings/providers and their specific use of electronic health records will be explored.

Repeatability: This course may not be repeated for additional credits.

HIM 1055. IT Applications for Health. 3 Credit Hours.

This course gives students an overview of several key areas of information technology they will face in their healthcare career. Students will learn about current trends and applications used in health information management settings and public health sectors. Topics to be explored in this course include, but are not limited to: HIPPA, privacy and security, mobile apps, healthcare website design, video creation, social media management, MS Office applications and presentation software. Other current trends is health technology will be covered as appropriate.

Repeatability: This course may not be repeated for additional credits.

HIM 1101. Medical Terminology. 3 Credit Hours.

An introduction to the language of medicine, including medical and anatomical terminology, definitions, the process of word construction, and analysis of terms. The focus is on the use of prefixes, suffixes, and combining forms that facilitate the ability to translate medical terms. Symptoms, diseases, operative procedures, laboratory tests, diagnostic and treatment terms, and abbreviations are studied.

Repeatability: This course may not be repeated for additional credits.

HIM 2031. Global Development of Health Information Systems. 3 Credit Hours.

Health information systems (HIS) use healthcare technology to acquire, store, deliver and analyze medical data, which is also critical to medical facilities and personnel management, medical error reduction, professional training, and quality improvement. This course will introduce the different HIS/HIT developed worldwide and the various governments' roles in supporting the HIS development. Students will also learn how HIS/HIT is used in clinical care, patient monitoring, pandemic monitoring, and emerging global health areas.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

HIM 2203. U.S. Health Care System. 3 Credit Hours.

The health care delivery system is studied, with a focus on issues related to access, cost and quality. System components are examined including: important values and beliefs; the historical development of the health care system and the current status; health services financing; the role of health care professionals; the use of technology; outpatient, primary care, inpatient, managed care, long-term care and integrated services; issues for special populations; the process and purpose of health policy; and, future options for the delivery system. The role of the health information management professional is examined within the context of the health care system, including the importance of the professional Code of Ethics.

Repeatability: This course may not be repeated for additional credits.

HIM 2215. Health Information Management IT Fundamentals. 3 Credit Hours.

The course will provide a foundation in information technology (IT) concepts related to the HIM Practitioner. Content related to IT architecture, computer hardware, software, and networking systems, security, IT valuation, types of computer systems, centralized versus decentralized design, data capture technologies, and emerging technologies will be explored in the context of the health care industry. Specific attention will be addressed to the application of information technologies on the ability of health care organizations to respond to changes in the environment including regulatory, legislative, and accrediting agency initiatives.

Repeatability: This course may not be repeated for additional credits.

HIM 3020. Special Topics in Health Information Management. 1 to 3 Credit Hour.

This course provides students the opportunity to explore new and emerging areas in the field of health information management and to gain a deeper understanding of a specific area within the field. This course may also be used to present areas of study not normally taught in the program

Repeatability: This course may be repeated for additional credit.

HIM 3031. Health Technology Assessment. 3 Credit Hours.

Technological innovation has improved health care delivery and patient outcomes. Examples of breakthroughs include vaccines, targeted cancer therapies, joint replacement, pain management, infection control, and health information technology. Manufacturers, regulators, clinicians, patients, hospital managers, payers, policy makers, and others increasingly demand evidence to support decisions about technology's development, regulation, purchasing, utilization, and reimbursement to ensure its appropriate use, and more. This course introduces fundamental aspects and issues of the dynamic field of health technology assessment (HTA), from an international perspective. The course will cover HTA's growth and development in the public and private sectors, HTA methodologies and processes, and reporting to diverse users. Students will learn about how HTA impacts the development, adoption, and diffusion of health technology in the health care sector.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in HIM 2031.

HIM 3082. Independent Study in Health Information Management. 1 to 3 Credit Hour.

Exploration of an aspect of health information management, in accordance with a student's learning objectives. NOTE: Permission of the faculty member is required.

Repeatability: This course may be repeated for additional credit.

HIM 3101. Health Record Documentation. 3 Credit Hours.

The purposes and uses of health record documentation will be explored including the primary and secondary uses of healthcare data. The development, content, format, and standards of health record will be studied for various healthcare settings. Documentation requirements including accreditation, regulatory, and licensure standards and required data sets will be examined. An introduction to Health Information Management functions (including storage and retrieval, classification systems, access and release of health information, transcription, electronic document management systems) will be provided.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (HIM 1101 or 'Y' in CRHI01), HIM 1055, (HPM 2214 or 'Y' in CRHP01), ((KINS 1223 and KINS 1224), (KINS 1221 and KINS 1222), (KINS 1223 and 'Y' in CRKI03), (KINS 1224 and 'Y' in CRKI02), ('Y' in CRKI02 and 'Y' in CRKI03), or (KINS 1221 and 'Y' in CRKI17)), and (EPBI 2219, MATH 1013, PSY 1167, SOC 1167, STAT 2101, 'Y' in CREP01, 'Y' in CRMA02, or 'Y' in CRSO02)

HIM 3106. Pathophysiology. 3 Credit Hours.

An introduction to basic concepts of disease processes. Clinical course, related diagnostic and therapeutic procedures and expected outcomes for commonly occurring medical conditions are addressed.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (HIM 1101, 'Y' in HIM1, or 'Y' in CRHI01), (KINS 1223, 'Y' in KIN1, or 'Y' in CRKI02), and (KINS 1224, 'Y' in KIN2, or 'Y' in CRKI03)

HIM 3107. Healthcare Leadership and Strategic Management. 3 Credit Hours.

The course is designed to explore the characteristics and functions of management in the healthcare environment with specific attention to leadership and strategic management. This course includes the study of traditional management functions including planning, organizing, leading, and controlling, with an emphasis on the administrative role of the health information management professional. Students will also explore how HIM practitioners support the organization's initiatives, mission, vision and objectives through the development of policies, procedures, and allocation of resources. Change management theories and best practices will be evaluated.

Repeatability: This course may not be repeated for additional credits.

HIM 3111. Statistics and Research in Health Care. 3 Credit Hours.

Course addresses medical research methodologies; computation of routine health care institutional statistics; the United States vital statistics system; and, presentation and interpretation of health care data.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (STAT 2101, MATH 1013, PSY 1167, SOC 1167, 'Y' in STT5, 'Y' in CRMA02, or 'Y' in CRSO02)

HIM 3113. Healthcare Database Design and Development. 3 Credit Hours.

Efficient and effective database design is critical to a healthcare organization's ability to collect, report, analyze and use data. In this course, students will effectively design and build relational databases in 3NF using multiple relational database management systems with specific attention to design which facilitates performance of daily operations. In addition, students will become adept at a wide range of data definition functions including updating, deleting, saving, and reverting to older versions of databases. Significant attention is devoted to the data manipulation language. Query development will include simple and complex queries such as conditions, aggregation, string functions, nested queries, mathematical functions, and joins using traditional forms and ANSI standard forms. An introduction in data analysis and migration will also be explored with pivot tables and data exports and imports. This course requires extensive hands on laboratory assignments.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (HIM 1055, CIS 1055, 'Y' in CS04, or 'PASS' in BCP)

HIM 3203. Electronic Health Record Systems. 3 Credit Hours.

The role of the electronic health record systems (EHRS) as they support improvements in the quality of patient care and reduction of healthcare costs will be addressed. This class offers an overview of the features and functions in electronic health record systems and their application across the healthcare continuum with emphasis on the acute care and ambulatory care settings. The course will explore the history of the development of interoperable EHRS, the drivers and impediments for adoption, and the development of nationwide health information exchange. The course will cover the various types of health information systems that serve as feeders to clinical repositories.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (HIM 2215 (may be taken concurrently) or 'Y' in HIM3)

HIM 3208. International Classification of Diseases. 3 Credit Hours.

An intensive coding course based on the International Classification of Diseases diagnosis and procedural classification systems, as modified for use in the United States. The emphasis of instruction will be on application of coding principles for the acute care inpatient setting. The Medicare inpatient prospective payment system and the determination of diagnostic related groups (DRGs) for hospital reimbursement will also be addressed.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (HIM 3106 or 'Y' in CRHI08)

HIM 3216. Clinical Procedures and Pharmacology. 3 Credit Hours.

The course is designed to develop an understanding of pharmacology and the technical aspects of commonly performed surgical and medical procedures and diagnostic tests. Detailed descriptions of procedures, approaches, equipment and implanted devices used will be analyzed. The procedural objective in terms of diagnosis versus treatment will also be discussed. An introduction to the principles of pharmacology, including drug terminology, drug origins, forms, and actions; routes of administration; and the use of generic name drugs, trade name drugs and categories of drugs to treat various body systems will also be addressed.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (HIM 3106 or 'Y' in CRHI08)

HIM 3271. Professional Development. 1 Credit Hour.

This course is designed to help prepare students for career planning. The emphasis is on interview preparation (including behavioral event interviewing), expected behaviors and legal issues. Career options and resume preparation in the context of life long career development will be explored.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management.

Repeatability: This course may not be repeated for additional credits.

HIM 3297. Health Information Management Human Resource Management. 3 Credit Hours.

Personnel policies and practices are evaluated for the healthcare environment, including: recruitment, selection and retention; personnel training and development; job design and analysis; performance management; employee and labor relations; compensation and benefits programs; and health and safety issues. NOTE: Writing Intensive course.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (HIM 3107 or 'Y' in CRHI09)

HIM 4101. Health Informatics: Infrastructure and Standards. 3 Credit Hours.

This course will explore the purpose, use, benefits and challenges of various standards to achieve semantic interoperability for health information exchange. Healthcare standardization related to privacy, security, clinical vocabularies, data communication, architectural framework, and data content will be evaluated in the context of meaningful use of electronic health record systems (EHRS). National and international standards development efforts are also discussed. Gaps between adopted standards and existing practice will be evaluated. Key content and data standards will be explored.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (HIM 3203 or 'Y' in CRHI03)

HIM 4102. Legal Aspects of Health Information Management. 3 Credit Hours.

This course provides a foundation of the legal, ethical and regulatory requirements that affect the use, access and disclosure of health information. The U.S. legal system, sources of laws and regulations, elements of case law, civil procedures and trial processes will be addressed. Emphasis will be on issues related to privacy and confidentiality; negligence, malpractice and liability; informed consent and contracts.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (HIM 3101 or 'Y' in CRHI07) and (HPM 2214 or 'Y' in CRHP01)

HIM 4104. Health Information Management Operations Management. 3 Credit Hours.

This course will explore methods and management tools used in the analysis of health information systems. Students will develop objectives, policies and procedures and will perform benchmarking, productivity measurement, and workflow and layout analyses. Traditional business process analysis and redesign tools such as data flow diagramming, flow charting, and swimlanes, will be evaluated including the benefits and challenges of each technique. A survey of functional requirement specification gathering approaches will be reviewed and evaluated. Contract management, resource allocation, and workflow process redesign within the context of health information systems will also be addressed.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (HIM 3297 or 'Y' in CRHI06) and (HIM 3203 or 'Y' in CRHI03)

HIM 4105. Current Procedural Terminology Coding. 3 Credit Hours.

A coding course, based on the Current Procedural Terminology (CPT) coding system that is used for classifying physician and hospital outpatient services. The course examines the role of CPT codes in claim submission, benefit adjudication and provider reimbursement. The Healthcare Common Procedure Coding System (HCPCS) II is also addressed and coding skills for the application of coding principles are developed.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (HIM 3106 or 'Y' in CRHI08) and (HIM 3216 or 'Y' in CRHI05)

HIM 4113. Healthcare Reimbursement Systems. 3 Credit Hours.

Reimbursement methodologies are studied, as they relate to a variety of health care settings, payers and patient populations. Case mix analysis, charge master description, revenue cycle management, claims processing and fraud and abuse are discussed. Provides an overview of accounting and financial terms used by health care managers.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management.

Co-requisites: HIM 4105.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (HIM 3208 or 'Y' in CRHI04) and (HPM 2214 or 'Y' in CRHP01)

HIM 4121. Healthcare Data Analytics. 3 Credit Hours.

Healthcare organizations have an ever increasing need to access, interpret, and analyze information from a multitude of data sources to respond quickly to changes in clinical practices, legislative, regulatory, and accrediting body initiatives, and the competitive marketplace. This course will explore data mining and analytic tools which facilitate the analysis of complex healthcare data. Students will review computer tools for manipulation, analysis and presentation of data using real-world examples across a wide range of healthcare settings.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (HIM 3113 or 'Y' in CRHI02)

HIM 4202. Health Information Management Project Management. 3 Credit Hours.

Managing EHRS projects centers on managing uncertainty at all stages. In this course, students will be introduced to the concepts of managing EHR projects by focusing on initiating, planning, executing, controlling, and closing projects in the context of topics such as integration, scope, timing, cost, quality, human resource, technology, communication, contracts, risk and procurement. The System Development Life Cycle of the EHRS development will be explored in depth. Topics surrounding cost-benefit analysis, return on investment, requests for proposal, and vendor selection will be emphasized.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management.

Co-requisites: HIM 4104.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in HIM 4101.

HIM 4206. Intermediate Coding. 3 Credit Hours.

This course focuses on advanced topics in diagnosis and procedural coding using the ICD-10-CM, ICD-10-PCS, CPT and HCPCS coding systems. Emphasis will be placed on applying official coding guidelines, and health record documentation analysis and reimbursement optimization. Students will be able to code inpatient, ambulatory surgery and physician encounter cases. Computerized coding and grouping software will be used. The emerging role of computer assisted coding will also be addressed.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (HIM 3208 or 'Y' in CRHI04), (HIM 4105 or 'Y' in CRHI11), and (HIM 4113 or 'Y' in CRHI12)

HIM 4207. Healthcare Quality Improvement. 3 Credit Hours.

This course provides a foundation in quality and patient safety management processes in healthcare. The role of performance measurement and reporting, professional staff credentialing, registries, risk and utilization management, data analysis, and presentation in healthcare quality management will be discussed.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (HIM 3208 or 'Y' in CRHI04) and HIM 3111.

HIM 4286. Management Internship. 4 Credit Hours.

Intensive professional practice experience on a full-time basis for 4 weeks at selected affiliated institutions; emphasis on administrative aspects of health information management services.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in HIM 4101, (HIM 4102 or 'Y' in CRHI10), (HIM 4105 or 'Y' in CRHI11), (HIM 4113 or 'Y' in CRHI12), (HIM 4207 or 'Y' in CRHI13), and HIM 4121.

HIM 4298. Health Information Management Senior Seminar. 3 Credit Hours.

Writing intensive capstone course that requires a formal paper regarding an important and current health information management issue. Problems and cases are also used for the development of critical thinking, problem-solving, and decision-making skills. The assignments facilitate the application of health information management expertise and the skills needed for a professional career path. NOTE: Writing intensive course.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in HIM 4101, (HIM 4102 or 'Y' in CRHI10), (HIM 4105 or 'Y' in CRHI11), (HIM 4113 or 'Y' in CRHI12), HIM 4121, and (HIM 4207 or 'Y' in CRHI13)

Health Policy and Management (HPM)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

HPM 2202. Man-Made Disasters: Radiological, Chemical & Biological Terrorism. 3 Credit Hours.

This course is designed to introduce students to the concepts and models of public health preparedness, mitigation, and evaluation in the context of man-made disasters, including radiological, chemical, and biological incidents. The course addresses identified core competencies of emergency preparedness for public health professionals that include: disaster management, risk assessment, risk communication, governmental resources, functional roles, surveillance, and preparedness evaluation. Man-made disasters will be looked at in a historical, environmental, and psychological context in order to elucidate the role of public health in man-made disaster preparedness and evaluation. In addition the role of cultural competency and the needs of special populations will be addressed. Public perception of risk and media views of man-made disasters will be explored. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better. NOTE: This course is only offered online.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

HPM 2208. Natural Disasters: Response and Recovery. 3 Credit Hours.

This course is designed to introduce students to the concepts and models of public health response and recovery in the context of natural disasters. It will assist health care and allied health professionals, public health professionals, and emergency responders to work together to respond effectively and to facilitate recovery in a natural disaster. The course will enable students to meet identified core competencies of emergency health preparedness for public health professionals that include functional roles, resource identification, problem solving, and appropriate response. Students will utilize problem-based learning by analyzing actual disaster events and applying the theories, principles, and practices of response and recovery. In addition, students will learn about the issues faced by special populations and how to address these special needs in natural disaster response and recovery. Public Health majors and minors must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

HPM 2214. Politics and Payments in US Healthcare System. 3 Credit Hours.

The course provides an overview of the finances and infrastructure on which the U.S. health care system is based as well as a basic overview of the health policy process. Students will learn about private and public health insurance, including Medicare, Medicaid, and SCHIP, as well as discuss the growing problem of uninsured populations. In addition, students will explore the policy process behind our current health system, focusing on the role of the legislative, executive, and judicial systems, as well as special interest groups and the role of public opinion in health policy. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

HPM 2216. Introduction to Health Policy. 3 Credit Hours.

This course introduces students to policy and its influence on public health. Students will gain an understanding of the policymaking process, focusing on prescriptive policy analysis, and will develop fluency in current debates in health policy, both in the context of health care policy and health-relevant social policy. They will also focus on analytical and communication skills for the practice of public health policy.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in HPM 2214.

HPM 3131. Global Health Systems. 3 Credit Hours.

Health systems around the world can look very different. Some provide high-quality, advanced services to everyone within a country - and result in very good population health outcomes. Others struggle to provide even minimal health services or fulfill basic public health functions - and result in relatively poor population health outcomes. This course examines healthcare and public health systems around the world and their impact on population health. The course will also explore the role of the World Health Organization, the World Bank, and financing mechanisms like the Global Fund to Fight AIDS, Tuberculosis, and Malaria and the President's Emergency Plan for AIDS Relief (PEPFAR). Students will learn to produce assessments of health systems and assess health system performance.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

HPM 3207. Principles of Emergency Management: A Public Health Perspective. 3 Credit Hours.

This course is designed to introduce students to the concepts and models of public health preparedness and response for all hazards emergency management. It will enable health care and allied health professionals, public health professionals, and emergency responders to work together to plan and respond effectively to both natural and man-made disasters. The course will introduce students to the identified core competencies of emergency health preparedness for public health professionals which include: functional roles, communication, resource identification, problem solving, and evaluation. The issues of mental health and special populations will be introduced in an emergency management context. Students will utilize problem-based learning by analyzing actual disaster events and applying the theories, principles, and practice of preparedness, response, mitigation, and recovery. In addition, students will learn about the importance of personal emergency preparedness, which will include the development of their own emergency plan. Public Health majors or minors or students pursuing the Certificate in Emergency Management with Special Populations must complete this course with a C or better.

Repeatability: This course may not be repeated for additional credits.

HPM 3208. History of U.S. Public Health. 3 Credit Hours.

To advance public health in the United States, it is important to understand the history of public health and how public health evolves. This course surveys the history of public health in the U.S. over the past 300 years and issues relevant to the 21st century. Each class session will focus on a history of public health theme, including shifting patterns of disease and illness; the emergence of public health as a profession; and the development of the U.S. public health systems. The class will focus on the dual nature of public health, encompassing both the biological basis of medicine and the economic, political, and cultural characteristics of societies in which public health operates. We will highlight how the beliefs and priorities in U.S. society have influenced both response to public health challenges and the activities by public health professionals to address these challenges. This includes scientific standards; religious or moral beliefs; and the political, cultural, economic, and sociodemographic gender context of society. Understanding historical interrelationships among context, issues, and decisions can help public health professionals better recognize and address today's challenges.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

College Restrictions: Must be enrolled in one of the following Colleges: College of Public Health.

Repeatability: This course may not be repeated for additional credits.

HPM 3215. Special Populations: Strategic Community Outreach. 3 Credit Hours.

This course is designed to introduce students to the concepts and models of strategic community outreach as it pertains to the special population communities, within the context of emergency management planning, response, and recovery. It assists health care and allied health professionals, public health professionals, and emergency responders to understand how accessible information and technology is part of the community outreach strategy. The course enables students to meet identified core competencies of emergency preparedness for public health and emergency professionals, which include functional roles, resource identification, problem-solving, and appropriate response. Students utilize problem-based learning by analyzing actual and scenario based disaster events and applying the theories, principles, and practices of strategic community outreach pertaining to emergency response and recovery. In addition, students learn about the issues faced by special population communities and how to address these special needs in all hazard response and recovery. Public Health majors or minors or students pursuing the undergraduate Certificate in Emergency Management with Special Populations must complete this course with a C or better.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (HPM 2207 or HPM 3207)

HPM 3216. Public Health Advocacy and Policy Change. 3 Credit Hours.

This course provides students with the knowledge of different approaches to doing public health advocacy and realizing policy change to improve the health of communities. Students will learn to identify public health issues and how to advocate for policy change at local, state, national and global levels.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in HPM 2214.

HPM 3231. Global Health Policy. 3 Credit Hours.

Health policy has profound implications for public health and health inequity. It determines who lives long, who dies early, and how we engage with social issues like access to healthcare, economic inequality, environmental pollution, and emerging infectious disease. This course introduces students to comparative policy and explores different policy responses to pressing global public health issues in the context of high-, middle-, and low-income countries. Students will identify one global health issue and conduct a health policy analysis that examines the effectiveness of policy responses around the world.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

HPM 3382. Independent Study in Public Health. 1 to 6 Credit Hour.

Students in this course pursue supervised independent projects on issues related to public health. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better. NOTE: Registration must be preapproved by faculty before registration.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Public Health.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

Health Related Professions (HRPR)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

HRPR 1001. Public Health: The Way We Live, Work and Play. 3 Credit Hours.

Public Health: The Way We Live, Work and Play is designed to help students think about contemporary health issues from an interdisciplinary perspective. The course includes an introduction to the five core areas of public health - biostatistics, epidemiology, environmental health, health services administration, and social and behavioral sciences - and how these areas relate to various health, health care, and human service professions. Public health helps inform decisions that shape the behavior of individuals and communities. Students will analyze health issues such as health promotion, disease prevention, and health care policy from a variety of perspectives. As part of the course, students will work in small interdisciplinary teams to access and evaluate information about a particular individual or population-level health issue, and learn to argue persuasively, both orally and in writing, for interdisciplinary approaches to that health issue. The focus of the course is to engage students' curiosity about how the discipline of public health and interdisciplinary approaches apply to issues students may confront in their future professional work.

Course Attributes: SI, SS

Repeatability: This course may not be repeated for additional credits.

HRPR 1005. Introduction to Mindfulness. 3 Credit Hours.

This 3-credit course is designed for undergraduate students in the College of Public Health. The course will review the history of mindfulness and then move to modern approaches and applications of mindfulness. A personalized mindfulness practice will be explored for relevance to a student's life. The course will focus on the neuro-biological influence of stress, the gut-brain axis, and the epigenetic nature of the human experience. It will explore issues such as conflict, approach versus withdrawing behaviors, and resilience. Students will deepen their understanding of concepts such as compassion fatigue, burnout, cognitive empathy, and vulnerability. The course serves as a springboard for future learning and deeper exploration into specific areas of mindfulness application, at a personal or population level.

Repeatability: This course may not be repeated for additional credits.

HRPR 1101. Contemporary Aspects of Disability. 3 Credit Hours.

An examination of psychological and social issues related to individual and social-cultural perspectives of disability, including social stigma and discrimination, portrayal by media, self-advocacy, family and other social relationship issues that impact the culture of disability and an individual's quality of life. NOTE: This course can be used to satisfy the university Core Individual and Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: IN, SI

Repeatability: This course may not be repeated for additional credits.

HRPR 1222. Introduction to Clinical Health Professions. 1.5 Credit Hour.

The purpose of this course is to introduce students to the range of clinical health professions outside of being a medical doctor or nurse. The health system is composed of a range of clinical professions that can work in harmony to provide for the prevention and treatment of illness and chronic conditions. In this course, students will get a hands-on and up-close look at five clinical professions, including athletic training, occupational therapy, physical therapy, recreational therapy, and speech therapy. By the end of the course, students will be able to describe the core functions of each profession and reflect on opportunities that may be a best fit for them.

Repeatability: This course may not be repeated for additional credits.

HRPR 1444. Movement Injuries: Prevention and Care. 3 Credit Hours.

This lecture course introduces students to the care and prevention of movement injuries. The content includes a review of pertinent anatomical structures and their relationship to injuries. The course also covers mechanisms, extrinsic and intrinsic factors, as well as basic preventative and treatment measures for common sports-related injuries. Lastly, an overview of legal issues related to sports health care is also discussed.

Repeatability: This course may not be repeated for additional credits.

HRPR 2106. An Introduction to Holistic Practices and Integrative Medicine. 3 Credit Hours.

The purpose of this course is to explore the use of Complementary and Alternative Medicine (CAM) and health practices, and integrative medicine within a holistic framework of care. The holistic/integrative approach incorporates traditional (Western Medicine) and CAM practices into the mental, emotional, physical, social, and spiritual dimensions of a person's functioning. The integrative approach uses standard treatments in combination with such adjuncts as nutrition, herbal therapy, and healing touch, among modalities.

Repeatability: This course may not be repeated for additional credits.

HRPR 2421. First Aid and CPR for Health and Exercise. 3 Credit Hours.

This skills-based course will introduce first aid and cardiopulmonary resuscitation for health and exercise students. Topics include management of acute injuries and illnesses and emergency response. Students will have the opportunity to earn first aid and CPR certification. Prior to Fall 2023, the course title was "Emergency Medical Care for Health Professionals."

Repeatability: This course may not be repeated for additional credits.

HRPR 2442. Basic Assessment of Musculoskeletal Injuries. 3 Credit Hours.

This three-hour course will focus on the assessment and basic treatment of musculoskeletal injuries of the upper and lower extremity. The use of hands-on clinical evaluation techniques will be emphasized. For those in pre-health studies, this introduction to such techniques does not imply clinical expertise and should not be used as such. For EMTs taking this course, all such knowledge should be used in accordance with your state practice act. Fall only.

College Restrictions: Must be enrolled in one of the following Colleges: College of Public Health.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (KINS 1223 or 'Y' in CRK102) and (KINS 1224 or 'Y' in CRK103)

HRPR 2800. Special Topics in Health Professions. 3 Credit Hours.

The Health Professions Special Topics course is designed to emphasize current trends and contemporary topics of interest within the various health professions. Topics will vary by semester.

Repeatability: This course may be repeated for additional credit.

HRPR 2900. Honors Special Topics. 3 Credit Hours.

This is an Honors course. Topics vary from semester to semester. Please consult with the instructor and/or check the class schedule for specific topic(s) being offered.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

HRPR 3001. Emergency Medical Technician. 6 Credit Hours.

The Emergency Medical Technician curriculum will follow the National Registry of Emergency Technician standards in a traditional course setting. This material will be taught in a dynamic classroom environment where hands-on skills are heavily integrated. Students will utilize an assigned textbook and associated interactive supplements to complete readings, assignments, presentations, and non-psychomotor skill labs. Students will complete field clinical hours with an affiliated pre-hospital and hospital facilities. Throughout the course, and through application of skills in the clinical setting, students will be proficient in Basic Life Support (BLS) care. Upon successful completion, the student will be eligible to take the National Registry Examination to become certified as an Emergency Medical Technician.

College Restrictions: Must be enrolled in one of the following Colleges: College of Public Health.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (KINS 1223 or 'Y' in CRKI02)

HRPR 3087. Emergency Medical Technician. 6 Credit Hours.

The Emergency Medical Technician curriculum will follow the National Registry of Emergency Technician standards in a traditional course setting. This material will be taught in a dynamic classroom environment where hands-on skills are heavily integrated. Students will utilize an assigned textbook and associated interactive supplements to complete readings, assignments, presentations, and non-psychomotor skill labs. Students will complete field clinical hours with an affiliated pre-hospital and hospital facilities. Throughout the course, and through application of skills in the clinical setting, students will be proficient in Basic Life Support (BLS) care. Upon successful completion, the student will be eligible to take the National Registry Examination to become certified as an Emergency Medical Technician.

Repeatability: This course may not be repeated for additional credits.

HRPR 3096. Cultural Competency in Health and Healthcare. 3 Credit Hours.

Cultural competence goes beyond language, ethnicity, race and sex. This course will examine those components in the context of cultural traditions, gender issues, aging, and (dis)ability. There is a need for such background knowledge to develop the skills to effectively interact with diverse groups of people to improve the patient experience in healthcare, eliminate cultural and linguistic barriers during clinical encounters, develop sensitivity to gender/age/ability bias, ensure compliance with all care requirements and protocols, and improve the overall quality of care. This interaction includes (but is not limited to) patients, patients' families, and the health care team. This course is reflective of the needs expressed by the National Institutes of Health to best prepare the future public health and healthcare workforce.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Studies, Health Professions.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

HRPR 3197. Understanding and Applying Research in Health Professions. 3 Credit Hours.

This 3-credit, writing intensive course will introduce the fundamentals of research design and interpretation in literature around clinical practice issues. Students will read, summarize, and interpret current literature and determine how it applies to clinical practice and health outcomes. Students will engage in multiple opportunities to draft and re-write.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Health and Rehab Sciences.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (EPBI 2219, STAT 2101, MATH 1013, PSY 1167, SOC 1167, 'Y' in CREP01, 'Y' in CRMA02, or 'Y' in CRSO02)

HRPR 3443. Assessment of Head, Neck, and Spine Injuries in Sport. 3 Credit Hours.

Study of athletic injury assessment principles and techniques. Specific areas include head, face, and neck injuries, and orthopedic injuries of the spine. Students will have the opportunity to practice manual skills related to the assessment, extraction, and immobilization of patient-athletes in challenging sports settings such as gymnastic pits, hockey rinks, etc. For those in pre-health studies, this introduction to such techniques does not imply clinical expertise and should not be used as such. For EMTs taking this course, all such knowledge should be used in accordance with your state practice act.

College Restrictions: Must be enrolled in one of the following Colleges: College of Public Health.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (KINS 1223 or 'Y' in CRKI02) and (KINS 1224 or 'Y' in CRKI03)

HRPR 4096. Introduction to the Narrative in Patient-Centered Health Care. 3 Credit Hours.

This is a multidisciplinary course that uses a variety of ways to help students understand the human experience in the context of health and illness and explore the linkage between the story and the body. In order to help develop narrative competence, students will learn how a narrative approach to health and disease is different from the conventional biomedical approach. The focus of narrative medicine is on the individual patient, a person with a past, a person with pain, and a person with agency. Students will learn about the ways in which the patient's story and physiology are related, how the story can be used in a clinical setting, and how to improve their ability to interpret narratives. It will provide students with the skills of respecting multiple perspectives. It will help them hear and mediate competing voices (e.g. those of authority, the patient, the patient's family), and it will help them engage in the dynamics of movement between empathy and emotional detachment. The goal for this course is interprofessional, patient-centered, and humanistic; and it is intended to promote compassionate clinical care through valuing the patient's, and the practitioner's, own unique experiences.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Studies, Health Professions.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (KINS 3096, HRPR 3096, or 'Y' in CRKI09) and (HRPR 2103, HPM 2214, or 'Y' in CRHP01)

HRPR 4282. Independent Study in Health Professions. 1 to 6 Credit Hour.

This course provides an opportunity for independent investigation and analysis of the intellectual, physical, social, psychological, and ethical bases of issues related to health professions.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Professions.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (KINS 1223 or 'Y' in CRKI02), (KINS 1224 or 'Y' in CRKI03), and HRPR 3096.

HRPR 4283. Directed Readings and Study in Health Professions. 1 to 6 Credit Hour.

This course provides an opportunity to participate in a variety of independent experiences (readings and study) in health professions as directed by a faculty mentor.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Professions.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: minimum GPA of 3 in: courses numbered 0700 to 4999.

HRPR 4821. LGBTQ+ Health Through the Lifespan. 3 Credit Hours.

Students in this 3-credit course will examine prevalent healthcare needs and barriers to care across the lifespan for those in the LGBTQ+ community. During the course, students will evaluate community health needs data, engage with patients and experts in the field, and deliberate research and case studies from across medical and healthcare specialties.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in HRPR 3197.

Healthcare Management (HCM)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

HCM 3501. Introduction to Health Services Systems. 3 Credit Hours.

Introduction to the organization, delivery and financing of health care. An overview of management issues designed for those preparing for careers as risk and insurance, public health, or healthcare professionals, or business majors interested in career opportunities in the healthcare industry. NOTE: This course can be used to satisfy the university Core Individual and Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Healthcare Management, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Public Health, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mnngt.

Course Attributes: IN

Repeatability: This course may not be repeated for additional credits.

HCM 3502. Healthcare Financing and Information Technology. 3 Credit Hours.

The insurance, payment mechanisms, contractual arrangements and control mechanisms related to the provision of health services with an emphasis on what the financial manager can do to enhance financial position of the healthcare institution. The course emphasizes information technology applications and hands-on exercises using web-based information resources. NOTE: This is an information management/technology approved course for FSBM majors.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Healthcare Management, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mnngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (HCM 3501 or 'Y' in CRHC02)

HCM 3580. Special Topics - Healthcare Management. 3 Credit Hours.

Special topics in current developments in the field of healthcare management.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mnngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

HCM 4596. Healthcare Quality and Risk Management. 3 Credit Hours.

The course focus is on the relationships among risk management, quality improvement and patient safety and how these impact the business of healthcare and patient health. The foundation of the study of these topics is the nature of risk and the risk management process as it pertains to health and healthcare organizations. The course emphasizes independent business research, independent and group problem solving, professionally prepared written and oral presentations and refining one's ability to prioritize multiple assignments/tasks. The learning environment is structured to approximate the business setting. To bridge the gap between the classroom and the actual practice of risk management, patient safety, and quality, students attend Healthcare Risk Management Grand Rounds at an area healthcare institution. The Grand Rounds include real time risk management, patient safety and quality improvement rounds with practicing leaders in these disciplines. NOTE: Must be a Risk Management and Insurance major, Healthcare Management minor or Business Management major with a Healthcare Management concentration. Students must earn a grade of C- or higher in this course if they are using it to fill the writing intensive course requirement for their degree.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Healthcare Management, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (HCM 3502, (HCM 3501 and RMI 3501), 'Y' in CRHC01, (HCM 3501 and 'Y' in CRRM03), (RMI 3501 and 'Y' in CRHC02), or ('Y' in CRHC02 and 'Y' in CRRM03))

Hebrew (HEBR)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

HEBR 1001. Elements I. 4 Credit Hours.

Introducing the Hebrew alphabet (print and cursive), functional grammar, basic vocabulary for daily life and basic sentence structures. The goal is to set up a solid base for the communication skills of reading unvocalized text, writing and basic conversation.

Course Attributes: LA

Repeatability: This course may not be repeated for additional credits.

HEBR 1002. Elements II. 4 Credit Hours.

Continuation of Hebrew 1001. Introducing more advanced sentence structures and three additional grammar paradigms and the past tense. The emphasis is on expansion of vocabulary to aid in understanding more varied texts and facilitating more ease in speaking, writing and reading.

Course Attributes: LA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in HEBR 1001.

HEBR 2001. Intermediate I. 3 Credit Hours.

Reading of moderately difficult Hebrew texts with discussion in Hebrew. Introducing more advanced sentence structures, the rest of the grammar paradigms and the future tense. Class is conducted mostly in Hebrew with the goal of strengthening communication skills.

Course Attributes: LB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in HEBR 1002.

HEBR 2002. Intermediate II. 3 Credit Hours.

Reading of moderately difficult Hebrew texts with discussions in Hebrew. Learning more advanced sentence structures, the rest of the grammar paradigms in all tenses. Class is conducted mostly in Hebrew with strong emphasis on understanding text and speaking with more ease.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in HEBR 2001.

Hindi (HIN)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

HIN 1001. Hindi Elements I. 4 Credit Hours.

First semester level of Hindi.

Course Attributes: LC

Repeatability: This course may not be repeated for additional credits.

HIN 1002. Hindi Elements II. 4 Credit Hours.

Second semester level of Hindi.

Course Attributes: LC

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in HIN 1001.

HIN 2001. Hindi Intermediate I. 3 Credit Hours.

Third semester of Hindi.

Course Attributes: LC

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in HIN 1002.

HIN 2002. Hindi Intermediate II. 3 Credit Hours.

Fourth semester of Hindi.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in HIN 2001.

History (HIST)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

HIST 0824. Gender and World Societies. 3 Credit Hours.

Learn about the history of feminine and masculine gender roles from comparative and international perspectives. Using case studies from Ancient Greece, Medieval Europe, West Africa, Victorian Britain, Modern Europe, the Middle East, South Asia, East Asia, and/or Latin America, we will explore certain themes - The State, The Sacred, Work, The Family, The Body and Sexuality, Modern Revolutionary Movements - to investigate how gender and gender roles have changed over time, and their significance today. Readings include primary sources written both by men and by women, secondary sources, novels, and films. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: Gender, Sexuality & Women's Studies 0824; History 0824, 1708, C065; Women's Studies 0824, 1708, or C065.

Course Attributes: GG, SI

Repeatability: This course may not be repeated for additional credits.

HIST 0829. The History & Significance of Race in America. 3 Credit Hours.

Why were relations between Native Americans and whites violent almost from the beginning of European settlement? How could slavery thrive in a society founded on the principle that "all men are created equal"? How comparable were the experiences of Irish, Jewish, and Italian immigrants, and why did people in the early 20th century think of them as separate "races"? What were the causes and consequences of Japanese Americans' internment in military camps during World War II? Are today's Mexican immigrants unique, or do they have something in common with earlier immigrants? Using a variety of written sources and outstanding documentaries, this course examines the racial diversity of America and its enduring consequences. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: African American Studies 0829, Africology and African American Studies 0829, Anthropology 0829, Geography and Urban Studies 0829, History 0829, Political Science 0829/0929, Sociology 0829, 0929, 1376, 1396, R059, or X059.

Course Attributes: GD, SI

Repeatability: This course may not be repeated for additional credits.

HIST 0831. Immigration and the American Dream. 3 Credit Hours.

As a Temple student, you go to school and live in a city full of immigrants. Perhaps your own relatives were immigrants to the United States. But have you ever listened to their stories? With an historical and sociological framework as a basis, we will take an in-depth and more personal look at the immigrant experience as expressed through the immigrants' own voices in literature and film. Topics explored include: assimilation, cultural identity and Americanization, exploitation and the American Dream, ethnic communities, gender, discrimination and stereotyping. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0831, CRIT 0831, Italian 0831/0931, Russian 0831, SOC 0831, or SPAN 0831/0931.

Course Attributes: GD, SI

Repeatability: This course may not be repeated for additional credits.

HIST 0832. Politics of Identity in America. 3 Credit Hours.

Gay or straight. Black or white. Male or female. What do these different group identities mean to Americans? How do they influence our politics? Should we celebrate or downplay our diversity? This course explores how we think about others and ourselves as members of different groups and what consequences it has for how we treat one another. Our fundamental social identities can be a source of power or of powerlessness, a justification for inequality or for bold social reform. Students learn about the importance of race, class, gender and sexual orientation across a variety of important contexts, such as the family, workplace, schools, and popular culture and the implications these identities have on our daily lives. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed Gender, Sexuality & Women's Studies 0832/0932, Political Science 0832/0932, Sociology 0832 or Women's Studies 0832/0932.

Course Attributes: GD, SI

Repeatability: This course may not be repeated for additional credits.

HIST 0834. Representing Race. 3 Credit Hours.

From classical Greeks and Romans, who saw themselves under siege by the "barbarian hordes," to contemporary America and its war on "Islamic extremism," from "The Birth of a Nation" to "Alien Nation," Western societies have repeatedly represented some group of people as threats to civilization. This course will examine a wide range of representations of non-Western people and cultures in film, literature, scientific and legal writings, popular culture and artistic expression. What is behind this impulse to divide the world into "us" and "them"? How is it bound up with our understanding of race and racial difference? And what happens when the "barbarian hordes" talk back? NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed African American Studies 0834, Africology & African American Studies 0834, Anthropology 0834/0934, Asian Studies 0834, or English 0834/0934.

Course Attributes: GD, SI

Repeatability: This course may not be repeated for additional credits.

HIST 0847. American Military Culture. 3 Credit Hours.

You live in a country that possesses the world's strongest military forces. Up through the Vietnam War, Americans viewed military service in wartime as a basic obligation for all adult male citizens - the ultimate test of their patriotism and manhood - but a temporary sacrifice that ceased for most on the return of peace. Today, the American people have outsourced their awesome war-making power to a restricted number of men and women - many of whom consider military service their career. We will explore the distinctive culture that shapes the composition and behavior of America's armed forces and probe how it reflects the strengths and weaknesses of American society. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed AMST 0847.

Course Attributes: GU

Repeatability: This course may not be repeated for additional credits.

HIST 0848. American Revolutions. 3 Credit Hours.

From the first encounters with Native Americans to the present, a series of pivotal moments have had an enduring influence on American society, culture, and politics. In each class, three modules will focus on three pivotal moments, such as King Philip's War, Nat Turner's Rebellion, the Scopes trial, the Civil Rights movement, the women's movement, the emergence of Elvis Presley, the sexual revolution, the rise of environmentalism, the Reagan Revolution, and 9-11. In each module, students will first place the main subject of the module in context, and then seek to understand how it changed American society. The last week of each module will be devoted to a consideration of how the subject of that module has become part of American collective memory. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: AMST 0848 or ANTH 0848.

Course Attributes: GU, SI

Repeatability: This course may not be repeated for additional credits.

HIST 0849. Dissent in America. 3 Credit Hours.

Throughout American history individuals and groups of people have marched to the beat of a different drummer, and raised their voices in strident protest. Study the story and development of dissent in America. How has dissent shaped American society? In addition to studying the historical antecedents of dissent, students will have first-hand experience visiting and studying a present-day dissent organization in the Philadelphia area to investigate connections between the history of dissent and the process of making dissenting opinion heard today. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed English 0849/0949, History 0949 or SOC 0849/0949.

Course Attributes: GU, SI

Repeatability: This course may not be repeated for additional credits.

HIST 0859. The Making of American Society: Melting Pot or Culture Wars?. 3 Credit Hours.

Terrorism, illegal immigration, gay marriage, religious conflict, political in-fighting, corporate corruption, racial animosities, civil liberties assaults, media conglomeration, Wal-Mart goes to China and the rich get richer. America in the 21st century is a contentious society. How did we get to this place in time? Examine what makes American society distinctive from other advanced industrial democracies as we study the philosophical origins of America, the development of social and economic relationships over time, and the political disputes dominating contemporary American life. The course relies heavily on perspectives from History, Sociology and Political Science to explain the challenges facing contemporary American society. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: AMST 0859, PHIL 0859, POLS 0859, or SOC 0859.

Course Attributes: GU, SI

Repeatability: This course may not be repeated for additional credits.

HIST 0861. Global Slavery. 3 Credit Hours.

Investigate global slavery as an historic phenomenon and a current reality. How is it that after the great emancipation movements of the 19th century and the International Geneva Convention (1926) outlawing slavery there are still 27 million slaves and counting? This course argues that any critique of globalization requires an understanding of why it has taken several millennia for anti-slavery law to emerge and why such legislation continues to have limited reach and effectiveness. It argues that there is no modernity and no globalization without slavery. Explore this problem by asking a basic question: By what techniques, abstract and concrete, do masters make themselves as visible by constructing slaves as invisible? With film viewings, carefully selected readings, debates and group projects, you will be led to make your own connections to these themes, and to consider global slavery as part of the past and the present. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core.

Course Attributes: GG, SI

Repeatability: This course may not be repeated for additional credits.

HIST 0862. Development & Globalization. 3 Credit Hours.

Use historical and case study methods to study the differences between rich and poor nations and the varied strategies available for development in a globalizing world. Examine the challenges facing developing countries in historical and contemporary context and analyze the main social, cultural, and political factors that interact with the dynamic forces of the world economy. These include imperialism/colonialism, state formation, labor migration, demographic trends, gender issues in development, religious movements and nationalism, the challenges to national sovereignty, waves of democratization, culture and mass media, struggles for human rights, environmental sustainability, the advantages and disadvantages of globalization, and movements of resistance. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: GUS 0862, POLS 0862/0962, or SOC 0862/0962.

Course Attributes: GG, SI

Repeatability: This course may not be repeated for additional credits.

HIST 0864. War and Peace. 3 Credit Hours.

Total war, weapons of mass destruction, genocide. These were not solely inventions of the 20th century nor are they the natural consequences of a violent human nature. Leaders, armies, and the strategies they pursue are rooted in their social and political context. Weapons are the products of not merely technological but also historical and cultural development. Battles occur on a political and historical terrain. Learn how ancient ideology, medieval technology, modern propaganda, and more have changed how humans wage war and make peace. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for History 0864 if they have successfully completed History 0964 or POLS 0864.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

HIST 0865. The Global Crisis: Power, Politics and the Making of Our Times. 3 Credit Hours.

Are we living in a time of global crisis? This course will provide you with the tools you need to find out. The course focuses on world politics over the past century, up to today. We will examine a number of key global problems as they have changed over time. We will adopt an historical approach, which means we will read texts and documents about the past as a way to understand the present. Together we will explore debates like: Is America an empire? What is ideology and is it a factor in world politics today? What role do diplomacy, strategy, and military power play in world affairs? How have non-western peoples and states challenged the power of the West, and with what results? What are the roots of ethnic and religious conflict? And what can we as citizens do to address truly global problems? Drawing on examples from 20th century world history, this course introduces you to world politics and the great debates of our time. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

HIST 0867. Founding Philadelphia. 3 Credit Hours.

This course will explore the important role of Philadelphia in the founding of the United States. It will not be, however, a mostly nostalgic visit to patriotic historical sites that glorify the founding fathers, but an in-depth examination into the actual social, cultural, and political events that shaped a city and a nation, as well as an evaluation of how we view these historical events and figures today. Is there a great discrepancy between myth and reality? What does our view of the past say about the present? In what ways can Philadelphia be viewed as a microcosm of the United States and in what ways does the development of Philadelphia, through political turmoil, industrial growth, and the creation of ethnic neighborhoods by a constant flood of immigrants tie in with global developments?

Course Attributes: GU

Repeatability: This course may not be repeated for additional credits.

HIST 0872. Turning Points in Human History: The Modern World. 3 Credit Hours.

"Turning Points in Human History: The Modern World" explores six of the most significant transformations in human life in the modern world which include 1) the establishment of world trade networks following Columbus' voyages, 2) slavery, colonization, and race in the making of the modern world, 3) the democratic, nationalist, and socialist revolutions from the seventeenth to the twentieth centuries, 4) the industrial revolution in global perspective, 5) the growing significance of ecological balance, and 6) the search for identity in contemporary history. The course looks at world history whole, asking how we have become who we are through our global history. It compares societies to foster analysis. It also examines interactions among societies to foster synthesis. The analysis of primary and secondary documents will be central to the course, along with study of secondary sources commenting on them. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core.

Course Attributes: GG, SI

Repeatability: This course may not be repeated for additional credits.

HIST 0874. Confronting Empire: Voices of Resistance. 3 Credit Hours.

What is "empire"? For millions of people throughout history, this is not just an academic question but a lived reality. In this class, you will confront the realities of empire, and you will observe ways that many others have confronted empire in the past. To find out what empire means, this class will introduce students to Asian, African and Latin American people whose lives have been shaped by Western colonial rule from the 18th to the 20th centuries. What was it like to live as a colonized person in the age of empire? What kind of power did one have to lead a free life? What sorts of opposition and resistance was available to colonized peoples? How has the struggle between colonized peoples and the powerful imperial states shaped the world we live in today? And do we still live in a world that has colonial dimensions to it? In this class, we will listen to the voices of those who experienced Western imperialism and follow them as they confronted and challenged that process. We bring together a variety of sources including speeches, newspapers, novels, films, and government documents to reconstruct specific moments of collective action on the part of the colonized. We will explore how this struggle carries on today. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core.

Course Attributes: GG, SI

Repeatability: This course may not be repeated for additional credits.

HIST 0876. Religion in Philadelphia. 3 Credit Hours.

The argument is sometimes made that religion in dense urban spaces is characteristically very different from religion as it appears elsewhere. A study of religion in Philadelphia provides numerous ways to explore that idea, especially since the city encompasses a variety of ethnic and immigrant groups, encouraging the generation of new and hybrid forms of religious life that are less possible in smaller populations. Learn how ideas of toleration and freedom, the urban environment, and immigration helped to define the role of religion in the life of this city. Study various religious traditions as they are manifested in the greater Philadelphia area and look at the influences religion has had on the fabric of Philadelphia's history and cultural life including politics, art, education, journalism and popular culture. You will visit and write about various religious sites and institutions. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed REL 0876, 0976, 1003, 1903, C052, H092 or History 0976.

Course Attributes: GU

Repeatability: This course may not be repeated for additional credits.

HIST 0929. Honors: The History & Significance of Race in America. 3 Credit Hours.

Why were relations between Native Americans and whites violent almost from the beginning of European settlement? How could slavery thrive in a society founded on the principle that "all men are created equal"? How comparable were the experiences of Irish, Jewish, and Italian immigrants, and why did people in the early 20th century think of them as separate "races"? What were the causes and consequences of Japanese Americans' internment in military camps during World War II? Are today's Mexican immigrants unique, or do they have something in common with earlier immigrants? Using a variety of written sources and outstanding documentaries, this course examines the racial diversity of America and its enduring consequences. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: African American Studies 0829, Africology and African American Studies 0829, Anthropology 0829, Geography and Urban Studies 0829, History 0829, Political Science 0829, Sociology 0829, 0929, 1376, 1396, R059, or X059.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GD, HO

Repeatability: This course may not be repeated for additional credits.

HIST 0949. Honors Dissent in America. 3 Credit Hours.

Throughout American history individuals and groups of people have marched to the beat of a different drummer, and raised their voices in strident protest. Study the story and development of dissent in America. How has dissent shaped American society? In addition to studying the historical antecedents of dissent, students will have first-hand experience visiting and studying a present-day dissent organization in the Philadelphia area to investigate connections between the history of dissent and the process of making dissenting opinion heard today. (This is an Honors course.) NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed English 0849/0949, History 0849 or SOC 0849/0949.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GU, HO, SI

Repeatability: This course may not be repeated for additional credits.

HIST 0961. Honors: Global Slavery. 3 Credit Hours.

Investigate global slavery as an historic phenomenon and a current reality. How is it that after the great emancipation movements of the 19th century and the International Geneva Convention (1926) outlawing slavery there are still 27 million slaves and counting? This course argues that any critique of globalization requires an understanding of why it has taken several millennia for anti-slavery law to emerge and why such legislation continues to have limited reach and effectiveness. It argues that there is no modernity and no globalization without slavery. Explore this problem by asking a basic question: By what techniques, abstract and concrete, do masters make themselves as visible by constructing slaves as invisible? With film viewings, carefully selected readings, debates and group projects, you will be led to make your own connections to these themes, and to consider global slavery as part of the past and the present. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students can receive credit only once for either HIST 0861 or 0961.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GG, HO

Repeatability: This course may not be repeated for additional credits.

HIST 0964. Honors War and Peace. 3 Credit Hours.

Total war, weapons of mass destruction, genocide. These were not solely inventions of the 20th century nor are they the natural consequences of a violent human nature. Leaders, armies, and the strategies they pursue are rooted in their social and political context. Weapons are the products of not merely technological but also historical and cultural development. Battles occur on a political and historical terrain. Learn how ancient ideology, medieval technology, modern propaganda, and more have changed how humans wage war and make peace. (This is an Honors course.) NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for History 0964 if they have successfully completed History 0864 or POLS 0864.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GG, HO

Repeatability: This course may not be repeated for additional credits.

HIST 0976. Honors Religion in Philadelphia. 3 Credit Hours.

The argument is sometimes made that religion in dense urban spaces is characteristically very different from religion as it appears elsewhere. A study of religion in Philadelphia provides numerous ways to explore that idea, especially since the city encompasses a variety of ethnic and immigrant groups, encouraging the generation of new and hybrid forms of religious life that are less possible in smaller populations. Learn how ideas of toleration and freedom, the urban environment, and immigration helped to define the role of religion in the life of this city. Study various religious traditions as they are manifested in the greater Philadelphia area and look at the influences religion has had on the fabric of Philadelphia's history and cultural life including politics, art, education, journalism and popular culture. You will visit and write about various religious sites and institutions. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed REL 0876, 0976, 1003, 1903, C052, H092 or History 0876.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GU, HO

Repeatability: This course may not be repeated for additional credits.

HIST 1012. Professional Development for History Majors. 1 Credit Hour.

This course is designed to introduce history majors to the wide array of career possibilities their skills make available to them. One of the keys to turning a history major into a career is understanding just what skills one possesses after all the coursework, the research, the reading and writing one does during college. These skills are very marketable and lead to very rewarding work in medicine, government, education, law, museums, journalism, public service, and the corporate world. Because there is significant overlap in course content, students will receive credit for only one of these courses: CLA 1002, CJ 1002, ENG 1801, HIST 1012, NSCI 1002, POLS 1002, PSY 1002, SOC 1002.

Repeatability: This course may not be repeated for additional credits.

HIST 1101. U.S. History to 1877. 3 Credit Hours.

This course, United States History to 1877, traces the historical roots of what is now the United States of America: the Mississippian development of agriculture and urban life, the competition of various empires over land and peoples, the successes and failures of European settlements, the forced migration of West Africans and the invention of enslavement and race. By 1776, the United States of America was formed under promises of liberty, equality, property rights, and tolerance. But who would benefit? Who should rule? Partial industrialization, the consolidation of slavery, agricultural specialization, and expansion to the west, along with demands for reform and democracy, made these questions ever more vexed and led to a Civil War and a flawed attempt to reconstitute the Union by 1877. There are no prerequisites. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AC

Repeatability: This course may not be repeated for additional credits.

HIST 1102. U.S. History since 1877. 3 Credit Hours.

This is a general survey of the main currents in American history since 1877. Since the 1870s, the people of the United States have struggled over the meaning of equality, the practice of democracy, the politics of economic development, and the role of the United States in the world. This course will explore these themes and others in order to analyze the history of the modern United States. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AC

Repeatability: This course may not be repeated for additional credits.

HIST 1701. World History Ancient. 3 Credit Hours.

An introduction to world history from earliest times until the 15th century. The course surveys the birth of agriculture, early human settlements, the establishment of cities and "civilizations," the organization of global cultural and religious systems, the power and authority of massive empires, the influence of business interests, and "border peoples" on the fringes of the great systems. The scope is global, and we always ask "How do we know?" and "What is its significance?" NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors.

Course Attributes: IS

Repeatability: This course may not be repeated for additional credits.

HIST 1702. World History Modern. 3 Credit Hours.

This course begins with Columbus' voyages, which linked the major trading regions of the world together, and continues through the expansion of imperialism, the revolts against excessive government power and authority, and the invention of astonishing new technologies of creativity and destruction. The course concludes with the formation of new international, national, religious, and gender identities in the last few decades. We analyze economics, politics, technology, culture, religion, and innovative ideas as formative influences. We always ask "How do we know?" and "What is its significance?" as well as "What do we know?" The course serves as an introduction to modern world history that students can build upon in subsequent course work. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors.

Course Attributes: IS

Repeatability: This course may not be repeated for additional credits.

HIST 1900. Honors Special Topics. 3 Credit Hours.

Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

HIST 1980. Honors: Special Topics. 3 Credit Hours.

Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

HIST 2001. The Historian's Craft. 3 Credit Hours.

What does it mean to think like a historian? What can we know about the past, how do we know it, and what do we do with that knowledge? "The Historian's Craft" is an introduction to the practice of history. It is intended to be the starting point for students interested in historical thinking and serves as the gateway to upper level research and writing. The tools of the historian - analyzing and critiquing sources, in-depth research, working with different source bases, making arguments, writing clearly and persuasively - are the focus of this class. Using a wide variety of topics, we will examine how historians work and students will cultivate the skills they need to do historical research and writing.

Repeatability: This course may not be repeated for additional credits.

HIST 2010. Special Topics. 1 Credit Hour.

Variable content course; this one credit seminar is not an elective for history majors and minors; it does not count for the CLA distribution requirement. It is a free upper level elective for any student.

Repeatability: This course may be repeated for additional credit.

HIST 2102. History of Nazi Germany. 3 Credit Hours.

This course studies the rise and decline of Hitler's Third Reich, from its intellectual origins in the 19th century and World War I, through the meteoric rise of the National Socialist movement during the early 1930's, to its demise in the ruins of Berlin in 1945. Special attention is given to the sources of support for Nazism among German voters, the structure of the National Socialist state, the role of Adolf Hitler, the Holocaust, and the causes and consequences of the Second World War. Duplicate credit warning: Students who have taken HIST 1046 or 2902 will not receive credit for taking HIST 2102.

Repeatability: This course may not be repeated for additional credits.

HIST 2103. African American History to 1865. 3 Credit Hours.

This course will examine the activities of African Americans in America from slavery to 1865. Among the topics to be studied are: Slavery, The American Revolution, and the Civil War. In addition, much attention will be devoted toward emphasizing the multi-dimensional aspect of the African American Community, and the crucial role which African American women have played in America will be stressed. The course will focus on themes and questions which are essential to an understanding of the past and to an understanding of the present struggles for full citizenship on the part of African Americans. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: RS, SI

Repeatability: This course may not be repeated for additional credits.

HIST 2104. African American History 1865-Present. 3 Credit Hours.

This course will examine the activities of African Americans in America from Reconstruction to the present. Among the topics to be studied are: Reconstruction, the evolution of African American leadership, the Harlem Renaissance, the Civil Rights Movement, and Black Power. In addition, much attention will be devoted toward emphasizing the multi-dimensional aspect of the African American Community, and the crucial role that African American women have played in America will also be stressed. The course will focus on themes and questions, which are essential to an understanding of the past and to an understanding of the present struggles for full citizenship on the part of African Americans. This course meets the university Studies in Race requirement. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: RS, SI

Repeatability: This course may not be repeated for additional credits.

HIST 2105. Race and the U.S. Constitution. 3 Credit Hours.

The central focus of the course is how the issue of race has shaped the history of the United States Constitution and how constitutional law contributed to the history of ideas about race in the United States. We study the origins of the law of race and slavery in the pre-revolutionary period and end with understanding the origins of affirmative action in the post-World War II period. Students will read various books about U.S. Constitutional history in order to understand various interpretations of historical events and ideas about race. Student will also read original court cases about racial minorities in order to develop an understanding of original historical texts. Many of the skills emphasized in the class prepare students for law school, public service, and analyzing the historical roots of contemporary issues. Class discussion about constitutional issues is designed to give students confidence and precision in public speaking. Students will also write book reviews in order to develop an understanding of how historians collect evidence in order to construct historical interpretations and to develop their own interpretations of historical events and their personal writing skills. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: RS, SI

Repeatability: This course may not be repeated for additional credits.

HIST 2106. Trials in America. 3 Credit Hours.

This course will examine American history through the lens of significant trials. Most trials are legal actions that settle quarrels or determine the guilt or innocence of an individual or group accused of a crime. But during the course of American history there have been numerous trials that reflect cultural/social/political issues much more than the ostensible guilt or innocence of the defendant. The Salem Witchcraft trials, for example, tell us much more about the cultural and social milieu of colonial Massachusetts than they do about the practice of witchcraft. The Dred Scott case was not about the status of one man, but about the legitimacy of slavery. The Scopes trial was a battle between forces of modernism versus forces of traditionalism, not about John Scopes. The O.J. Simpson trial was more about race and the legacy of racism than about murder. These are a few of the trials we shall examine. How important are such trials as a force in history? Do trials resolve conflict or do they fuel conflict? When do trials reflect state, or federal, coercion? When does public opinion determine the outcome of a trial? Duplicate credit warning: Students who have taken HIST 2906 will not receive credit for taking HIST 2106.

Repeatability: This course may not be repeated for additional credits.

HIST 2107. Asian American History. 3 Credit Hours.

An introductory survey of the historical experiences of Chinese, Japanese, Filipino, Korean, South, and Southeast Asian immigrants in the United States. Considers economic, social, political, and cultural trends, beginning with the arrival of the Chinese in the 1830s and ending with issues facing Asian-Americans today. Includes the development and significance of Asian-American communities and culture as well as approaches to the study of Asian-Americans in racial hierarchies. The aims of the course are to analyze commonalities and differences in the historical and contemporary experiences of Asian ethnic groups and to explore perspectives on the position of Asians in U.S. society - assimilation, model minority, institutional racism, and internal colonialism. Instructional methods include lectures and audio-visual materials, but they also emphasize active student participation in learning through discussion, oral reports, and written assignments. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. Note: This course is cross-listed with Asian Studies 2107, American Studies 2107, and Sociology 3223. Students may only receive credit for one of these courses: ASST 2107, AMST 2107, HIST 2107, or SOC 3223.

Course Attributes: RS

Repeatability: This course may not be repeated for additional credits.

HIST 2108. Growing Up in America. 3 Credit Hours.

This course will examine the changing perception and experience of growing up in the United States from colonial times to the present. It will argue that childhood and adolescence are social constructions that change over time. The course will explore the emergence of childhood and adolescence as distinct stages in the life cycle, the evolving role of the family in the process of growing up, and the increasing importance of social institutions other than the family in the lives of the young. Particular attention will be paid to the difference between growing up rich or poor, black or white, male or female, and rural or urban. Finally, it will consider the reciprocal relationship between popular culture and the lives of young Americans.

Repeatability: This course may not be repeated for additional credits.

HIST 2109. Sexuality and Gender in American History. 3 Credit Hours.

How do sexuality and gender shape the way a society views the behavior of men and women? How do they create images and stereotypes of ideal or "typical" female and male behavior? And how do the ways in which people actually act compare to the society's conventional ideas about how they ought to act? This course takes us from the beginning of the 19th century to the present, exploring the social, cultural, and political dimensions of the public and private roles of women and men in the United States. It examines changing cultural values and social norms of masculinity and femininity and considers the actual behavior of women and men in the family, at work and at play, in love, and in the life of the nation. It also probes the ways in which race, social class, and sexual orientation have affected the experience of gender.

Repeatability: This course may not be repeated for additional credits.

HIST 2111. Recent American History. 3 Credit Hours.

The purpose of this course is to describe the political, social, and economic changes that the United States has experienced in making the transition from the Cold War era to the post-Cold War (and post-industrial) society of the late 20th century. The subject matter should be of interest to students in Education, Journalism, Urban Studies, and Psychology, as well as History majors. The course covers the entire period since World War II, but there is more emphasis on social change since 1970. Topics covered include: the origins of the Cold War; anti-Communism in American society and politics; the Civil Rights movement; the Vietnam War and anti-war movement; conservative backlash; Nixon and Watergate; the rise of a post-industrial economy; post-industrial social trends (gender, race, and the new immigration); and the growing impact of media on society and politics.

Repeatability: This course may not be repeated for additional credits.

HIST 2112. Native American History. 3 Credit Hours.

This course introduces students not only to the history of Native Americans after first contact (invasion?) with Europeans, but also how we write the history of peoples who left little or no written records for much of the time period under consideration. It begins with pre-contact societies and cultures and charts how native peoples were affected by Spanish, French, English, Dutch, and American exploration and settlement. Thereafter the course examines how Indian peoples resisted and adapted in the face of encroachment upon their land and assaults upon their way of life. Finally, the course examines the strategies of native peoples in the twentieth and twenty-first centuries as they fought (and continue to fight) for Indian political, economic, and cultural rights.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

HIST 2116. Baseball and American History. 3 Credit Hours.

This is not a course about baseball. This is a course that uses the game of baseball to try to make sense of a complicated last 175 years of American history. It is a course about the place of baseball in American society and how the game both reflected and influenced American society. We will examine issues of race, gender, class, immigration, suburbanization, urban planning, capitalism, and identity in American history using America's National Pastime, baseball, as our lens. You do not need to love (or even understand) baseball to enjoy this class. All you need is a curiosity about the American past!

Repeatability: This course may not be repeated for additional credits.

HIST 2117. History of Global Soccer. 3 Credit Hours.

In 2010, Franklin Foer published a book with the audacious title: "How Soccer Explains the World: An Unlikely Theory of Globalization." In it, Foer explained how certain features of our "globalized" world can be better understood by better understanding soccer. This course will examine how soccer's past and present connect to forces and trends that have shaped history since the modern game's "invention" in England in 1863. Soccer tells us about race, economics, empire, gender, and of course sports in the modern world. It is connected to nation and tradition, to international business, to organized crime, to hooligan violence. Readings and assignments drawn from Europe, South America, Africa, and the United States will inform expert and novice students alike about "the beautiful game" (as it is known in Portuguese) and at the same time the world around them.

Repeatability: This course may not be repeated for additional credits.

HIST 2151. Introduction to Public History. 3 Credit Hours.

This course introduces the field of public history. It begins by surveying the history of the field and its various realms of professional practice. Subsequent units concern the challenges of doing history with diverse audiences, the value of historical interpretation in public contexts, and best practices for public historians. Throughout, special emphasis is placed on issues such as historical resource management, museum practice, digital history, and other facets of the dissemination of public memory. Students discover who manages our shared heritage while learning to think critically about its place in society. And because Philadelphia has figured so prominently in the history and practice of public history, the city will play a central role in readings and assignments.

Repeatability: This course may not be repeated for additional credits.

HIST 2152. Museum History. 3 Credit Hours.

This course examines the history of museums, from their origins in the memory theaters and curiosity cabinets of Renaissance Europe to their recent place in conversations about nation, power, and the future of public funding for arts and culture. Although our focus will sometimes be theoretical--especially with regard to the philosophy of collecting, the construction of memory, and competing concepts of the "public"--we will also consider the practicalities of museum management with an eye toward exploring career paths for students. Philadelphia is itself a museum of museums and will therefore provide the backdrop for our investigation. As a result, we will pay particular attention to the history of the museum in America and especially the place of history museums in shaping our ideas about the nation's past and its future.

Repeatability: This course may not be repeated for additional credits.

HIST 2153. Memory and Commemoration. 3 Credit Hours.

This course examines the history of memory and remembering, particularly in the United States from the American Revolution to the present. We will undertake a broad survey of the various ways that Americans have gone about remembering their past(s) while exploring why and how those memories are made real by monuments, museums, and other commemorative architecture. A central concern of this course is to understand how memory functions in the construction of American nationalism. Special attention will also be given to contests of memory wherein competing ways of remembering collide along lines of gender, race, class, and ethnicity.

Repeatability: This course may not be repeated for additional credits.

HIST 2207. Religion in the Modern United States. 3 Credit Hours.

This course explores the ways in which religious beliefs and practices have influenced the history of the United States in the years between 1898 and the present. Special attention is paid to lived religion, church-state relations, the relationships between religion and social power, the invention of the Judeo-Christian tradition, and the rise of new religious movements (such as Pentecostalism, the Nation of Islam, and Wicca).

Repeatability: This course may not be repeated for additional credits.

HIST 2211. United States at War. 3 Credit Hours.

This course is a survey of the rise of the American military establishment from its origins as a small, neglected cadre of coastal and frontier guardians to a mighty world police force and the most expensive concern of the federal government. Emphasis will be placed on the development of military policy, the principles of war, and the inter-relationship between military affairs, technology, politics, and social change.

Repeatability: This course may not be repeated for additional credits.

HIST 2212. History of the American Presidency. 3 Credit Hours.

This course examines historical developments in the office of the U.S. president from its establishment to contemporary times. Through lectures, discussions, class projects, and outside assignments, we will explore the historical literature dealing with the creation and evolution of the office; the presidents who have shaped the office; the powers and limitations of the office in both foreign and domestic affairs; the president's relationship to the courts, the Congress, the people, and the press; and the broad political developments essential to our understanding of the place of the presidency within our changing political culture. This course asks: How has our most important national political institution come to be what it is? Two themes permeate the course: (1) What is the source and nature of presidential power? (2) Who are the men who have held the office and why have they failed or succeeded? This course prepares students for further historical or other academic studies and for related professional careers in law, journalism, or executive management. More importantly, the course engages students' concerns as life-long participants in American democracy. Duplicate credit warning: Students who have taken HIST 1013 will not receive credit for taking HIST 2212.

Repeatability: This course may not be repeated for additional credits.

HIST 2213. History of the American Economy and American Business. 3 Credit Hours.

This course is intended to provide the student with a history of the development of the American economy with an emphasis on the part which business played in its development. Topics covered include the agricultural economy; the rise of manufacturing; the development of the corporation, the stock exchanges, finance capitalism, and the rise of banking; 19th century business cycles; the expansion of the American corporation in the years between the Civil War and the Great Depression; the overseas expansion of business and the development worker's capitalism in the 1920s; the changes produced by the Great Depression and the Second World War; and the rise of the modern economy with its trans-national connections, the movement towards deregulation, and the move from manufacturing to a service economy. Students will be introduced to a number of skills aimed at making them better able to understand the current American economy, to the use of historical data as a means of judging current trends in finance and business, and to some of the major web sites and journal literature on the subject. They will make written and oral presentations in which they defend their ideas, take a mid-term and a final exam, both of which will require students to answer essay questions, and write a short paper (10-15 pages) on a historical topic dealing with business or economic issues.

Repeatability: This course may not be repeated for additional credits.

HIST 2214. History of the National Park Service. 3 Credit Hours.

This course will examine ideas that have shaped the National Park Service and its mission. It will introduce students to key events and figures responsible for creating the National Park Service that played critical roles in its development. Particular focus will be placed on significant legislation bearing on the agency's function, turning points in its institutional evolution, genesis of bureaucratic hierarchies and process, origins and evolution of its interpretive strategies and the relationship over time between the agency and broad currents in American history. Note: For history majors, this course is in the American history category.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

HIST 2215. Imperiled Promise: An Introduction to Heritage Interpretation in the National Park Service. 3 Credit Hours.

This course surveys theory and method in heritage interpretation, which refers broadly to the various techniques used by the National Park Service to communicate the significance of its historical resources. Students will study the history of heritage interpretation, examine the challenges that confront it today, and consider new paths forward. Although this course serves Temple's ProRanger program, it will also appeal to students interested in public history, museum studies, communication studies, and education.

Repeatability: This course may not be repeated for additional credits.

HIST 2216. U.S. Civil War. 3 Credit Hours.

This course will present a detailed survey of the causes, conduct, and immediate consequences of the American Civil War, the bloodiest conflict in United States history. Special emphasis will be placed on the sectional, racial, political, and economic differences that culminated in the dissolution of the Union, the formation of the Confederate nation, strategy and tactics, the personalities of major Union and Confederate commanders and statesmen, the role of Abraham Lincoln in preserving the Union, and the federal government's conflicting and ultimately unsuccessful efforts to reconstruct Southern politics and society.

Repeatability: This course may not be repeated for additional credits.

HIST 2217. Vietnam War. 3 Credit Hours.

The Vietnam War is a microcosm of the forces that have shaped the 20th century world: colonialism, imperialism, nationalism, revolution, modernization, nation building, Third World development, capitalism, communism, the cold war, and more. It was a defining moment for both Americans and Vietnamese, although the peoples of neither nation can agree on what precisely it defined. For the United States, the loss of the war produced a crisis of national identity. For Vietnam, the victory meant the culmination of thirty years of revolutionary struggle. To the present day both suffer from the failure to resolve problems inherent in these outcomes. This course is designed to emphasize the war as a problem for both Americans and Vietnamese. The question will be why almost complete strangers prior to World War II became such bitter enemies so soon thereafter, and as a consequence engaged in mortal combat for more than a decade. The strategy will be to explore the social, political, economic, military, and diplomatic dimensions and ramifications from the perspective of each. Note: This course is cross-listed with American Studies 2217 and Asian Studies 2217. Students may only receive credit once for these courses: AMST 2217, ASST 2217, or HIST 2217.

Repeatability: This course may not be repeated for additional credits.

HIST 2219. Cold War Culture in America. 3 Credit Hours.

In the years following World War II, the United States held a position of unprecedented global power. Yet many Americans experienced a sense of insecurity about the world as never before. Anxieties about communism at home and abroad as well as the constant fear of a nuclear Armageddon shaped American daily life in the early postwar period. This seminar traces the correlation between America's foreign relations and its culture and society between 1945 and 1960. Participants will discuss the influence of the atomic bomb on American culture, the emergence of the national security state, the effect of anticommunism on individual liberties at home as well as containment policies abroad, cold war gender relations, and the international dimensions of the civil rights movement.

Repeatability: This course may not be repeated for additional credits.

HIST 2280. Topics in American History. 3 Credit Hours.

Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Repeatability: This course may be repeated for additional credit.

HIST 2301. Pre-Modern Europe. 3 Credit Hours.

The evolution of Europe from Roman times until 1750. The different cultures that went to make up Europe-Roman, Christian, "Barbarian," Muslim; formation of proto-states; technological and economic change; contact with non-Europeans; social and cultural movements over the medieval and early modern periods. Europe before the modern era was not a static, fossilized culture but rather a dynamic one marked by important discontinuities as well as continuities.

Repeatability: This course may not be repeated for additional credits.

HIST 2303. History of Central Europe, 1618-1871. 3 Credit Hours.

This course will examine the political, social, and cultural history of Central Europe from the Thirty Years War until the unification of Germany in 1871. Although Central European history is dominated by German history, this course will cover Central Europe broadly defined. In addition to German and Habsburg history, we will be looking at the important historical changes taking place in Poland, Hungary, and the other non-German regions of the Habsburg lands. In the course of the term we will concentrate on a number of overarching questions: the structure and political traditions of the early modern state (absolutism, rise of bureaucracies and modern state structures, development of political parties); the questions of backwardness, modernization, and relative economic and social development; the rise of nationalism and the emergence of unification politics; and the broad implications of profound changes in the way people in Central Europe thought about and lived their lives.

Repeatability: This course may not be repeated for additional credits.

HIST 2304. 20th Century Europe: A Continent in Crisis. 3 Credit Hours.

This course explores Europe's tumultuous history during the past century. Over the course of the semester, we will study important moments, stories, groups and individuals from this period, and try to understand why Europeans fought two devastating wars within thirty years, wars that reshaped modern world history. We will explore Europe's gradual recovery from war and the paths it has taken toward unification and democratization. We will pay significant attention to the histories of Germany, France, and the United Kingdom and some attention to Eastern Europe and Russia/the Soviet Union. We will also look at Europe's global role, especially its imperial and colonial legacies, as well as the construction of the European Union.

Repeatability: This course may not be repeated for additional credits.

HIST 2308. Black Europe. 3 Credit Hours.

Recent waves of immigration seem to be challenging European identities; the darker the skin tone of the immigrant, the more her presence threatens a sense of Europe as a region defined by whiteness. But there is a long history of people defined as black living in Europe and contributing to European nation-states. If we focus our attention on their stories, we can see the fragility of the white identity in Europe. The goal of this course is to explore a deeper history of black lives in modern Europe than we see presented in the news. Through a combination of primary sources, history books, fiction, and movies, we will discover what it has meant to be black in various countries since the late eighteenth century. In the process, we will question the historical basis of a white identity in the European region.

Repeatability: This course may not be repeated for additional credits.

HIST 2317. Central Europe Through Wars and Revolution, 1848-1989. 3 Credit Hours.

This course introduces students to new narratives of European nationalism and identity. The traditional courses on European history have relied on an understanding of European politics that divides the continent between east and west, and relies on Great Power perspectives. Using the concept of Central Europe, and the ways that it has been interpreted, this course encourages students to restore Central and Eastern Europe to the broader histories of the continent. Narratives of Eastern European peoples, Germans, Slavs, Hungarians, and others, were defined by the struggle between forces of nationalism and geopolitical realities, conflicting desires of sovereignty and security, freedom and social justice. This region, now part of the European Union, is rich in history and culture, as well as cultural and religious diversity. This course will highlight how East Europeans went from objects of high politics to subjects of European and world history.

Repeatability: This course may not be repeated for additional credits.

HIST 2319. The Mafia in Modern Italy. 3 Credit Hours.

Organized crime emerged in modern Italy at the same time as the 19th century process of unification, and it remains a topic of heated debate and controversy in Italy today. In this course, we will trace the history of organized crime as a portal to underlying issues at the heart of the modern Italian nation: the relationship between state and society; tensions between national and regional identities; gender, work, and the family; party politics and the rise of fascism. Our study of the history of the mafia also necessitates a study of the history of anti-mafia movements in Italy. Who claims to represent the interests of the Italian nation and why? What is the image of organized crime in Italy today?

Repeatability: This course may not be repeated for additional credits.

HIST 2353. Early Modern Italy - From Columbus to Beccaria. 3 Credit Hours.

This course will present an overview of "Italy without Italy," that is of the consolidation of an Italian cultural identity in the absence of a unified state, and in the presence of foreign occupation in Lombardy and Naples. Other topics will include the rebirth of the empire under the Habsburgs, tensions with the papacy, the impact of Luther's and Henry's challenges, the Turkish threat and the Counterreformation. The course will conclude with the 18th century and an Italian enlightenment on par with the rest of Europe, with Cesare Beccaria, who had an impact on the American founding fathers as its most significant representative. The broader European and global context will be the consistent emphasis of the course.

Repeatability: This course may not be repeated for additional credits.

HIST 2400. Special Topics. 3 Credit Hours.

Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Repeatability: This course may be repeated for additional credit.

HIST 2411. Film in European History. 3 Credit Hours.

The renowned film historian Anton Kaes once wrote: "Historical films interpret national history for the broad public and thus produce, organize, and, to a large degree, homogenize public memory. Surpassing schools and universities, film, and television have become the most effective (and paradoxically least acknowledged) institutional vehicles for shaping historical consciousness." This course seeks to right that imbalance by acknowledging and studying the way that films (and other visual media) teach us about history. Using prominent American and European films (primarily), students will learn to critically analyze visual media, examining them for content, bias, and interpretation. The course will cover key episodes in modern European history and will provide historical background/context for the period necessary to evaluate and study films as historical documents.

Repeatability: This course may not be repeated for additional credits.

HIST 2415. Russian History in Literature and Film. 3 Credit Hours.

Students will read and study a short history of Russia and then read literary works and watch films depicting various periods, topics, events, figures, and issues in Russian history.

Repeatability: This course may not be repeated for additional credits.

HIST 2480. Topics in European History. 3 Credit Hours.

Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Repeatability: This course may be repeated for additional credit.

HIST 2501. Introduction to East Asia: China. 3 Credit Hours.

Overview from ancient times to the present. Designed to provide students with a basic understanding of major themes and broad processes of social change in Chinese history. Emphasizes those aspects of continuity and change that are particularly relevant to contemporary China. Topics include: state formation; the development of characteristic institutions, thought, and cultural practices; long term trends in social dynamics and the economy; imperialism and semi colonialism; revolutionary transformation in the early 20th century; the Maoist road to socialism after 1949; and the post-socialist trajectory of the past two decades and its critique. Course materials include films, primary documents, and literature. Note: This course is cross-listed with Asian Studies 2501. Students may only receive credit once for these courses: ASST 2501 or HIST 2501.

Repeatability: This course may not be repeated for additional credits.

HIST 2502. Introduction to East Asia: Japan. 3 Credit Hours.

A survey of Japanese history from early times to the 20th century. Major themes include religious, political, and social change. Major topics are: early state and religion; classical government, culture and society; emergence of the warrior class in medieval Japan; and the modern transformation into an urban, industrial empire. Course emphasizes broad historical themes of continuity and change and analysis of short primary documents in translation. Generally offered in alternate spring semesters. Note: This course is cross-listed with Asian Studies 2502. Students may only receive credit once for these courses: ASST 2502 or HIST 2502.

Repeatability: This course may not be repeated for additional credits.

HIST 2503. Introduction to Southeast Asia: Insular. 3 Credit Hours.

This course covers the histories of the Philippines, Indonesia, Malaysia, and Singapore from the 16th century until modern times. It will introduce students to the island worlds of Southeast Asia, its peoples, their histories, societies, and economies. To familiarize students with non-Western worlds, lectures will be illustrated with videotapes, slides, and transparencies. Excerpts of articles and indigenous documents will also be used for discussion. Course work will include readings, discussions, examinations, and book reviews. Note: This course is cross-listed with Asian Studies 2503. Students may only receive credit once for these courses: ASST 2503 or HIST 2503.

Repeatability: This course may not be repeated for additional credits.

HIST 2504. Introduction to Southeast Asia: Mainland. 3 Credit Hours.

This course covers the histories of Burma, Thailand, Laos, Cambodia, and Vietnam, from the 16th century until modern times. It is a course designed to introduce students to the analysis of such forces as religion, statecraft, ideology, and trade, and the manner in which they have shaped the mainland countries of Southeast Asia. Mainland Southeast Asia's role in world politics and economy will also be analyzed. Reference will be made to contemporary events taking place in the region, and students will be encouraged to follow these developments through the media and integrate their knowledge in class discussions. Note: This course is cross-listed with Asian Studies 2504. Students may only receive credit once for these courses: ASST 2504 or HIST 2504.

Repeatability: This course may not be repeated for additional credits.

HIST 2505. East Asian Environmental History. 3 Credit Hours.

This course explores the modern environmental histories of East Asian societies. Starting long before the contemporary era of ecological crisis, the natural world in East Asia shaped and was shaped by human activity. The course begins with an overview of environmental change, demographic growth, and imperial expansion in China and Japan in the early modern period. We will also make a brief survey of East Asian ideas about nature before proceeding to cover a wide range of topics relevant to history since 1850, such as the environmental impact of modern agriculture, environmental changes caused by warfare and agrarian revolution, the environmental significance of rapid industrialization, East Asian energy regimes, the rise of environmental movements, and recent ecological disasters. As we study environmental histories of China, Japan, and Taiwan, we will have the chance to consider how patterns of environmental and social change in East Asian societies set them apart from other places around the world. We will also have an opportunity to evaluate the historical roots of the contemporary ecological crisis.

Repeatability: This course may not be repeated for additional credits.

HIST 2511. Introduction to African History. 3 Credit Hours.

This course is an introduction to the study of African history. History is the record of human activities transmitted to posterity either in written or oral form. Africa has the longest record of human habitation, making African history the oldest in the family of human history. Given the immense complexity and richness of African history, we could only scan through the major themes of African history by studying the intertwining of African culture with African history proper. The reading materials are drawn from interdisciplinary sources in anthropological, gender, and historical studies.

Repeatability: This course may not be repeated for additional credits.

HIST 2512. Mexican Migration to the United States. 3 Credit Hours.

Illegal immigration remains a volatile and divisive question for the United States. Most discussions in the political system and in the mass media ignore the extensive history of Mexican migration to the United States. We will examine the pervasive influence of that history upon the present as well as the tight connections that exist between Mexican labor migration and phenomena that most US citizens prize-- the spread of American culture and influence abroad, international political stability, reliable domestic economic growth, and the availability of inexpensive goods and services. Instruction takes place through discussion, lecture, film, and computer projection. Readings include both primary documents stemming from historical events themselves as well as secondary academic studies. NOTE: Students will receive credit only one time for either HIST 2512 or LAS 2512.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

HIST 2513. Cold War Africa. 3 Credit Hours.

This course explores African societies and politics during the Cold War. We pay close attention to the ways in which the politics of the Cold War were played out through proxy wars, interventionist policies, and the exploitation of natural resources in newly independent and emergent African nations. At the same time, we examine the ways in which African leaders and nations used the Cold War to define their own post-colonial experiences and identities. In addition, we investigate the significance of African nationalism and independence for redefining race and race relations in South Africa and the United States. Although we use examples from throughout the continent to explore issues of nationalism, sovereignty, race, socialism, and development within the Cold War context, we pay particular attention to Guinea-Bissau, Angola, Congo, South Africa, Ghana, and Ethiopia. Note: For history majors, this course is in the "Global/Comparative" category.

Repeatability: This course may not be repeated for additional credits.

HIST 2514. Introduction to Latin America. 3 Credit Hours.

An overview of Latin American history from pre-Hispanic civilizations through the Spanish and Portuguese colonial periods and nationhood to the present. Organized both chronologically and thematically, the course probes such issues as the rise and fall of political systems; matters of race, gender, and class; the economic conditions of work and survival; and patterns of social and cultural change. Methods of instruction include paperback readings, the Internet, and video clips.

Repeatability: This course may not be repeated for additional credits.

HIST 2515. Civilization and Modernity in the Caribbean. 3 Credit Hours.

This course surveys post-Emancipation Caribbean history, regarding it as a complex process dominated by notions of "civilizing" and "modernizing." We will address the significance of both terms, exploring what they have meant for the diverse peoples inhabiting the region. What did civilizing mean for the labor practices and religious expressions of free blacks and indentured Indians in the late 19th century? What did modernizing mean for concepts of peoplehood, cultural production and representation in the 20th century? Who have been the primary agents of "civility" and "modernity"? And how have others responded to - resisted, embraced, negotiated - their efforts and ambitions? In answering these questions, we will turn to a range of disciplines including history, anthropology, literature and political science. NOTE: Students will receive credit only once for either HIST 2515 or LAS 2515.

Repeatability: This course may not be repeated for additional credits.

HIST 2516. Modern Islamic History. 3 Credit Hours.

This course studies Sunni Islam in terms of its modernist tendencies and its more traditional ones, comparing it to other major trends in the religion, Shi'ism and Sufism. Some emphasis is placed on Egyptian cultural history. The course encourages analytic skills through class participation and written work.

Repeatability: This course may not be repeated for additional credits.

HIST 2517. Cuba: War, Hope, and Revolution. 3 Credit Hours.

This course examines Cuba's history, culture and politics, from its remote past of the Taino people, to its major economic and political changes of the 20th century, to the end of the Cold War and renewed relations with the United States. Students explore Cuba's rich multicultural and multiethnic society and its leading artists, writers, and musicians, from writer and revolutionary Jose Marti, to visionary songstress Celia Cruz to Fidel Castro.

Repeatability: This course may not be repeated for additional credits.

HIST 2518. The Ancient Near East. 3 Credit Hours.

A survey of ancient Mesopotamian culture starting with the end of the neolithic period and covering Sumerian, Akkadian, Babylonian, Assyrian, Neo-Babylonian and Persian civilizations. Students will be introduced to the literature and the archaeology of these cultures and their influence on the Bible and later civilizations.

Repeatability: This course may not be repeated for additional credits.

HIST 2519. Pre-Colonial Africa. 3 Credit Hours.

This course examines the events and processes that shaped African history prior to European colonial rule. Specifically, we explore the changing nature of African cultures; Islam as a political force; the relationship between Christianity, culture, and politics; slavery and the slave trades; and migration and the transformation of the African cultural landscape. Our goal is to understand the forces that shaped African material and political culture prior to European political domination and the relationship between African societies and the wider world to 1900. Note: For history majors, this course is in the "Global/Comparative" category.

Repeatability: This course may not be repeated for additional credits.

HIST 2521. Global Terrorism. 3 Credit Hours.

This course will examine the rise of modern global terrorism from the rise of left-wing Marxist/Leninist terrorism in the 1960s to Jihadi terrorism in the 21st century. The first half of the course will touch on the historical antecedents of terrorism and then look more deeply at such terrorist groups as the IRA in Ireland, ETA in Spain, the Brigade Rosse in Italy, the Red Army Faction in Germany, the FARC and ELN in Colombia, and Shining Path (Sendero Luminoso) and Tupac Amaru in Peru. The second half of the course will examine the transition to the beginnings of a different kind of terrorism that emerged in the 1990s and continues, ever more violently and more effectively, to this day. We will also look at the role of state terrorism. Repeat credit warning: This course is equivalent to HIST 2921. Students may only earn credit for either HIST 2521 or HIST 2921.

Repeatability: This course may not be repeated for additional credits.

HIST 2522. Spanish Conquest of the Americas. 3 Credit Hours.

In 1492, Columbus sailed the ocean blue and ... either discovered or destroyed America, depending on your point of view. By 1542, Spain had claimed most of the Americas and Lopez de Gomara, the private secretary of Hernan Cortes, wrote, "The greatest event since the creation of the world." Later, in the 18th and 19th centuries, both Adam Smith and Karl Marx would make the same claim in their writings. From the very beginning, not only the magnitude but also the meaning of the Conquest of the Americas has been a point of controversy and acclaim. In this class, we will examine the Indigenous societies of the Americas and the Iberian Peninsula on the eve of their cataclysmic encounter, the processes by which the Spanish Conquistadors overran Indigenous territories, the ways in which each of these distinct societies impacted one another, and the hybrid societies that emerged on the other side. **DUPLICATE CREDIT WARNING:** Students can receive credit only once for either HIST 2522, ANTH 2522, or LAS 2522.

Repeatability: This course may not be repeated for additional credits.

HIST 2611. Third World Issues through Film. 3 Credit Hours.

Films bring alive the texture of society and the context of ideas, events, lives, and conflicts in a way that standard textbooks and readings cannot. This survey course introduces repeating, powerful, and important themes in modern history through the study of issues raised in Asian, African, and Latin American cinema. Unit I presents issues of Colonialism, Nationalism, and Independence Movements. Unit II, Post-Colonial Themes, includes nation building, neocolonialism, and responses to neocolonialism as well as issues of cultural reconstruction, political leadership, class, gender, race, and ethnicity in post-independence eras. Written texts complement the films; class discussion and assignments focus on analysis of the characters, events, institutions, and ideas represented in the films and readings.

Repeatability: This course may not be repeated for additional credits.

HIST 2670. Topics in African History. 3 Credit Hours.

Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Repeatability: This course may be repeated for additional credit.

HIST 2680. Topics in Asian History. 3 Credit Hours.

Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Repeatability: This course may be repeated for additional credit.

HIST 2702. Imperialism, Race, and Empire. 3 Credit Hours.

This course introduces key themes and issues central to an understanding of race in modern history. Examining the intersection of race and imperialism-empire over the last two centuries, it places special importance on: how ideas about race were profoundly affected by the colonial encounter; how rationalizations for imperialism have often depended on race; and the resistance of subordinated people to racist discourses and forms of rule. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: RS, SI

Repeatability: This course may not be repeated for additional credits.

HIST 2703. African Diaspora. 3 Credit Hours.

This course deals with the history of the African Diaspora in the Americas for the last five hundred years. How this African presence impacted upon the social, economic, cultural, religious, and demographic set-up of the Americas will be addressed. Themes like pan-African nationalism and racial discourse will also be discussed. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: RS, SI

Repeatability: This course may not be repeated for additional credits.

HIST 2705. Anti-Semitism/Holocaust/Racism. 3 Credit Hours.

This course examines the history of antisemitism with a focus on the Holocaust and racism. It investigates the development and implementation of racial antisemitism in Germany and compares Nazi antisemitism with other forms of racism and antisemitism in Europe and America. The course also explores the social construction of race, the connection between antisemitism and anti-Zionism, the growth of neo-Nazism, the complex relationship between American Jews and African Americans, and racism in the world today. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. Be advised that students will only receive credit once for JST 2705, REL 2705, or HIST 2705.

Course Attributes: RS, SI

Repeatability: This course may not be repeated for additional credits.

HIST 2803. Soldiers, Wars, and Societies: The British Army. 3 Credit Hours.

This course will trace the history of the British Royal Army from its founding in 1660-61 to the present. Emphasis will be placed on organization, recruitment, wars, battles, campaigns, prominent commanders, and how changes in the British Army mirrored changes in British society. Other important themes will be the army's role in conquering and defending the British Empire and major developments in British military policy and strategy.

Repeatability: This course may not be repeated for additional credits.

HIST 2804. Peace, Conflict, and Social Change. 3 Credit Hours.

This course addresses the question of conflict/violence in terms of local, domestic, national, and international issues. Course material will consider conflict/violence using the following subtopics: weapons proliferation and peacekeeping; racism, the global economy; women, children, and the family; conflict and cooperation over the environment. Guest lecturers will offer their expertise on particular case studies related to the topic. In the final weeks of the semester, students will be asked to submit a paper and give presentations that address conflict and options for conflict resolution using selected case studies from one of the above topics.

Repeatability: This course may not be repeated for additional credits.

HIST 2805. Nationalism and Revolution. 3 Credit Hours.

Beginning with the establishment of civil and political rights during the French Revolution, the course will address the relationship of the individual to the nation-state in Western Europe from the French Revolution to World War I. The course will include problematical issues that emerged during this period such as: the Napoleonic wars and the emergence of the modern nation-state; the development of the industrial revolution and its socio-economic impact on members of the working and middle classes; the consolidation of the nation-state and its impact on personal and political freedom. But in addition to considering the expansion of liberal political developments in the West, the course will consider the effects of imperialism on Asian and African countries during the final decades of the century. The final unit will consider how nationalism and imperialism contributed to the outbreak of the First World War and to the breakdown of old political states and traditional values in the Western societies.

Repeatability: This course may not be repeated for additional credits.

HIST 2806. Colonial North Africa in European History. 3 Credit Hours.

The Mediterranean has always been a crossroads between peoples and religions, traversed by commodities, ideas, and conquerors, and it remains so today. Yet at the beginning of the 19th century, Europeans increasingly described North Africa - and its people - as starkly foreign, wholly 'other'. This course will examine European and North African interactions over the period of 1798 to the present, with a particular focus on European invasions and colonizations - including Napoleon in Egypt, Lyautey in Morocco, and Mussolini in Libya. How did Europeans shape North African history and how did colonizing North Africa form modern European institutions and ideas? The class will examine these questions by focusing on both sides of the Mediterranean 'divide', including recent debates in Europe on North African immigrants, political invocations of Islam, and Islamophobia.

Repeatability: This course may not be repeated for additional credits.

HIST 2807. Battleground Cinema. 3 Credit Hours.

Films play an important and often unacknowledged role in shaping our understanding of historical events. The influence of war films is especially pronounced in this regard. The vicarious experience of battle leaves strong impressions on the viewer, more often than not mixing fact and fallacy in ways that create a particular, peculiar notion of historical reality. This course will examine war films from the United States, Germany, Great Britain, and the Soviet Union to see how these cinematic representations actually make important historical arguments about hotly contested topics such as the nature, meaning, and causes of war, moral responsibility for atrocities committed in war, and other issues. Students will be expected to view the films outside of class time, which will be devoted to brief lectures and discussions of the issues the films raise.

Repeatability: This course may not be repeated for additional credits.

HIST 2811. World War I. 3 Credit Hours.

The First World War (1914-1918) did more to shape the history of the 20th century than any other military conflict. It led to the destruction of empires, the outbreak of revolutions, and gave rise to Communism, Fascism and Nazism. The war catapulted the United States into a position of global dominance that it still maintains today. The war also transformed modern arts and culture. This course surveys not just the military history of the conflict, but its political, social, and cultural impact on Europe, the Middle East, the United States, Africa, and Asia. Extensive use is made in this course of primary sources, including soldiers' diaries, memoirs, poetry, novels, propaganda, and photographs. Research projects will draw upon extensive online collections.

Repeatability: This course may not be repeated for additional credits.

HIST 2812. World War II. 3 Credit Hours.

This course offers a survey of World War II, the largest and most destructive armed conflict in human history, with coverage of its causes and consequences. It utilizes the prism of grand strategy to analyze national policy and military strategy. In addition to detailed descriptions of major military operations, the course will assess the impact that Adolph Hitler, Benito Mussolini, Winston S. Churchill, Joseph Stalin, and Franklin D. Roosevelt had on the war. While this course emphasizes military events and wartime diplomacy, some attention will be paid to the internal politics of the major belligerents and economic factors. There are no prerequisites for this course.

Repeatability: This course may not be repeated for additional credits.

HIST 2816. Gender, Class, Nation. 3 Credit Hours.

An exploration of social and economic roles of women and men in modern Europe. Comparison of the impact of gender, class, and nationality on middle-class, working-class and peasant women and men in England, France, Germany, Italy, and Russia. The effects of industrialization, nationalism, war, fascism, communism, and the welfare state on women's and men's lives. The evolution of the role of girls and women in the family and the changing status of single and married women in the home and the workplace.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

HIST 2817. Gender, War, and Society. 3 Credit Hours.

In wartime, the traditional organization of society is often radically altered to meet the pragmatic and ideological needs of triumphing in the ongoing conflict. Ideas about gender - i.e., how masculinity and femininity are defined - are frequently subject to radical revision in the context of a society at war. This course examines the European and, to a lesser extent, the American experiences of war during the two World Wars and the intervening 20 year period, to understand how war and ideas of gender are related. Using both primary and secondary source materials, as well as films about World Wars I and II, the course looks at the experiences of men and women on the front lines and on the home front, those who participated in the wars and those who resisted them, those who benefited from war and those who were its victims. The course examines not only how wartime experiences construct and revise ideas about gender, but also how the rhetoric of gender is often used to further wartime aims.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

HIST 2818. American Icons. 3 Credit Hours.

The Statue of Liberty. Lincoln. Barbie. Route 66. Disneyland. Elvis. Ali. These are all American Icons. This course will explore iconic images of America as a way to understand the central myths, promises, and ideas behind the nation - ideas about freedom, individuality, democracy, mobility, second chances, masculinity and femininity, race and class. Each unit will focus on an individual icon, its origins, what it represented, and how this representation has changed over time and place. The course will invite a critical analysis of these icons and their economic and cultural impact in a global context.

Repeatability: This course may not be repeated for additional credits.

HIST 2819. Global Connections. 3 Credit Hours.

This course introduces students to major themes in global history over the past two centuries. It will chart the trajectory of transnational human relations from the overlapping cosmopolitan webs of the early nineteenth century to the global webs of the early twenty-first century. The course will place equal weight on economic, political, and cultural transformations. Students will explore the economic, political, social, and cultural changes that attended the growth and increasing integration of these webs. They will study the constant tension between conflict and cooperation that simultaneously brought them closer together and pulled them farther apart. The course will help students understand the origins of the current world system by exploring global transformations since the American and French revolutions. Themes include the rise of nationalism; the revolutions of 1848; American expansion; industrialization; the opening of Japan; colonialism; imperialism; world migrations; the decline of the British and the rise of the American empire in the first half of the 20th century; the two World Wars; the cold war; decolonization movements in the 1950s; cultural and economic globalization; and the transportation and communication revolutions of the last third of the 20th century.

Repeatability: This course may not be repeated for additional credits.

HIST 2870. Topics in Women's History. 3 Credit Hours.

Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Repeatability: This course may be repeated for additional credit.

HIST 2882. Independent Study. 1 to 3 Credit Hour.

Arranged each semester, please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

HIST 2900. Honors Special Topics I. 3 Credit Hours.

Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

HIST 2902. Honors Nazi Germany. 3 Credit Hours.

This course studies the rise and decline of Hitler's Third Reich, from its "intellectual" origins in the 19th century and World War I, through the meteoric rise of the National Socialist movement during the early 1930's, to its demise in the ruins of Berlin in 1945. Special attention is given to the sources of support for Nazism among German voters, the structure of the National Socialist state, the role of Adolf Hitler, the Holocaust, and the causes and consequences of the Second World War. Duplicate credit warning: Students who have taken HIST 1046 or 2102 will not receive credit for taking HIST 2902.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

HIST 2906. Honors Trials in America. 3 Credit Hours.

This course will examine American history through the lens of significant trials. Most trials are legal actions that settle quarrels or determine the guilt or innocence of an individual or group accused of a crime. But during the course of American history there have been numerous trials that reflect cultural/social/political issues much more than the ostensible guilt or innocence of the defendant. The Salem Witchcraft trials, for example, tell us much more about the cultural and social milieu of colonial Massachusetts than they do about the practice of witchcraft. The Dred Scott case was not about the status of one man, but about the legitimacy of slavery. The Scopes trial was a battle between forces of modernism versus forces of traditionalism, not about John Scopes. The O.J. Simpson trial was more about race and the legacy of racism than about murder. These are a few of the trials we shall examine. How important are such trials as a force in history? Do trials resolve conflict or fuel conflict? When do trials reflect state, or federal, coercion? When does public opinion determine the outcome of a trial? Duplicate credit warning: Students who have taken HIST 2106 will not receive credit for taking HIST 2906.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

HIST 2910. Honors Special Topics II. 3 Credit Hours.

Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

HIST 2915. Honors Russian History in Literature and Film. 3 Credit Hours.

In this honors course, students read and study a short history of Russia and then read literary works and watch films depicting various periods, topics, events, figures, and issues in Russian history. Students in the course develop an understanding of the depiction of history in literature and film as contingent on the ideological perspective of the storyteller; students also learn to identify ideological perspective through attention to symbol, metaphor, and theme in both literature and film and, in addition, in film, through attention to lighting, sound and other filmic devices.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

HIST 2918. Honors American Icons. 3 Credit Hours.

The Statue of Liberty. Lincoln. Barbie. Route 66. Disneyland. Elvis. Ali. These are all American Icons. This course will explore iconic images of America as a way to understand the central myths, promises, and ideas behind the nation - ideas about freedom, individuality, democracy, mobility, second chances, masculinity and femininity, race and class. Each unit will focus on an individual icon, its origins, what it represented, and how this representation has changed over time and place. The course will invite a critical analysis of these icons and their economic and cultural impact in a global context.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

HIST 2919. Honors Global Connections. 3 Credit Hours.

This course introduces you to major themes in global history over the past two centuries. It will chart the trajectory of transnational human relations from the overlapping cosmopolitan webs of the early nineteenth century to the global connections of the early twenty-first century. We will explore the economic, political, social, and cultural transformations that came with the increasing integration of the world. You will study conflict and cooperation, developments that simultaneously brought people closer together and pulled them farther apart. The course will help you understand the origins of the current world system by exploring global connections since the American and French Revolutions. Themes include the rise of nationalism; the revolutions of 1848; American expansion; industrialization; the opening of Japan; colonialism; imperialism; world migrations; the decline of the British and the rise of the American empire; the two World Wars; the cold war; decolonization movements; political, cultural and economic globalization; and the transportation and communication revolutions of the last third of the 20th century.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

HIST 2920. Honors Special Topics. 3 Credit Hours.

Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

HIST 2921. Honors Global Terrorism. 3 Credit Hours.

This course will examine the rise of modern global terrorism from the rise of left-wing Marxist/Leninist terrorism in the 1960s to Jihadi terrorism in the 21st century. The first half of the course will touch on the historical antecedents of terrorism and then look more deeply at such terrorist groups as the IRA in Ireland, ETA in Spain, the Brigade Rosse in Italy, the Red Army Faction in Germany, the FARC and ELN in Colombia, and Shining Path (Sendero Luminoso) and Tupac Amaru in Peru. The second half of the course will examine the transition to the beginnings of a different kind of terrorism that emerged in the 1990s and continues, ever more violently and more effectively, to this day. We will also look at the role of state terrorism. Repeat credit warning: This course is equivalent to HIST 2521. Students may only earn credit for either HIST 2521 or HIST 2921.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

HIST 2930. Honors Special Topics. 3 Credit Hours.

Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

HIST 2940. Honors Special Topics. 3 Credit Hours.

Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

HIST 3096. Intermediate Writing Seminar. 3 Credit Hours.

The Intermediate Writing Seminar builds on the skills developed in The Historian's Craft. This seminar is writing intensive. The goal of the class is to cultivate research and writing skills to prepare students for the Capstone Seminar in History. Students will complete a variety of projects to build their research and writing skills. Students will work with the instructor and with peer writing partners to revise and edit their work.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in HIST 2001.

HIST 3101. Colonial America. 3 Credit Hours.

Many important aspects of U.S. society developed significantly before the Revolution. The purpose of this course is to understand better how this society took shape in that formative early era. The first classes deal with some general issues that colonizers faced as they tried to form and develop settlements in North America, and the way the English entered into this process. Then characteristics of how three regions of the colonies evolved are examined: the South, New England, and the Middle Atlantic. The final few weeks of the course take up changes in political life, economics, and culture that all parts of the colonies experienced in the 1700s and which tended to bring them together towards becoming one new nation, though not a nation without differences and conflicts.

Repeatability: This course may not be repeated for additional credits.

HIST 3102. American Revolution and Republic, 1754-1789. 3 Credit Hours.

This course examines the transformations in politics, culture and society that we call the American Revolution. What was revolutionary and not revolutionary about the period? What did the Revolution mean to the people who lived through it, and how might the answer be different for different groups of people? What was the relationship between the famous, enduring ideals of the Revolution and the realities of life in late 18th century America? And what kind of republic came out of the process? We will also consider the revolution as, among other things, a crisis in the first British empire, the creation of independent states and a nation, a civil war, and a massive slave rebellion, the aftershocks of which reverberated in the 19th century.

Repeatability: This course may not be repeated for additional credits.

HIST 3103. The Early United States, 1787-1846. 3 Credit Hours.

This course covers the political, social, and cultural history of the U.S. from ratification of the Constitution to the beginnings of the crisis over expansion and slavery. It examines the democratization of politics and the problems of national independence; territorial expansion; economic change; the development of regional, class, religious, racial, ethnic and gendered subcultures; slavery and resistance to slavery; and the new political and reform movements that responded to the era's deep and lasting changes.

Repeatability: This course may not be repeated for additional credits.

HIST 3104. 19th Century America. 3 Credit Hours.

This is an advanced level history course aimed at giving history majors and students in other disciplines such as English and Political Science an understanding of the changes in American life during the 19th century. This is truly a "World We Have Lost," a society dominated by agriculture, but becoming increasingly industrial and urbanized. But even though a visit to the world of 100 years ago is as foreign to contemporary students as the visit by the anthropologist to a non-western culture, the consequence for modern American life is immense. The topics discussed in this course are related to the changes in the United States that promoted its development as a multicultural democracy and an economic superpower.

Repeatability: This course may not be repeated for additional credits.

HIST 3105. 20th Century America. 3 Credit Hours.

This course analyzes American politics, society and culture in the 20th century. Among the topics to be analyzed are the changing role of the presidency from McKinley to Clinton, progressivism, World War I, the conflictive 1920s, the depression and the New Deal, World War II, affluence in the 1950s, the Cold War, antiCommunism, racism, the civil rights movement, the rebellious 1960s, the war in Vietnam, Nixon, the Great Society, the women's movement and gender issues, the conservative backlash, and the new diversity.

Repeatability: This course may be repeated for additional credit.

HIST 3107. American Cultural History. 3 Credit Hours.

This course will not attempt to cover all aspects of American cultural history in one semester. Instead, it will examine some important themes from the 19th and 20th centuries. It will use material drawn from elite and popular sources to explore the meaning of "culture" in a diverse, democratic society. It will ask when and why Americans began to think that there was such a thing as American culture. It will interrogate this culture for some basic elements, taking into account the role of such important features of American life as liberalism, pragmatism, patriotism, consumerism, and modernism as well as the impact of science, technology, the arts, and religion. It will distinguish between public culture, intended for the edification of all, and the private cultures of different subgroups.

Repeatability: This course may not be repeated for additional credits.

HIST 3108. Modern American Social History. 3 Credit Hours.

The purpose of this course is to provide an overview of the main elements of American social/economic development during the industrial period, approximately 1870-1945, with some attention to the transition to the post-industrial era after World War II. Topics covered include the growth of new industries and changing work conditions, urbanization, class divisions, immigration and black migration, the changing status of women and the family, and the impact of the Great Depression and the New Deal on American life. Both secondary and primary sources, including two important novels with social history themes, are used in the course, and students are required to write an essay (and give an in-class report) that analyzes a specific primary source dealing with one of the aspects of social history covered in the lectures and required readings. The take-home final exam essay also requires that students evaluate sources. Class participation in discussing the readings is also an important part of the course.

Repeatability: This course may not be repeated for additional credits.

HIST 3151. Local History. 3 Credit Hours.

This course provides an introduction to doing local and regional historical research, especially in collaborative partnership with community organizations such as museums and historical societies. We will learn how to design community research projects and how to harness resources that are particularly relevant to them, such as: census records, fire insurance maps, municipal archives, online databases, public records, images, artifacts, and recorded interviews. Along the way, we will consider the perils and possibilities of doing local history and the extent to which successful collaboration can pivot on competing notions of the past. This course is organized around an actual collaborative partnership with a Philadelphia-area cultural organization wherein you will provide the historical expertise.

Repeatability: This course may not be repeated for additional credits.

HIST 3152. Material Culture for Historians. 3 Credit Hours.

This course introduces students to the major themes, issues, and methods relevant to the study of material culture and the past. Although archaeologists have long concerned themselves with the study of prehistoric objects, only within recent decades have scholars focused their attention on the evidentiary value of historic objects. We will consider the variety of ways in which scholars from diverse fields have sought to infer historical meaning from things and then seek specifically to understand how historians have applied those ideas to their own work. Because this course is also concerned with the role objects play in exhibits and collections, it is particularly well suited to students considering careers in public history.

Repeatability: This course may not be repeated for additional credits.

HIST 3211. Development of the Modern American City. 3 Credit Hours.

The course examines the way that the American city has undergone two revolutionary changes in the 135 years since the Civil War. In the mid- to late 19th century the city went from a walking city to a streetcar city, altering the basic social and economic geography. Then in the 20th century American cities were transformed from streetcar cities to automobile cities, again revolutionizing the cities' basic geography. The two transformations were rooted in technological innovation in such areas as transportation, power, and building construction. But the changes also depended upon what American urban dwellers chose to make of the technologies. History, by examining the way that American cities have changed in the past, can illuminate what the American city has become and thus can provide insight into the factors that should be taken into account in influencing the future of cities.

Repeatability: This course may not be repeated for additional credits.

HIST 3214. North American Environmental History. 3 Credit Hours.

This course examines the interactions between human societies and the natural world in North America. That relationship is complex: the environment both reflects people's influences and affects human history. Through lectures, reading, and discussion, participants in this course will examine this reciprocal relationship. Issues to be discussed in the course include Native American management of the environment; the effects of the European ecological invasion; resource exploitation in the industrial era; the foundations of the preservationist and conservationist movements at the beginning of the 20th century; the evolution of 20th century environmentalism; and the historical context of current environmental problems.

Course Attributes: SF, SS

Repeatability: This course may not be repeated for additional credits.

HIST 3215. Historical Roots of Urban Crime. 3 Credit Hours.

The course focuses on two aspects of the history of the underworld of American cities: The first aspect might be called the life within the underworld, or what it means to live the life of a criminal. The course examines how bookmakers or madams run their businesses, how pickpocket gangs pick pockets, how loan sharks collect their money, and what kind of culture and social life characterizes those who are part of the underworld life. The second aspect is the way that underworld activities both reflect and influence the wider society. The course, then, examines the interrelationships of crime, on the one hand, and ethnic groups, neighborhood structure, urban politics, criminal justice institutions, the rise of professional sports, the changing sexual mores of the society, and even such aspects as the changing role of the family and the impact of technology. Crime becomes a prism through which students will learn about the history of American urban society.

Repeatability: This course may not be repeated for additional credits.

HIST 3216. Media and American Culture, 1706-Present. 3 Credit Hours.

This course will explore the role of media in the development of American popular culture, with particular emphasis on the cultural transformations brought about by mass media after 1880. Historical analysis will demonstrate the profound shift in media roles within the past century; from media expressions of popular culture before 1889, to media as generators of popular culture after that point. A by-product of this analysis will be the formulation of a critical definition of mass media in terms of a specific relationship between the media and the audience.

Repeatability: This course may not be repeated for additional credits.

HIST 3217. African American Church and Black Liberation. 3 Credit Hours.

Race has been and is a central issue in America. Race has played a very important role in the lives of black people and in the history of African Americans. Historically the black church has been a central institution for addressing pressing societal issues that threaten the existence of black people. African Methodism, the first major black Christian organization came into existence as a liberation movement and a protest against racism and segregation in the Christian Church. Utilizing selected historic periods, i.e., ante-bellum, Civil War and Reconstruction, the 1920s and 1930s, and the 1960s, this course will explore the meaning of freedom and liberation as defined by the historic African American church and its leadership, and will examine the different ideologies and strategies employed by church leaders in addressing and resolving issues regarding the individual and collective freedom of black people. American and African American history will be used as the context, for examining issues, events, movements and personalities important to understanding the role and impact of the black church on the development of liberationist black thought and movements during different periods.

Repeatability: This course may not be repeated for additional credits.

HIST 3221. Jewish Experience in America. 3 Credit Hours.

This course considers the evolution of the Jewish community in the United States from its colonial beginnings to the present day. Topics include the immigrant experiences of various waves of migration, especially from Eastern Europe; the development of the major religious movements within Judaism; the role of Jews in American culture, economy, and politics; relationship between American Jews and Israel; assimilation and identity.

Repeatability: This course may not be repeated for additional credits.

HIST 3225. Women in U.S. History. 3 Credit Hours.

The principal theme of this course in women's history can be summed up in this phrase: "Unity, Difference, and Diversity: The Search for Sisterhood and Beyond." Working with a textbook, a number of scholarly articles, and documents that come from throughout American history, we will explore the ways in which women have both been affected by, and helped to shape, this nation's history. Our emphasis will be on how women of different socioeconomic backgrounds, races, and ethnic groups have experienced colonization, American expansion, sectionalism, the industrial revolution, urbanization, immigration, war, economic depression, cultural transformations and political change. We will be looking not only at commonalities but also differences among women as well as the conflicts between women and a society based on male supremacy. We will be exploring how race, ethnicity, and class affect the experience of gender. NOTE: Students will receive credit only once for either HIST 3225 or GSWS 3225.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

HIST 3228. America's Rise to Globalism. 3 Credit Hours.

This course will trace the contours of U.S. foreign policy from its colonial origins through the destruction of the myth of isolationism produced by the attack on Pearl Harbor. Although the syllabus proceeds chronologically, the lectures and readings emphasize thematic continuities and discontinuities. These themes include the ideological, strategic, economic, cultural, and racial influences on America's foreign relations; mission, manifest destiny, and continental expansion; issues of war, peace, and security; crisis management and mismanagement; the closing frontier and imperialism; Wilsonianism and its critics; independent internationalism; and personal versus coalition diplomacy. Because the study of diplomatic history is highly interpretative, and the assigned studies reflect competing interpretations, all students will be expected to question, comment upon, and yes, even criticize the readings and lectures. In doing so, emphasis will be placed on recognizing and assessing the strategies historians employ to collect and use evidence in order to advance arguments. Students will be required to "volunteer" at the start of each session to summarize briefly and cogently the primary issues and arguments covered in the preceding one, and students should be prepared to respond to questions and references to the readings that will be incorporated into each session's lectures.

Repeatability: This course may not be repeated for additional credits.

HIST 3229. Superpower America. 3 Credit Hours.

This course surveys the history of U.S. foreign relations from World War II to the present. It focuses on the ways that political, economic and cultural forces, both at home and abroad, helped shape America's relationship with the wider world. The course deals with issues such as the American response to the challenge of war; the impact of anti-Communism on American society and foreign policy; the role of economic interests in shaping U.S. foreign policy; and the creation of the national security state during the Cold War. This course shows the many ways that the United States has deployed its power during what is often called the American Century.

Repeatability: This course may not be repeated for additional credits.

HIST 3231. German Minority Identities: Gendered and Cultural Dimensions (in English). 3 Credit Hours.

Germany has vibrant migrant communities with ethnic and racial groups from places as diverse as Turkey, Italy, Greece, Morocco, East Africa, and Russia. This course looks at the presence of minority communities in Germany today, their history and cultural influences as well as economic contributions. Our main analytical lens will be gender - how the German host culture is shaped by concepts of femininity and masculinity, sexuality, family, and a gendered division of labor and how these concepts are challenged (and/or shored up) by the various ethnic communities. We will look at both the perception of migrants by white/native Germans (how are they portrayed in the media, film, and politics?) and we will explore the voice of the "other", i.e. the experience of minority communities living in Germany and how this influences their own cultural identities. Questions we will ask include: How does the experience of immigration affect the identity of minorities living in Germany? What does "Deutsche Kultur" (German culture) mean today? Our focus will be on how gender shapes and underlies much of these discussions on minorities in Germany as well as their negotiations of conflicting expectations of community and larger "German" culture. Course material will include critical readings, films, and other cultural texts. Taught in English.

Repeatability: This course may not be repeated for additional credits.

HIST 3235. Weimar Culture: Race, Gender, Sexuality and Nation (in English). 3 Credit Hours.

This class explores the contradictions in German culture during the Weimar Republic (1918-33), with particular attention to its urban centers. Berlin was considered the European capital of artistic and experimental subcultures as well as the hotbed for radical politics, whose decadent Bohemian culture of sexual experimentation, drug use, women's liberation and cabaret existed side by side with abject poverty and street violence. We will ask questions such as how Hitler could come to power in a Germany that was considered to have the most advanced science, technology, literature, philosophy and art of its time, and whose Jewish citizens contributed to all areas of society? How did a new consumerism contribute to the complacency of many Germans in the face of a violent fascism? Thereby we will pay attention to how concepts of race, gender, sexuality and nation shaped the debates of the time. We will watch movies, read literature and graphic novels, and learn about the Weimar Republic's political landscape and history. This course is conducted in English. All films are subtitled and readings are in English.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

HIST 3280. Topics in American History. 3 Credit Hours.

Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Repeatability: This course may be repeated for additional credit.

HIST 3311. Greek History. 3 Credit Hours.

The Greek History survey begins with the Bronze Age and ends shortly after the Peloponnesian Wars. Students will read a narrative history, a study of the art in historical context, and a selection of the ancient literary sources upon which our knowledge is based. Strong emphasis is placed on the archaeological material and how it is used to augment the literary sources. The philosophical and cultural achievements of ancient Greece will be put in historical context.

Repeatability: This course may not be repeated for additional credits.

HIST 3312. Roman History. 3 Credit Hours.

This survey of Roman History begins with the foundation of Rome in the 8th century B.C. and ends with the founding of the Christian capital of the Empire at Constantinople. Students will read a narrative history, a study of various aspects of Roman society and culture, and a selection of the ancient sources upon which our knowledge is based. Archaeological material will be used to augment the literary sources. The influence of Rome on later Western Civilization in government and law will be studied as well as its role in determining the foundation of Christianity.

Repeatability: This course may not be repeated for additional credits.

HIST 3321. Irish History. 3 Credit Hours.

Irish and Irish American culture, society, religion, and problems associated with minority status and oppression. Special questions relating to the changing structure of family ties and women and related issues; Irish American consciousness as exemplified by support over the recent troubles in Northern Ireland. The recent and dramatic improvements in the standard of living in the Republic and the growing disparity amongst the urban Irish will serve to complete this study.

Repeatability: This course may not be repeated for additional credits.

HIST 3331. History of England. 3 Credit Hours.

How the kingdom of England was created and how its government evolved from a feudal monarchy to a constitutional democracy that has been a model for other countries, especially the United States. How England became the first industrial nation and how its society and culture responded to this change.

Repeatability: This course may not be repeated for additional credits.

HIST 3332. Historic Britain, 1688-1815. 3 Credit Hours.

This course examines British history from the "Glorious Revolution" of 1688 through the end of the Napoleonic Wars in 1815. Using a variety of primary and secondary sources, including novels, the course will examine the debates and arguments that contributed to the establishment of the modern industrialized nation-state in Britain. The course examines such important events as the industrial revolution and its implications for Britain and the world, the development of a constitutional parliamentary form of government which was important for the nascent United States, as well as for Britain, the development of mass politics and radical politics, and Britain's involvement in European and world affairs.

Repeatability: This course may not be repeated for additional credits.

HIST 3333. Modern Britain: Empire, War, Rock and Roll. 3 Credit Hours.

This course examines the history of Britain from the end of the Napoleonic Wars in 1815 until the present. Using a variety of historical sources, including primary and secondary historical sources, as well as novels and journalistic reportage, the course looks at the critical questions that have faced Britain and have influenced world history over the course of the 19th and 20th centuries. Among the issues to be examined are the development of mass politics, and the inclusion of the working classes and women in the British polity, the development and Thatcherite decline of the welfare state, the construction and demise of the British Empire, Britain's military and diplomatic roles in the two world wars, and position in the emerging European Union. The course examines these questions from a variety of different angles, including political, cultural, economic and social.

Repeatability: This course may not be repeated for additional credits.

HIST 3341. French Revolution and Napoleon. 3 Credit Hours.

This course will treat the history of the French Revolution from the mid 18th century through the Napoleonic era (1750-1821). Material in the course will address varied interpretations of the revolution from classical Marxist to more recent cultural, feminist, and post-modern perspectives on the subject. In addition to various texts on the revolution, the course also includes a detailed discussion of Napoleon Bonaparte's military and political career with due consideration given to the French empire and its impact on the subsequent political configuration of 19th century Europe.

Repeatability: This course may not be repeated for additional credits.

HIST 3342. Revolutionary Europe. 3 Credit Hours.

This course treats major social, political, and cultural revolutions that occurred in Europe during the modern period (1789-1989). By addressing specific revolutions, the class will attempt to discern some patterns in the causes and occurrence of revolutionary events. More precisely, the course will consider historical factors related to the outbreak of revolutions due to rural economics, industrial transformation, class conflict, commercial changes, and ideological influence prior to or during revolutionary periods. Specific topics include: the French Revolution; the Industrial Revolution and Revolutions of 1848; the French Commune; the Russian Revolution, and the social and cultural revolutions of the 30's.

Repeatability: This course may not be repeated for additional credits.

HIST 3351. Rome and Italy: Renaissance to the Present. 3 Credit Hours.

A broad survey of Italian history from medieval to modern times. Although the unified Italian state is a modern creation little more than a century old, Italy gave birth to Europe's first urban civilization in its glorious renaissance cities. Italy finally achieved unity and played a major role in European affairs, which unfortunately included two world wars and the fascist dictatorship of Benito Mussolini. More than is the case with most countries Italian history is the history of its great cities like Rome, Florence, Venice, and Milan. We will focus on those centers, especially Rome, which is also the home of the Popes whose role in Italian and world history is immense, and Florence, the home of great artists and such great modern figures as Dante, Machiavelli, and Galileo.

Repeatability: This course may not be repeated for additional credits.

HIST 3352. Roman Archaeology. 3 Credit Hours.

In this course, students will discuss and examine the physical remains of Roman culture, and explore the ways these artifacts affect the study of history. After looking at the Greek and Etruscan contributions to Rome life and a brief look at the limited remains from Republican Rome, the material from the Roman Empire will be surveyed. Special attention will be paid to architecture, city planning and sculpture. Detailed examination of the ruins from the cities of Rome, Pompeii, Herculaneum and Ostia will comprise the bulk of the course. Students will be expected to do some work at area museums.

Repeatability: This course may not be repeated for additional credits.

HIST 3353. Modern Italy - From Napoleon to Hitler. 3 Credit Hours.

The formation and consolidation of a centralized Italian state - known as the Risorgimento - occurred relatively late in the history of European nation-state formation. In this course, we will examine the rise of Italian nationalism during the Napoleonic invasions of the 1790s to the proclamation of Rome as the Italian capital in 1871. From there, we will turn to an in-depth analysis of the cultural, social, and political legacies of the process of unification. From this perspective, we will explore issues of regionalism and national identity in Italy's position abroad including Italian imperial expansion and Italy's role in World War I and World War II. Finally, we will ask how legacies of Allied and Nazi invasions persist in post-War Italy.

Repeatability: This course may not be repeated for additional credits.

HIST 3362. Russia: Nationality and Empire. 3 Credit Hours.

This course examines factors and events that shaped Russia's history between 1700 and 1917. Special focus is on the role of "enlightened" autocracy, the rise of bureaucratic state, and spread of Western values, but also on various forms and ways of popular resistance, from peasant's rebellions to Populists and revolutionaries. Another emphasis is on placing Russian history in a broader context of modern European history, Enlightenment, liberalism, and progressivism. Lectures and reading projects are complimented by wide use of multimedia and Internet resources, films and music.

Repeatability: This course may not be repeated for additional credits.

HIST 3363. Russia: Revolution, State, and Empire. 3 Credit Hours.

This course focuses on the rise and fall of the Soviet Union, from the Russian Revolution of 1917 until the collapse of the Soviet Union in 1991. It deals with major factors and events, including Communism, two world wars, and the Cold War, that shaped Soviet history. The course explores Soviet impact on European and world developments, and Soviet motives in confrontation with the United States. Reading and lectures are complimented with multimedia and Internet sources, discussions and individual presentations. Cross-Listed with POLS 3363. Students will receive credit for only one course from: HIST 3363 or POLS 3363.

Repeatability: This course may not be repeated for additional credits.

HIST 3411. Belief and Society in Pre-Modern Europe. 3 Credit Hours.

An examination of changes in belief systems (both religious and ideological) and their impact on, and influence by, the society around them. The course will focus especially on beliefs as understood and interpreted by the wider society, not just a few intellectuals. Focus is on diversity of belief and practice within an overwhelmingly, but not monolithically, Christian society.

Repeatability: This course may not be repeated for additional credits.

HIST 3412. Power and Conflict in Pre-Modern Europe. 3 Credit Hours.

An examination of the kinds of power struggles that took place in Europe during the medieval and early modern period, and the military, legal, and other means used to resolve them. Struggles among monarchs and territorial magnates; the Crusades; heresy and its suppression; religious wars; and much more local and personal disputes as well.

Repeatability: This course may not be repeated for additional credits.

HIST 3422. Art, Culture, and European Societies. 3 Credit Hours.

This course examines the shift from elitist forms of representation in the arts to the increased popularization (and democratization) of European politics and culture from the 18th to the 20th centuries. Using both contextual (historical) and formal (art historical) tools for analysis, the class will trace stylistic changes in art, literature, music and the press. More specifically, this includes a consideration of political propaganda and neoclassicism during the revolutionary epoch to romanticism, realism, impressionism, and expressionism concurrent with the establishment and commercial expansion of the modern nation state. Additionally, the course will consider the "democratization" (or popularization) of visual and material culture through the lithographic press, the daily newspaper, photography, and poster publicity. The concluding unit will incorporate visual propaganda in particular European countries during the perilous decades that preceded and followed World War I.

Repeatability: This course may not be repeated for additional credits.

HIST 3423. Glitter and Doom: Europe, 1885-1914. 3 Credit Hours.

Known as the belle epoque (the beautiful era) to some, and the fin de siecle (the end of an era) to others, the period from 1885 to 1914 has been described in terms of promise and crisis, glitter and doom. On the one hand, this was a time characterized by urban growth, mass culture, modernisms, scientific and technological advances, as well as new genders and sexualities. On the other hand, it was the crisis-ridden period leading up to World War One, marked by imperialism in Africa, an arms race, rising anti-Semitism, fears of degeneration, as well political radicalism. In this course, we will explore this transformative period in greater detail, with particular emphasis placed on social, cultural, and gender historical approaches. We will also consider a range of primary sources from politics, literature, philosophy, science, feminism, as well as art and music.

Repeatability: This course may not be repeated for additional credits.

HIST 3428. Fascism, a History. 3 Credit Hours.

Europe between the First and Second World Wars (1918-1938) was riddled with political divisions, economic collapse, and the rise of extremist political movements. The most notorious was fascism. Perhaps no other term is used and misused with greater frequency in contemporary politics, but to understand what fascism really means, you have to examine where and when it developed in the past. This course will focus on the origins of fascism in interwar Italy. But we will also trace the connections between fascism in Italy and the Nazi regime in Germany as well as the proliferation of fascist movements and parties throughout Europe and beyond. We will delve into a variety of topics and historical debates concerning the popularity of fascism, the culture of fascism, and the legacies of fascism.

Repeatability: This course may not be repeated for additional credits.

HIST 3431. Women's Lives in Modern Europe. 3 Credit Hours.

This course treats issues related to women's status and power in Modern European History from the 18th century to the present. The emphasis of the course will be on the experiences of women in England, France, Germany, and Russia where significant economic and political changes have occurred in the past few centuries. The purpose of this course is to discuss important issues that women have confronted in the past, and that continue to influence problems that women face today such as: personal, economic, and political power, education, sexuality, psychology, and social esteem, women's position in the home and workplace plus the continuing question of conventional versus unconventional gender roles in Western Societies. To supplement a general text and several published sources in European history, students will be reading memoirs and essays written by women on economic, political, and social issues pertaining to women, work, and the family during the past two centuries.

Repeatability: This course may not be repeated for additional credits.

HIST 3433. Blood and Iron: 19th Century European Diplomacy. 3 Credit Hours.

This course will be a survey of the history of European diplomacy from the wars of the French Revolution until the outbreak of World War I in 1914. Modern warfare, nationalism, and tremendous economic, social, and technological upheaval shaped the 19th century and fundamentally altered the way nation-states interacted. Therefore, we cannot be content in this course to study the biographies of Metternich, Napoleon III, Bismarck, and other great diplomats of the 19th century, though they will receive due attention. In order to explain the events that in many ways laid the groundwork for the world situation in our own time, we will examine cultural and intellectual movements, military and scientific innovations, and political and social changes that still affect the way nations conduct diplomacy.

Repeatability: This course may not be repeated for additional credits.

HIST 3434. Cold War from the Other Side: The Communist Countries and International History, 1945-1991. 3 Credit Hours.

The course will explore the history of the Cold War from the perspective of the main U.S. adversaries in the Cold War: the Soviet Union and China. Also, the course provides secondary themes, covering the motives and actions of other communist countries, including Eastern European countries, Vietnam and Cuba.

Repeatability: This course may not be repeated for additional credits.

HIST 3480. Topics in European History. 3 Credit Hours.

Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Repeatability: This course may be repeated for additional credit.

HIST 3511. Southern Africa: A History. 3 Credit Hours.

This course deals with the history of Southern Africa focusing on South Africa. It also includes the history of Angola, Mozambique, Namibia, Zambia, and Zimbabwe. A good part of the course deals with a detailed study of the history of apartheid in South Africa from its inception to its political demise in 1994. It also deals with the history of African resistance against the Dutch-British racial order. Some of the themes of the course include: African societies in Southern Africa; European slave traders, settlers, and colonizers (Portuguese, Dutch, British, and German); racism and apartheid in South Africa and Southern Africa at large; African nationalism and the struggle against white domination; the demise of Portuguese colonialism in Angola and Mozambique; the political demise of apartheid and post-apartheid Southern Africa.

Repeatability: This course may not be repeated for additional credits.

HIST 3521. The Chinese Revolution. 3 Credit Hours.

This course is a general introduction to the Chinese Revolution (1921-49) from the perspective of sociopolitical history. Special emphasis on: the internal historical trends and external (semi-colonialist) interventions that shaped the struggle for revolutionary change in the 20th century; conditions in the countryside on the eve of revolution; the urban and rural contours of the Communist Movement; the evolution of Mao Zedong's thought; and revolutionary process and dynamics.

Repeatability: This course may not be repeated for additional credits.

HIST 3522. Contemporary China. 3 Credit Hours.

This course examines society, the state, and popular politics in the Peoples' Republic of China from 1949 to the present. Special emphasis on: revolutionary transformation and socialist construction during the Maoist years (1949-79); the postsocialist trajectory and its critique over the last two decades. Note: This course is cross-listed with Asian Studies 3522. Students may only receive credit once for these courses: ASST 3522 or HIST 3522.

Repeatability: This course may not be repeated for additional credits.

HIST 3531. Modern India. 3 Credit Hours.

Beginning with some of the basic social structures of village India, we move on to study changes introduced by the British during 200 years of colonial rule. An analysis of anti-imperial nationalism, headed by Gandhi, leads in turn to the study of India since independence in 1947, with special attention to international relations, non-governmental organizations, the politics of religious militance, and the causes and consequences of India's opening to the global economy. Note: This course is cross-listed with Asian Studies 3531. Students may only receive credit once for these courses: ASST 3531 or HIST 3531.

Repeatability: This course may not be repeated for additional credits.

HIST 3541. Japan Today. 3 Credit Hours.

This course examines important social, political, and economic trends in Japan from 1945 to the 1990s through lecture, discussion, audio-visual materials, and group oral reports. Topics include the Occupation, the "economic miracle," state and society, the world of work, women, and gender, international relations, impact of affluence, post-bubble Japan, and varying approaches to the study of postwar Japanese history and society. Note: This course is equivalent to ASST 3541; students may receive credit for either HIST 3541 or ASST 3541.

Repeatability: This course may not be repeated for additional credits.

HIST 3542. Women and Society in Japan. 3 Credit Hours.

This course analyzes the changing position of women in Japanese society from ancient times to the present. Through discussions, lectures, and audiovisual materials, students learn about goddesses, female diviners, empresses, the classical female writers, women in warrior culture, women in industrializing Japan, and Japanese women's movements. NOTE: Students will receive credit once for either HIST 3542, ASST 3542, ASST 3942, or GSWS 3542.

Repeatability: This course may not be repeated for additional credits.

HIST 3551. History of Vietnam. 3 Credit Hours.

Emphasizing cultural, social, and economic factors, the course traces Vietnamese history from its mythological origins to the 21st century. Topics include indigenous social formations, the period of Chinese domination, the rise of independent Vietnamese dynasties, the French colonial era, the Vietnamese Revolution, and the three Indochina Wars, including the Vietnam Conflict in the 20th century. It will close with consideration of life under the current Socialist Republic of Vietnam. Note: This course is cross-listed with Asian Studies 3551. Students may only receive credit once for these courses: ASST 3551 or HIST 3551.

Repeatability: This course may not be repeated for additional credits.

HIST 3561. History of Brazil. 3 Credit Hours.

Brazil is one of the world's largest nations being inferior in territorial size only to the United States, Russia, and China. With more than 150,000,000 people, Brazil is second in population among western hemisphere nations to the United States, and far larger than any Latin American nation. Brazilians can claim national unity solidly based on a common language and common cultural heritage. Brazilians are descended from Native Americans, Africans, and Europeans, but can claim a recent history relatively free of ethnic or racial strife. Brazil is rich in natural resources, and has one of the world's few natural resource frontiers. Finally, Brazil continues to produce outstanding architects, artists, writers, composers, social scientists and legal intellectuals, religious and political leaders, entrepreneurs and athletes. At the same time, persistent problems block Brazilian development. They include widespread racism and class bias, excessive dependence on foreign capital and technology, a shamefully inadequate public school system, a perverse distribution of income that favors the wealthy, and fragile democratic institutions. After 500 years of history, Brazilians have immense tasks before them, while the promise of national greatness remains unfulfilled.

Repeatability: This course may not be repeated for additional credits.

HIST 3562. Contemporary Mexico. 3 Credit Hours.

Over the past several years, Mexico has become increasingly integrated with the United States economically, socially, and culturally; a phenomenon that has presented new challenges to both countries to organize this irreversible process constructively. We will look at the present-day questions between the United States and Mexico through the experience of Mexico's history since 1940. This period includes decades of industrialization, city growth, labor migration to the United States, cultural flourishing, political restlessness, the emergence of narcotics trafficking, and incorporation into the North American Free Trade Agreement (NAFTA). This course concludes with some speculative considerations about the future. Instruction takes place through discussion, lecture, film, computer projection, and readings from the new historical scholarship that has emerged on post-1940 Mexico.

Repeatability: This course may not be repeated for additional credits.

HIST 3563. Puerto Rican History. 3 Credit Hours.

This course explores particular issues related to the political, economic, and social development of Puerto Rico with special emphasis given to the 19th and 20th centuries. The course will not only address historical paragons but also questions of interpretations. In each class a combination of readings, discussion, lectures, and videos will be used to view the various issues in a comprehensive manner.

Repeatability: This course may not be repeated for additional credits.

HIST 3564. Caliban's World: Cultural Politics in the 20th Century Americas. 3 Credit Hours.

This course considers the history of struggles for decolonization primarily but not exclusively in the Americas during the 20th century. It focuses particularly on the uses of "culture" and the significance of creative expression in movements dedicated to dismantling the hegemony of the "West." From writers wrestling with Shakespeare's *Tempest* to musicians arranging artful ways to "curse," we examine texts, music and films in which people work to imagine a world beyond colonialism.

Repeatability: This course may not be repeated for additional credits.

HIST 3566. Race, Gender, and Empire in the Iberian World. 3 Credit Hours.

Latin America is a culturally rich and diverse region. Its complex and fascinating history is the product of different worlds and cultures coming together in the 16th century. In this course we will analyze this encounter and its consequences by looking at two main topics: race and gender. Following a chronological order that starts with the conquest of the Americas by the Spaniards and Portuguese in the 16th century and ends with the breakdown of the Spanish empire in the early nineteenth century, the course will explore the ways in which different peoples have interacted. We will discuss the various roles men and women assumed in these societies and the significance of race. In so doing, we will attempt a deeper analysis of the social dynamics of Latin America in the past that will give us a better understanding of its present and future. Note: For history majors, this course is in the "Global/Comparative" category.

Repeatability: This course may not be repeated for additional credits.

HIST 3571. Israel: History, Politics and Society. 3 Credit Hours.

This course traces the political and social history of modern Israel/Palestine since the late 19th century, examining the evolution of Zionism; the relationship between Jews and Muslims; the conflict between Zionists and Arabs; the development of the Jewish settlement in Palestine; and the creation of the State of Israel. It explores Israeli politics, society and identity, especially the role of immigration, ethnicity and religion, and also discusses the wars and tensions between Israel and neighboring Arab states; the status of the Arab/Palestinian minority in Israel; and the growth of Palestinian nationalism, the PLO and Hamas. Through studying Israeli history, politics and society this course helps students gain an understanding of the ongoing conflict in the Middle East.

Repeatability: This course may not be repeated for additional credits.

HIST 3572. Modern Middle East. 3 Credit Hours.

This course surveys the history of the modern Middle East, analyzing some of the great controversies of the region. How the modern Middle East arose, why so many conflicts in the region in modern times have taken place, why the Great Powers have been so involved, and how the struggles of the working class have fared are among the questions to be addressed.

Repeatability: This course may not be repeated for additional credits.

HIST 3580. Topics in Asian History. 3 Credit Hours.

Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Repeatability: This course may be repeated for additional credit.

HIST 3606. Asian Women in Transition. 3 Credit Hours.

This course introduces and compares the experiences of women in Asia and Asian women in migration to the United States in the modern period, including rural and urban women, and ordinary and elite women in the late 19th and 20th centuries. Topics include women in households, women and work, and women's activism. Duplicate credit warning: Students may only receive credit for one of the following: ASST 3696, HIST 3696, GSWS 4696, ASST 3606, HIST 3606, or GSWS 3606.

Repeatability: This course may not be repeated for additional credits.

HIST 3675. Third World Women's Lives. 3 Credit Hours.

Explores the themes of imperialism, colonialism, class, race, interlocking oppressions, commitments to family and community, migration, resistance/insurgency/revolution, collective action, memory, and alternative visions as crossroads of identities in Third World women's lives. Utilizes a variety of source materials with emphasis on the voices of Third World women themselves (testimonies, oral interviews, and documentary visual media). Compares these life texts to those of other working women as they speak to the experiences of being women of color or poor white women in a late capitalist world. Develops the tools for understanding the experiences and perspectives of diverse groups of women to create liberating ways of thinking and living.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

HIST 3711. The City in History. 3 Credit Hours.

From Catal Huyuk and Sumer to Florence and Xian to Manchester and Ahmedabad to Los Angeles and Mexico City we examine the significance of the city in the economic, political, social, and cultural life of our planet. Why and how have people created such different kinds of cities? What interest groups have dominated them? What strategies have planners proposed for making them more liveable? For whom? How can studies of cities in other times and places help us understand our own cities? Extensive use of visual materials and some field trips.

Repeatability: This course may not be repeated for additional credits.

HIST 3741. Comparative Slavery. 3 Credit Hours.

This course deals with the study of comparative slavery in four distinct historical-cultural domains: Ancient Greece, "New World" slavery, Arab-Ottoman Islamic civilizations, and Africa. The course analyzes the four locales separately, and compares similarities in the general structure of slave societies as well as differences in their details. Issues pertaining to manumission or the lack of it and integration of ex-slaves into the larger society will be discussed.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

HIST 3751. Colonialism and Decolonization. 3 Credit Hours.

This course looks at the decline and fall of the modern European empires. It adopts a case study method to allow students to acquire in-depth knowledge of the colonial and post-colonial environment in four distinct regions of the world: Indonesia, North Africa, India and West Africa/Britain. The course examines the cultural construction of colonialism in Indonesia and North Africa, examining such issues as relations between the colonizers and the colonized peoples in terms of race and gender, construction of an imperial architecture and environment, and modes of resistance to the imperial project. Moving to India, the course looks at the rise of colonial nationalism, including the various discourses and tactics that are implemented to resist, modify, and ultimately abolish colonialism. Finally, the course examines the repercussions of imperialism for the contemporary, discussing post-colonial theory and the cultural, economic, political, and demographic effects of de-colonization on both Europe and its former colonies.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

HIST 3811. World Economy Since 1945. 3 Credit Hours.

At the turn of the millennium, economic globalization is profoundly transforming many long-standing patterns of human existence. Public discussion about globalization, nevertheless, remains often shallow and misleading. This course aims to offer a deeper perspective on the present by examining the experience of the world economy over the formative period since World War II. It concentrates on two basic questions: 1) How did the domestic and global foundations of the current world economy come into being over the last half century? And 2) What are the implications of this historical process for our immediate and future lives? As an intermediate level course, it assumes no prior student backgrounds in either history or economics--only a lively interest in learning about broad historical trends and in developing intellectual skills. In addition to discussion, lecture, and common readings, methods of instruction in the course include use of a computer-assisted classroom to provide image and text projections, video clips, and Internet linkages.

Repeatability: This course may not be repeated for additional credits.

HIST 3860. Topics in World History. 3 Credit Hours.

Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Repeatability: This course may be repeated for additional credit.

HIST 3870. Topics in World History. 3 Credit Hours.

Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Repeatability: This course may be repeated for additional credit.

HIST 3880. Topics in Comparative History. 3 Credit Hours.

Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Repeatability: This course may be repeated for additional credit.

HIST 3900. Honors Special Topics. 3 Credit Hours.

Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

HIST 3910. Honors Special Topics. 3 Credit Hours.

Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

HIST 3911. Honors World Economy Since 1945. 3 Credit Hours.

At the turn of the millennium, economic globalization is profoundly transforming many long-standing patterns of human existence. Public discussion about globalization, nevertheless, remains often shallow and misleading. This course aims to offer a deeper perspective on the present by examining the experience of the world economy over the formative period since World War II. It concentrates on two basic questions: 1) How did the domestic and global foundations of the current world economy come into being over the last half century? And 2) What are the implications of this historical process for our immediate and future lives? As an intermediate level course, the World Economy Since 1945 it assumes no prior student backgrounds in either history or economics--only a lively interest in learning about broad historical trends and in developing intellectual skills. In addition to discussion, lecture, and common readings, methods of instruction in the course include use of a computer-assisted classroom to provide image and text projections, video clips, and Internet linkages.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

HIST 4096. Capstone Seminar in History. 3 Credit Hours.

This course is the culmination of the writing sequence in the Department of History. In this seminar, students will develop their skills as researchers and writers of history. Each student will define their own research project, write and revise a significant piece of research, collaborate with peers in improving their work, discuss history as a field, and present their research.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in HIST 3096.

HIST 4282. Independent Study. 3 Credit Hours.

Arranged each semester, please consult with the instructor

Repeatability: This course may be repeated for additional credit.

HIST 4289. Fieldwork in History. 3 Credit Hours.

Arranged each semester, please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

HIST 4400. Special Topics in History. 3 Credit Hours.

Arranged each semester; please consult with the instructor for a specific course description. The history department web site (www.temple.edu/history) provides a listing of the specific topics offered each term.

Repeatability: This course may be repeated for additional credit.

HIST 4697. Modern Japan: Empire, War, Society. 3 Credit Hours.

Was early modern Japan (1600-1867) static or dynamic? Do the roots of Japan's modern achievements (1868-1945) lie in her early modern culture? What happened to Japan after the 1868 Meiji Restoration, and why? Was modernity a blessing or a curse? We'll find answers to questions like these as we survey Japanese society, culture, and events and trends at home and abroad from the Tokugawa shogunate to the Pacific War. Assignments focus on writing a comparative review. Note: This course is cross-listed with Asian Studies 4696. Students may only receive credit once for these courses: ASST 4696 or HIST 4697.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

HIST 4880. Special Topics: World/Comparative History. 3 Credit Hours.

Arranged each semester; please consult with the instructor for a specific course description. The history department web site (www.temple.edu/history) provides a listing of the specific topics offered each term.

Repeatability: This course may be repeated for additional credit.

HIST 4934. Honors Historiography and Research Methods. 3 Credit Hours.

This course is designed for upper-level history Honors majors, and for upper-level students more generally who are working on research projects that involve historical inquiry. The course has as a starting point three fundamental questions: 1) How do historians frame meaningful research problems? 2) What kinds of basic tools do historians use to carry out archival research? 3) How do they craft persuasive arguments? The precise topic of the course varies from year to year, but students will be able to pursue research topics of their own design. History Honors majors will use this course to develop the topic of their Honors Thesis.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

HIST 4982. Honors Independent Study. 3 Credit Hours.

The Honors Independent Study is open to History majors pursuing Honors. It consists of an intensive research project, guided by a History Department faculty member, that will result in a significant piece of scholarship.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

HIST 4997. Honors Thesis Seminar. 3 Credit Hours.

This course is the second part of the year-long thesis writing sequence for honors scholars. It will culminate in the completion of a major research paper. The seminar consists of workshops designed to help students organize their research material and draft and revise their thesis. Students will further refine their writing skills through presentations, peer critiques, and individual consultations with the instructor. The course fulfills the writing seminar requirement for history majors. It is open to honors scholars and history majors.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in HIST 4934.

Honors Program (HNRS)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

HNRS 1901. Honors First Year Seminar I. 1 Credit Hour.

This course will attempt to provide you with the foundation necessary for success in and after college life. You will engage in interactive discussions and workshops to develop the academic, professional, and life skills required for University Honors Program students. Topics include: self-exploration, academic exploration, goal setting, financial literacy, embracing/understanding diversity, exploring university resources, and exploring the city of Philadelphia. This course meets for 7 weeks and requires some activity outside of class time.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

HNRS 3900. Honors Special Topics. 3 Credit Hours.

Course content varies each semester. Please see the Honors Course Guide or contact the Honors office for details.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

HNRS 3902. Honors Peer Mentor Development. 0 to 1 Credit Hours.

Honors Peer Mentor Development is a variable credit course that introduces students to content and communication skills identified as integral to serving as a peer mentor in the college setting. Through this course, students will become proficient guides to Temple and community resources, well-versed in college and academic success strategies, and equipped with interpersonal communication skills to deliver their message and reach fellow students. Course material will be grounded in student development theory. Focus will be paid to how peer mentors can contribute to the persistence of their peers in college by considering at-risk or other special student populations' needs. Students who successfully complete this course will be eligible to serve in the Honors Mentor Network - a collection of students devoted to helping their peers adjust and thrive at Temple University and in the Honors Program and who provide academic success outreach, transition assistance, and guidance for those unsure where to turn to for help. Students must apply and be selected as an Honors Peer Mentor to register for this course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

HNRS 4901. Creating Knowledge: Honors Thesis Project Design. 0 to 1 Credit Hours.

This workshop-style seminar has one clear and overriding objective: To get students ready to write their interdisciplinary honors thesis. That's it. In this class, we will take a number of carefully laid out steps to get students on the right path by developing a do-able topic, laying out a clear research agenda, and thinking about the best ways to present their findings and observations.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

HNRS 4999. Honors Thesis. 2 Credit Hours.

This class is for students to finish their approved and vetted senior honors thesis project. While students will work independently, they will regularly check in with the instructor and turn in parts of their thesis at regular intervals.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Horticulture (HORT)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

HORT 1001. Fundamentals of Horticulture. 2 Credit Hours.

Principles of horticultural science; basic techniques of horticulture, including soil management, plant propagation, selection and maintenance of plant materials, and landscape design. NOTE: Horticulture 1001 (0015), unless it is the student's first Landscape Architecture/ Horticulture course or part of a successful credit certificate, is not applicable toward degree credit.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

HORT 1211. Woody Plants I. 3 Credit Hours.

The study of native and introduced trees, shrubs, and vines that are the foundation of our natural and designed landscapes with emphasis on identification, culture, association in plant communities, and appropriate use.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

HORT 1212. Woody Plants II. 3 Credit Hours.

Study of native and introduced trees, shrubs, and vines that are the foundation of our natural and designed landscapes with emphasis on identification, culture, association in plant communities, and appropriate use. The focus of this course is on conifers and broadleaf evergreens.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

HORT 1555. Equipment Maintenance. 3 Credit Hours.

This course covers proper operation, repair, and normal maintenance procedures for motorized equipment, including tractors, mowers, tillers, shredders, sprayers, chain saws, and hand-held trimmers and blowers.

Repeatability: This course may not be repeated for additional credits.

HORT 1566. Horticulture Business Management. 3 Credit Hours.

Emphasis on managerial philosophies and responsibilities including: ethics; development of staff; problem solving; scheduling; budgets; tax laws; personnel recruiting and networking; public relations and marketing; reading specifications and blueprints; estimating and bidding; and writing business plans.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (MATH 0701, any MATH course numbered 0702 to 4999 (D- or higher; may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC3A, 'Y' in MC6A, 'Y' in MATW, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

HORT 1651. Art of Floral Design I. 3 Credit Hours.

A lecture-studio course in which students learn the aesthetic principles of design firsthand as they create a series of floral compositions from natural and artificial materials. Development of a critical eye by analyzing and critiquing their own and each other's work. Also considers traditions of floral design as it has been practiced in Eastern and Western cultures. NOTE: This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AR

Repeatability: This course may not be repeated for additional credits.

HORT 1652. Art of Floral Design II. 3 Credit Hours.

Applies the philosophy of the relationships of nature and creativity to commercial design and compositions for home and exhibition. Also engages students in further study and experimentation in assembling plant materials and found objects indigenous to classical styles as well as considering the influences of avant-garde design from the art world.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in HORT 1651.

HORT 2114. Soils. 3 Credit Hours.

The physical, chemical, and biological properties of soils are examined, considering water/mineral, organism/air relationships. Soil morphology, classification, genesis, and geographic distribution are studied. An understanding of soil horizon from textbook to actual site soil pits is developed. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.

Course Attributes: SB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in ((CHEM 1021 and CHEM 1023), EES 1001, or BOT 1111)

HORT 2221. Herbaceous Plants I. 3 Credit Hours.

The identification, culture, and appropriate designs for native and cultivated annuals, perennials, bulbs, and wildflowers; collaboration with nature in designing and maintaining ecologically sound gardens.

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

HORT 2222. Herbaceous Plants II. 3 Credit Hours.

Topics include: identification, culture, and creation of environmentally appropriate designs for native and cultivated annuals, perennials, herbs, and roses; cost analysis; designing and maintaining ecologically sound gardens.

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

HORT 2256. Interior Plantscaping. 3 Credit Hours.

Explores the culture and use of foliage and flowering plants indoors, management of the interior environment for plants, plant identification, and business practices for interior plantscapers.

Repeatability: This course may not be repeated for additional credits.

HORT 2323. Greenhouse Management. 3 Credit Hours.

Introduces the basic concepts and principles utilized in greenhouse operation and management. Centers on topics such as greenhouse structure, environmental control, substrate, fertilization, watering, light and temperature, pest and disease control, growth control, and post production management. Focuses on managing the greenhouse environment to maximize the productivity of crops and examines the latest trends in the greenhouse industry.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in BOT 1111.

HORT 2324. Plant Propagation. 3 Credit Hours.

Principles and practices of sexual and asexual methods of propagation, including micropropagation.

Repeatability: This course may not be repeated for additional credits.

HORT 2334. Food Crops I. 3 Credit Hours.

An introductory hands-on course in sustainable food production, handling, and distribution of crops. Food tasting is an integral part of this course.

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

HORT 2353. Food Crops II. 3 Credit Hours.

The focus of this course is on Community Supported (Sustainable) Agriculture (CSAs), food co-ops, farmers' markets, and restaurants.

Course Attributes: SE, SF, SS

Repeatability: This course may not be repeated for additional credits.

HORT 2356. Greenhouse Production. 3 Credit Hours.

Considers scheduling greenhouse crop production and cultural requirements of several major floricultural plants, finished plants, liners and plugs, including the latest cultivars used in urban nursery/garden centers. Identification of greenhouse grown plant material and field trips to innovative growers are also components of the course.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in HORT 2323.

HORT 2366. Nursery Operation, Management, and Production Techniques. 3 Credit Hours.

Includes an overview of the nursery industry and examines the management and operation of wholesale and retail nurseries, and the production of plants in both container and field-grown conditions.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in HORT 1212.

HORT 2552. Trees in the Urban Landscape. 2 Credit Hours.

Urban life is tough on trees - pollution, weather extremes, neglect, traffic accidents, construction, and vandalism all take their toll. This course provides an overview of Western civilization's efforts to integrate trees into the urban landscape, with a particular emphasis on Philadelphia's urban forest. Urban treescapes through the nineteenth and twentieth century are explored from the perspective of social, cultural, economic, political and ecological influences. Philadelphia's Center City and its adjacencies serve as a laboratory for field walks, tree identification exercises, and for exploring urban forestry practices and policies.

Course Attributes: SE, SF, SP, SS

Repeatability: This course may not be repeated for additional credits.

HORT 2554. RejuviNATURE: Improving Health and Well-being. 1 Credit Hour.

The positive effects of natural environments on the health and well-being of humans is becoming well documented. This unique course combines overviews and discussions about relevant theories and research on the role of nature in health, as well as experiential learning via visits to the Ambler Arboretum and other self-chosen nature excursions. Students will read important works that span from early advocates for the natural environments and conservation such as Thoreau and Muir to modern areas of research on mood and psychological well-being. Students will explore the effect of natural environments on their own well-being and will write about their experiences.

Repeatability: This course may not be repeated for additional credits.

HORT 2555. Arboriculture. 3 Credit Hours.

Basic biology and care of trees; diagnosis of common pests, diseases, mechanical, nutritional, and environmental problems. Types and use of proper equipment for climbing, pruning, maintenance, and structural requirements. Professional training includes insurance, liability, tree evaluation, job estimates, tree inventories, record keeping, and working with municipalities and community groups.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in HORT 1211.

HORT 2556. Introduction to Beekeeping. 3 Credit Hours.

Introduces students to the science and art of keeping honey bees and the critical role played by honey bees in sustaining our environment by pollinating food crops and wild flowers. Topics include: establishment of colonies; seasonal management; honey production; and environmental challenges to honey bee health, including pests, diseases, and insecticides/herbicides. The laboratory portion makes use of the apiary located on the Ambler Campus, allowing hands-on application of course topics.

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

HORT 2565. Turf Management. 3 Credit Hours.

The establishment and maintenance of turf grasses under varying soil and environmental conditions, particularly urban conditions. The identification of species and newer strains of grasses and their appropriate uses. An environmental approach to lawn maintenance and the responsible use of fertilizers, pesticides, and herbicides is stressed.

Repeatability: This course may not be repeated for additional credits.

HORT 2575. Introduction to Public Horticulture. 3 Credit Hours.

Introduction to principles of horticultural management and administration in the public realm. Examines the activities of botanic gardens and societies, arboreta, zoos, community garden groups, and parks departments. Covers the basic principles of botanic garden management, plant curatorship, collection care, public education, facility design, business management, and long-range planning. NOTE: Designed for students considering a career in public horticulture and those already associated with non-profit institutions who would like to learn more about the field.

Repeatability: This course may not be repeated for additional credits.

HORT 2653. Art of Floral Design III. 3 Credit Hours.

Deeper exploration of the principles of composition and the study of symbolism, periods, and movements of design, as well as construction with plant materials, found objects, lighting, and other media.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in HORT 1652.

HORT 2655. Flower Shop Management. 3 Credit Hours.

The business management of the retail flower shop; design of unusual floral displays; handling flowers, plants, and accessories; and making corsages, sprays, bouquets, and wedding decorations.

Repeatability: This course may not be repeated for additional credits.

HORT 2666. Designing with Perennials. 3 Credit Hours.

Perennial designs involve an understanding of the site, respect for adjacent areas, maintenance concerns, and client desires. Student's knowledge of herbaceous plants is used as a basis for developing creative, ecologically sensitive design solutions.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in HORT 2221.

HORT 2753. Introduction to Horticultural Therapy. 3 Credit Hours.

Definition and history of Horticultural Therapy (HT). Presentation of HT programs, such as social, therapeutic and vocational. HT population types are discussed including physically and developmentally disabled, older adults, children, visually impaired, incarcerated populations, and those in healthcare settings. Design of therapeutic spaces, garden design characteristics, universal design and site assessment. Overview of the profession.

Repeatability: This course may not be repeated for additional credits.

HORT 2754. Horticultural Therapy Skills. 3 Credit Hours.

Developing horticulture skills and techniques for use in therapy programs for diverse client populations. HT programming to include: setting goals and objectives; assessment and evaluation; use of adaptive tools and devices; use of plant materials and supplies for HT programs.

Repeatability: This course may not be repeated for additional credits.

HORT 2755. Horticultural Therapy Program Management. 3 Credit Hours.

Examines Horticultural Therapy programs and the impact of gardening, plants, and nature on diverse client populations. Site visits to local facilities. Research into funding sources, writing proposals for programs, developing program budgets, and grant writing.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in (HORT 2753 or HORT 2754)

HORT 2850. Special Topics in Horticulture/Landscape Architecture I. 3 Credit Hours.

Study of topics and problems in horticulture, landscape architecture, and related disciplines. NOTE: Students may obtain a description of the current version at the department office and in the schedule of classes. This course may be repeated for credit.

Repeatability: This course may be repeated for additional credit.

HORT 2860. Special Topics in Horticulture/Landscape Architecture II. 3 Credit Hours.

Study of topics and problems in horticulture, landscape architecture, and related disciplines. NOTE: Students may obtain a description of the current version at the department office and in the schedule of classes. This course may be repeated for credit.

Repeatability: This course may be repeated for additional credit.

HORT 2870. Special Topics. 1 to 3 Credit Hour.

Variable offerings from semester to semester of selected topics not part of the regular listing of courses. The topic can be in an area of specialization of a faculty member or an examination of a current development in the field. NOTE: Students may obtain a description of the current version at the department office and in the schedule of classes. This course may be repeated for credit.

Repeatability: This course may be repeated for additional credit.

HORT 2881. Cooperative Education. 3 Credit Hours.

A program of full-time summer work in horticulture or landscape design for a minimum of seven weeks. Cooperative Education gives the student the opportunity to integrate academic learning with practical work experience, thereby broadening his or her skills and perspectives.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Horticulture, Landscape Architecture.

Degree Restrictions: Must be enrolled in one of the following Degrees: Associate in Science, Bachelor of Science.

Repeatability: This course may be repeated for additional credit.

HORT 2883. Directed Studies in Horticulture. 1 to 3 Credit Hour.

Specialized topics from various areas of horticulture in which individuals will work independently and be supervised by a faculty member.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Horticulture, Landscape Architecture.

Degree Restrictions: Must be enrolled in one of the following Degrees: Associate in Science, Bachelor of Science.

Repeatability: This course may be repeated for additional credit.

HORT 2982. Honors Projects in Horticulture. 1 to 3 Credit Hour.

For exceptional students interested in pursuing independent, in-depth study. Credits based on the quantity and quality of work fulfilling the established course outline.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Horticulture.

Degree Restrictions: Must be enrolled in one of the following Degrees: Associate in Science, Bachelor of Science.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

HORT 3256. Advanced Plant Materials. 3 Credit Hours.

Advanced studies in woody and herbaceous plants, including identification of less commonly used material, late spring and summer aspects of garden design, maintenance, and restoration. Practical aspects of this course include weekly field trips, actual garden seed sowing, and garden maintenance.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in (HORT 1212 and HORT 2221)

HORT 3423. Applied Entomology. 3 Credit Hours.

In lecture and laboratory, students learn the basic diagnostic skills for identifying pest problems. Integrated Pest Management (IPM) is emphasized as the approach for managing pests of plants grown in stressful environments.

Course Attributes: SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in HORT 1212.

HORT 3424. Applied Plant Pathology. 3 Credit Hours.

Explores plant pathological theories and practices. The causes of plant diseases, such as fungi, bacteria, virus, nematodes, plant parasites, as well as environmental stresses, also are examined. Diagnostic skills for determining causes and current management measures are highlighted through lectures and laboratory work. Prepares students to solve horticultural pathology problems.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in BOT 1111.

HORT 3456. Tree Pathology. 3 Credit Hours.

A study of tree health and management. Infectious and noninfectious diseases of shade trees are studied in lectures and in-depth field trips. Emphasizes the effects of urban stress, economically important diseases, and complex tree declines.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in BOT 1111.

HORT 3514. Landscape Restoration. 3 Credit Hours.

Develops an ecologically based understanding of how to establish, restore, and manage meadows, forest, and wetland systems. Emphasizes natural processes and integrating the built landscape with our natural systems, and also explores plant communities and wildlife habitats of Southeastern Pennsylvania. Students participate in the management of natural landscapes on the Ambler campus and nearby parkland.

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in HORT 1212.

HORT 3523. Landscape Management. 3 Credit Hours.

Students develop an understanding and practical experience with professional, innovative, and appropriate landscape management topics. Major focus is given to site analysis, pruning, pest identification and management, nutrition, watering and irrigation, and other maintenance techniques. Hands-on practical experience and theory combine in project-based educational opportunities.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in HORT 1212.

HORT 3882. Independent Study. 1 to 3 Credit Hour.

Explorative study or research not met in any established course. Initiated by the student, the project must be sponsored by a faculty member with an approved agreement outlining the content and requirements, including readings, meetings, and papers. NOTE: Special authorization required for all students. Students must have the agreement of a faculty sponsor and must submit a formal proposal to this faculty member and Department before registering for the course.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Horticulture.

Degree Restrictions: Must be enrolled in one of the following Degrees: Associate in Science, Bachelor of Science.

Repeatability: This course may be repeated for additional credit.

HORT 3885. Internship. 1 Credit Hour.

A minimum of one semester or 350 hours of employment is required in an area related to the student's horticultural field of interest. Should provide a meaningful work experience. NOTE: The internship should be taken between the sophomore and junior years.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Horticulture.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Degree Restrictions: Must be enrolled in one of the following Degrees: Associate in Science, Bachelor of Science.

Repeatability: This course may be repeated for additional credit.

HORT 4896. Senior Seminar. 3 Credit Hours.

Using a broad range of critical thinking skills derived from previous course experiences, students write and present an in-depth research paper on a horticultural topic. In preparation for graduation, students develop a cover letter, resume, and curriculum vitae and discuss professional internships. NOTE: Fulfills the capstone writing intensive requirement for the B.S. in Horticulture.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Horticulture.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Science.

Course Attributes: WI

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in BOT 2121.

Human Development and Community Engagement (HDCE)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

HDCE 2304. Families and the Community. 3 Credit Hours.

This course examines the historical and contemporary development of families with a focus on American trends. We explore the way families have changed over time with respect to class and racial/ethnic variations, the division of labor and social power within families, and communication patterns within households. We will also research the stressors affecting families (e.g., divorce, addiction, loss, immigration issues) and the types of family and community resources that support families through these times. We also devote a portion of our time to relating our own family autobiographies to the broader context of American families.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

HDCE 3332. Professional Seminar in Human Development and Community Engagement I. 1 Credit Hour.

Many students want to make a difference in children's lives in other ways besides being a teacher. There are several hundred charitable and educational foundations and agencies in the greater metro Philadelphia area alone. State, federal, and local governments also often have child-focused initiatives. The programs, policies, and practices of these agencies and governments could benefit from employees who understand the factors that impede or facilitate the cognitive, social, and physical development of children, particularly in urban communities. This course provides an orientation to the HDCE major and exposure to a variety of career options and organizations that are relevant to HDCE. It aims to help students develop a sense of their future career path and understand their role within a collective impact framework.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

HDCE 3333. Professional Seminar in Human Development and Community Engagement II. 1 Credit Hour.

Many students want to make a difference in people's lives in other ways besides being a teacher. There are several hundred charitable and educational foundations and agencies in the Philadelphia area alone. State, federal, and local governments also often have social service-focused initiatives. The programs, policies, and practices of these agencies and governments could benefit from employees who understand the factors that impede or facilitate the cognitive, social, and physical development of individuals, particularly in urban communities. This course provides an orientation to the HDCE major and exposure to a variety of career options and organizations that are relevant to HDCE. It aims to help students develop a sense of their future career path and understand their role within a collective impact framework. This course requires 3-hours of fieldwork. In order to register for this course, students must submit full clearances to the Office of Field Placement.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

HDCE 3334. Professional Seminar in Human Development and Community Engagement III. 1 Credit Hour.

This course is a 1-credit course aimed at helping students become familiar with the career opportunities, create network contacts, and develop a deeper understanding of the breadth and depth of the Human Development and Community Engagement field. This course will help students build upon or rethink the career path they identified in Seminar 1 (if taken) and craft a focused professional development plan and identify a professional with whom they can engage in that career field.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

HDCE 4185. Community Internship and Seminar. 6 to 12 Credit Hours.

The internship is meant to build on students' practicum experience, by providing a learning experience that unites prior coursework with professional organizational settings and the community as a whole, while also guiding students as they transition into their own professional lives. Students will continue at the site where they completed their practicum course. Having developed relationships and acquainting themselves with the organization, students can seamlessly transition into an internship at the same site. Students are required to complete a total of 65 - 390 hours at their site (depending on the number of credits). Additionally, students will meet eight times during the course of the semester to share observations and experiences gained from the internship placement. In order to register for this course, students must submit full clearances to the Office of Field Placement.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Human Develop Commnty Engagemn.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in HDCE 4187.

HDCE 4187. Practicum in Applied Development. 3 Credit Hours.

This course will give undergraduate students the opportunity to integrate and apply theory and coursework within a community organization working with children or other vulnerable populations. Students will be required to demonstrate increased knowledge and skills in practice, research, and evaluation across multi-level systems. Students will experience a practicum placement under the immediate supervision of a professional who functions as the student's Site Supervisor, and the overall supervision of the Practicum Instructor. The practicum will involve activities such as observing the members within the organization and conducting background research about the organization. Additionally, practicum students will meet five times during the course of the semester to share observations and experiences gained from the practicum placement.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Human Develop Commnty Engagemn.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in HDCE 3332, HDCE 3333, and HDCE 3334.

HDCE 4302. Economics for Education. 3 Credit Hours.

Education plays a central role in the economy through its effects on the labor force, distribution of income, and individuals' earnings and quality of life. This course will provide an introduction to the concepts of economics and how these can be applied to education. Topics to be discussed include education markets and financing (both K-12 and higher education), education production, teacher labor markets, school choice, and school accountability.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

HDCE 4305. Curriculum and Training Design. 3 Credit Hours.

This course focuses on helping students learn how to design and implement teaching and training programs in not-for-profit organizations. This course guides students through the process of designing curriculum to support out-of-school learning and training programs. Course activities include program and curriculum evaluation, analysis of existing training programs, a comprehensive research project on teaching and training, student-centered collaboration and group work, working with logic models and working with the Pennsylvania Academic Standards to develop curricula for teaching and training.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

HDCE 4333. Program Evaluation. 3 Credit Hours.

Program evaluation is a critical component in designing and operating effective programs and interventions. Evaluations supply information to program managers and policymakers that can assist them in making decisions about which programs to fund, modify, expand or eliminate. Evaluation can be an accountability tool for program managers and funders. Programs need answers to many questions (i.e., Who is a program intended to serve? What are its goals? What does the program actually look like? Who does it actually reach? What are the outcomes for those who received the intervention? How can a program be improved to better meet its goals? What needs to be adapted for a different population or setting? Why should a program continue to be funded? Which intervention works better? Which is more cost-effective?). This course serves as an introduction to evaluation methodology and evaluation tools commonly used to assess programs. Students will become familiar with the concepts, methods and applications of evaluation research; learn how to read evaluation research critically; understand how to use evaluation results to improve program performance; and be able to propose and execute an appropriate evaluation plan to assess the implementation and/or effectiveness of a program. There is no specific policy or sector focus to this course, as evaluation tools are used in all policy areas and by public (government) and private (foundation) funders as well as by public and private sector program managers. Students are encouraged to relate the general material of the course to their specific interests. Students taking this course will already have taken the following courses: (a) Child Development (that explain age trends in outcomes such as achievement and the factors that cause these outcomes), and (b) Statistics for Decision-Making. This course requires fieldwork. In order to register for this course, students must submit full clearances to the Office of Field Placement.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in EPSY 2325 (may be taken concurrently) and (ECED 2101, EDUC 2109, or AOD 3317)

Human Resource Management (HRM)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

HRM 1101. Leadership and Organizational Management. 3 Credit Hours.

This course prepares students to address the challenges of leading high performing organizations. Students will examine the enablers of principled organizational leadership and performance. Course topics include leadership, change management, decision-making, culture, team building, organizational structure and control, communication, social responsibility and sustainability, motivation, human resource management, and globalization.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Facilities Management, Actuarial Science, Business Management, Business, Business Basics, Corp Compliance + Reg Policy, Construction Engr Tech, Construction Mgt Tech, Career and Technical Education, Economics, Economics - Management Career, Economics, Entrprnrship & Innovation Mgt, Engineering, Engineering Technology, Entrepreneurship, Event and Entertainment Mgmt, Finance, Financial Planning, General Business Studies, Horticulture, Human Resource Management, International Business, International Business Admin, Intrnl Bus - TUJ, Law & Business, Legal Studies, Management Information Systems, Marketing, Management Consulting, Pre Business, Real Estate, Risk Management and Insurance, Supply Chain Management, Sport & Recreation Management, Statistical Sci + Data Analyt, Tourism and Hospitality Mgmt, Undeclared-Business & Mngt, Undeclared-University Studies.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

HRM 1901. Honors Leadership and Organizational Management. 3 Credit Hours.

This course prepares students to address the challenges of leading high performing organizations. Students will examine the enablers of principled organizational leadership and performance. Course topics include leadership, change management, decision-making, culture, team building, organizational structure and control, communication, social responsibility and sustainability, motivation, human resource management, and globalization.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Facilities Management, Actuarial Science, Business Management, Business, Business Basics, Corp Compliance + Reg Policy, Construction Mgt Tech, Career and Technical Education, Economics, Economics - Management Career, Economics, Entrprnrship & Innovation Mgt, Engineering, Engineering Technology, Entrepreneurship, Finance, Financial Planning, General Business Studies, Horticulture, Human Resource Management, International Business, International Business Admin, Intrnl Bus - TUJ, Law & Business, Legal Studies, Management Information Systems, Marketing, Pre Business, Real Estate, Risk Management and Insurance, Supply Chain Management, Sport & Recreation Management, Statistical Sci + Data Analyt, Tourism and Hospitality Mgmt, Undeclared-Business & Mngt, Undeclared-University Studies.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, SI

Repeatability: This course may not be repeated for additional credits.

HRM 2501. Introduction to Human Resource Management. 3 Credit Hours.

What role do human resources play in organizations? How can human resources strategically add value to organizations? In this course you will survey pertinent topics related to human resource management to better understand the essential function of HRM. For instance, you will learn processes and methods to recruit and select top talent and give your organization a competitive advantage; how to train employees, conduct performance appraisals, retain employees, and motivate employees with pay and benefits. HR processes and policies will be discussed with an appreciation for the legal environment dictating the practice of HRM.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics - Management Career, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (HRM 1101 or HRM 1901)

HRM 2511. Corporate Sustainability: People, Profits & Planet. 3 Credit Hours.

After completing this course, you should have a grasp of the nature and extent of the current global environmental crisis, an understanding of the concept of sustainability, an appreciation of how organizations can take action toward sustainability through the pursuit of the "triple bottom line," and a sense of how you can contribute to the emerging "green collar workforce." The course will feature short lectures, discussions, case analyses, team debates, guest experts, opinion papers and experiential exercises.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Corporate Social Responsibility, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Course Attributes: SE, SF, SP, SS

Repeatability: This course may not be repeated for additional credits.

HRM 3501. Power, Influence and Negotiation. 3 Credit Hours.

Examines how influence, power, and politics are related to effective negotiation and leadership; practical and ethical issues related to negotiating tactics and conflict management are addressed. Experiential and applied exercises facilitate learning effective supervisor and negotiator strategies.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (HRM 1101 or HRM 1901)

HRM 3502. Leading People at Work. 3 Credit Hours.

This course uses Emotional Intelligence (EI) as a foundation for exploring critical leadership and management skills needed in the work place. EI consists of self-awareness, self-management, relationship awareness and relationship management. Topics of study include: dealing with difficult people, time management, motivation, performance appraisal, and managing down and up the hierarchy.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (HRM 1101 or HRM 1901)

HRM 3503. Communicating in Organizations. 3 Credit Hours.

Explores interpersonal and managerial communication strategies in an organizational setting. Emphasis is on understanding communication practices and structures consistent with prominent approaches to management. Students also examine the conceptual underpinnings of effective communication, enhance their presentation and writing skills, and conduct a communication audit in a local business.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (HRM 1101 or HRM 1901)

HRM 3504. Leadership in the 21st Century. 3 Credit Hours.

This course helps guide students towards becoming effective and ethical leaders. Development will occur through self-assessments, experiential exercises, and critical examination of effective and ineffective approaches to leadership in the modern business environment and society at large. Major topics of study include: authentic leadership behavior, ethical leadership, abusive leadership, and cross-cultural considerations.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (HRM 1101 or HRM 1901)

HRM 3505. Sustainable Organizational Leadership. 3 Credit Hours.

This course will help students understand and appreciate the dynamics of sustainable organizational leadership that engages with the human, financial, social, and natural environments to promote collective and individual prosperity.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrshp & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Course Attributes: SE, SF, SP, SS

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (HRM 1101 or HRM 1901)

HRM 3506. HR Metrics: Using Data, Scorecards and Dashboards to Drive Business Performance. 3 Credit Hours.

This course is primarily designed to prepare individuals desiring to work in a corporate human resource function, especially those individuals responsible for recruiting, compensation, training and development, employee relations, HRIS (Human Resource Information Systems), or interaction with other corporate staff functions. It may also be of interest to students preparing for general management positions with responsibilities for managing human resources, and/or reliance on reporting metrics.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in HRM 2501.

HRM 3507. Intrapreneurship in the 21st Century. 3 Credit Hours.

You may identify a great opportunity for your organization to improve its products, services, sustainability, or treatment of employees or other stakeholders. Or you may see ways for your organization to adapt to threatening external events. Developing good ideas for change is only part of the solution. The most challenging aspect of change may lie in convincing your organization to act on your ideas. This course focuses on the challenges in implementing change in organizations, and overcoming these challenges - in other words, how to be an effective intrapreneur. Topics addressed include managing in all directions: downward, upward, and "sideways," personal assessment of strengths and weaknesses in ability to effect change, and organizational culture and reward systems that facilitate change. Coursework includes a hands-on project in which students propose a change initiative in a real-world organization.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (HRM 1101 or HRM 1901)

HRM 3511. Compensation Management. 3 Credit Hours.

An applied examination of total reward systems in organizations in the context of relevant theoretical and legal perspectives. Topics include employee engagement, job analysis, job evaluation, performance evaluation, pay surveys, incentives, pay equity, benefits, and compensation strategy.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in HRM 2501.

HRM 3512. Human Resource Management and Public Policy. 3 Credit Hours.

Investigates the nature and impact of government and other external forces on human resource management. Specifically addresses the development, intent, and implications of a range of employment laws and regulations which affect corporate human resource policy.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in HRM 2501.

HRM 3513. Labor Relations: Strategy and Practice. 3 Credit Hours.

Examines the development and current operations of labor unions, the process and outcomes of collective bargaining and the impact of these institutions on management and society. Practical insights from National Labor Relations Board and grievance cases.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in HRM 2501.

HRM 3531. HR on the Ground. 3 Credit Hours.

Explores how good HR practices influence an organization/s success by working in teams on a real project at a real company. Topics covered include: consulting skills, communication, presentation skills, employee engagement, employee research techniques, leadership development, project management and more based on the consulting opportunity provided by the company. Part of the final grade comes from the company.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Management Consulting, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

HRM 3565. International Human Resource Management. 3 Credit Hours.

Focuses on the role of the manager in international organizations and creates awareness of differing legal environments and societal attitudes. Relates national differences to functional areas of human resource administration, including staffing, compensation, training, and labor relations.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (HRM 1101 or HRM 1901)

HRM 3580. Special Topics - Human Resource Management. 3 Credit Hours.

Special topics in current developments in the field of human resource management.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (HRM 1101 or HRM 1901)

HRM 3581. Co-op Experience in Human Resource Management. 3 Credit Hours.

This is an academic course intended to give students experience applying HRM concepts in a real world work environment. In a typical assignment, students work under the mentorship of an HR professional on HRM related project(s). As part of the class, students complete an evidence-based management paper based on their work experience, complete an interview with their mentor, and participate in weekly discussion boards. Students who have identified their own internships and would like to receive course credit can also register for HRM 3581. In these instances the student should first visit CSPD to learn about the "Credit for Internship Process." Once CSPD approval is give, the student will meet with the HRM 3581 professor for permission to register. Students must be prepared to work on-site at the organization for 8-9 hours/week, have a minimum 2.5 GPA, and be a Human Resource Management major. HRM 2501 is the prerequisite for this course. For more detailed information on the course, please visit the course web site at www.fox.temple.edu/HRMIndustryExperience.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in HRM 2501 and minimum GPA of 2.5 in: courses numbered 0700 to 4999.

HRM 3582. Independent Study. 1 to 6 Credit Hour.

Readings and/or papers under the supervision of a faculty member. Arranged each semester.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (HRM 1101 or HRM 1901)

HRM 3682. Independent Study. 1 to 6 Credit Hour.

Readings and/or papers under the supervision of a faculty member. Arranged each semester.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (HRM 1101 or HRM 1901)

HRM 3902. Honors Managing People at Work. 3 Credit Hours.

Honors version of HRM 3502 (0320).

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (HRM 1101 or HRM 1901)

HRM 3903. Honors Management, Theory and Practice: The State of Labor in the Post-COVID Workplace. 3 Credit Hours.

The COVID-19 pandemic unveiled what were already deep fissures in the relationship between workers and capital. For some American workers, workplace shutdowns and stimulus checks granted a chance to pause and contemplate a life with less hustle. This novel experience of time reinvigorated the concept of "anti-work" and spawned the notion of "quiet quitting" among those who felt discomfort with their newfound consciousness of their labor utility. The Anti-work subreddit home of these nouveau Thoreaus boasts over 2.5 million "idlers" and a tag line that reads "unemployment for all, not just the rich!" On the other hand, workers deemed "essential" in health care, retail, education and human services were forced to hustle even harder, often at the expense of their own mental and physical health. This class will explore the resurgence of organized labor and the changing nature of work since the beginning of the pandemic, examining their causes and consequences, and offering implications for managers, employees, and union members and leaders. Note: Prior to Fall 2023, the course was titled "Honors - Management, Theory & Practice: From the Locker Room to the Board Room."

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

HRM 3904. Honors, The Leadership Experience: Leading Yourself, Leading Change, Leading Communities. 3 Credit Hours.

Leadership is a hot topic in social sciences, management, and popular culture. Ask ten people "what makes a good leader?" and you might get ten different answers. Our subject is to explore leadership as a discipline, or as scholars. More specifically, as current Honors students, you represent our future leadership. To effectively lead, having a basic understanding of the core tenets and theoretical foundations is important, but insight into your strengths and capabilities as a potential leader is essential. Thus, this course will provide you with foundational knowledge on core principles of leadership. More importantly, this course will focus on reflection, assessment, and development on the core skill sets required of effective leaders. Finally, you will be challenged to leverage your unique strengths in a team setting to enact and inspire change within your community.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

HRM 3999. Honors Thesis I. 1 to 3 Credit Hour.

The first of a two-part sequence of courses in which independent research is conducted under the supervision of a thesis advisor from the Human Resource Management department resulting in a substantial piece of original research, roughly 30 to 50 pages in length upon completion of Human Resource Management 4999. The student must publicly present his/her findings at a Temple University Research Forum session or the equivalent during one of the two semesters during which these courses are undertaken.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Human Resource Management.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

HRM 4596. Organizational Staffing and Career Management. 3 Credit Hours.

Acquisition and development of human resources in organizations and career management for individuals. Emphasis on using computers to perform human resource planning, job analysis, recruitment, selection, training, socialization, career development, and withdrawal from work. Students must earn a grade of C- in this course if they are using it to fill the writing intensive course requirement for their degree.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Human Resource Management.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in HRM 2501, HRM 3511, HRM 3512, and (BA 2196 or BA 2996)

HRM 4597. Critical Skills for Effective Managers. 3 Credit Hours.

The purpose of this course is to bring together Human Resource Management (HRM) knowledge and skills learned in a final, capstone experience to make the student a more effective manager. Students will take a hands-on approach to assessing and improving their self-awareness, interpersonal and teamwork skills. The course will also test skills learned in other core business school courses such as your ability to identify problems, gather and analyze data to understand the problem, to develop alternative courses of action, and implement it. Because this is a writing intensive course, there will be several individual writing assignments that you will have the opportunity to draft, receive feedback and re-draft to improve your writing skills, as well as a group project. NOTE: Students cannot receive credit for this course if they have passed HRM 3502. Students must earn a grade of C- in this course if they are using it to fill the writing intensive course requirement for their degree.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in HRM 3501, HRM 3503, and (BA 2196 or BA 2996)

HRM 4999. Honors Senior Thesis II. 1 to 3 Credit Hour.

Independent research conducted under the supervision of a thesis advisor from the Human Resource Management Department resulting in a substantial piece of original research, roughly 30 to 50 pages in length. Student must publicly present his/her findings at a Temple University Research Forum session or the equivalent if this was not done in Human Resource Management 3999.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Human Resource Management.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in HRM 3999.

Human Services (HS)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

HS 4000. Special Topics. 3 Credit Hours.

Arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic.

Repeatability: This course may be repeated for additional credit.

Industrial and Systems Engineering (ISE)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ISE 2101. Applied Statistical Methods for Industrial and System Engineers. 3 Credit Hours.

Statistical analysis techniques and their applications in the field of industrial and systems engineering are presented. Topics include the statistical measures describing data, frequency distributions, probability distributions, sampling parameter estimation, hypothesis testing, regression analyses, and analyses of variance. Special emphasis on their application to field of industrial and systems engineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1042 (may be taken concurrently), MATH 1942 (may be taken concurrently), MATH 1951 (may be taken concurrently), MATH 1031 (may be taken concurrently), 'Y' in MA07, 'Y' in MATW, or 'Y' in METW)

ISE 2102. Production Process Design and Laboratory. 4 Credit Hours.

Introduction to the theory and practice of manufacturing processes. Study covers the fabrication of metallic, plastic, and electrical products, operation of NC and other automatic equipment, and economics of the design and production process. Topics to be covered include introduction to manufacturing processes, metal forming processes, metal cutting processes and machine tools, metal finishing processes, introduction to AutoCAD, numerical control (NC) machining, processing of plastic products and an introduction to automated manufacturing processes. Lectures will be complemented by a laboratory.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ENGR 1117.

ISE 2103. Deterministic Models in Operations Research. 3 Credit Hours.

The deterministic techniques of operations research. Topics include the applications of linear, nonlinear, integer, and dynamic programming methods and network flows analysis to solve industrial and systems engineering problems. Other topics include an introduction and overview of deterministic models, preliminaries of Linear Programming (LP), graphical solution of linear programming and introduction to simplex method, sensitivity analysis, marginal utility, computer applications and LP packages, transportation and assignment problems, network and graph theory introduction, spanning trees shortest route algorithm, Dijkstra's algorithm, formulation of shortest path as LP, maximum flow algorithms, nonlinear programming, classical optimization, integer programming introduction, Gomory's cutting plane, branch and bound method, complete methods, Dynamic Programming (DP), and recursive relationship of DP.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1042 (may be taken concurrently), MATH 1942 (may be taken concurrently), or 'Y' in METW)

ISE 3101. Product Quality Assurance. 3 Credit Hours.

Methods used to achieve higher product quality, to prevent defects, to locate chronic sources of trouble, to measure process capability, and to use inspection data to regulate manufacturing processes are emphasized. Preparation of statistical control charts and selection of suitable sampling plans. Topics include review of probability distributions, control chart principles, control charts for variables (X, R charts), control charts for attributes (p, c, u charts), specifications and tolerances, fundamentals of acceptance sampling, acceptance sampling by attributes, special attribute sampling procedures, reliability, graphic methods for quality control, and TQM and ISO standards.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ISE 2101.

ISE 3102. Stochastic Models in Operations Research. 3 Credit Hours.

Probabilistic techniques of operations research. Topics include the applications of Markov chains, queueing and inventory control models to analyze and evaluate systems performance. Other topics include introduction to stochastic processes, review of probability, Markov chains and classification of their states, long-run Markov chains and applications, introduction to queueing theory, birth and death process, applications of queueing theory, introduction to inventory theory, components of inventory models, deterministic inventory models, stochastic inventory models, and introduction to forecasting.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ISE 2103.

ISE 3103. Systems Thinking and Modeling. 3 Credit Hours.

Utilizing a systems thinking approach in engineering design and development is necessary to understand the connections and dependencies that exist within the system. This course introduces the concept of systems thinking and computer modeling via system dynamics. Computer modeling can aid in understanding the complex feedback dynamics possible emergent behavior which can be found in the human, technological and organization systems. In addition, policy interventions and their effect on the behavior and structure of the system will also be addressed.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ISE 2101 and (MATH 2041, MATH 2941, MATH 3041, MATH 3941, or 'Y' in METW)

ISE 3185. Industrial and Systems Engineering Internship Experience. 1 to 3 Credit Hour.

The course provides industrial and systems engineering experience in an engineering service, industrial, or research setting. The internship should allow the student to apply knowledge learned, build upon that knowledge and assess outcomes.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may be repeated for additional credit.

ISE 4101. Human Factors (Ergonomics). 3 Credit Hours.

This course covers Human-machine systems analysis. The study of workplace layout, measurement of employee efficiency and productivity, criteria for tool and fixture design or selection, industrial fatigue, environmental influences on performance including the effects of illumination, noise, vibration, thermal, and other atmospheric factors. The basic ideas of industrial hygiene; the impact of OSHA; and special techniques for experimenting with human subjects, via demonstrations and supervised experiments are explored. Additional topics include human factor definitions, human factor research methodologies, human information processing, visual presentation - static and dynamic information, auditory and other displays; speech communication, motor skills, human control systems, data entry devices, physical work and manual materials handling, applied anthropometry, workplace environment; illumination and atmospheric conditions, noise, vibration and motion, human error, accidents and warnings, and usability and human-computer interaction.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

ISE 4102. Industrial Simulation. 3 Credit Hours.

Introduction to the application of simulation modeling for the analysis of complex industrial and manufacturing service systems. Examples are chosen from real-life situations such as warehousing, material handling, robotics, transportation, and hospital emergency rooms. Verification/validation as well as statistical analysis of both input/output data are introduced. Topics include Verification and validation, calibration of models, face validity, validity of assumptions, Turing/Delphi test, comparison and evaluation of alternative systems, simulation examples, queueing systems, inventory systems, object oriented programming, ARENA simulation software, random number generation, Input modeling and Output analysis, confidence intervals, and variance reduction.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ISE 2103.

ISE 4103. Engineering Cost Analysis. 3 Credit Hours.

This course introduces the tools and techniques applicable for cost analysis and control including standard costs, variance analysis, cost volume relationships, cost estimation, and utilization of accounting data for control of operations. Topics include basics of financial/cost management; elements of financial accounting and development of income statements and balance sheets; cash flow statements, inventory valuation methods; cost-volume relationships, cost drivers; methods of measurement, application of regression analysis; product addition or deletion, target costing, pricing decision; cost allocation; activity based costing, job order cost systems and process cost systems and overhead, cost allocation, analysis and control.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ACCT 2501.

ISE 4104. Production Planning and Control. 3 Credit Hours.

This course introduces the study of the components and functioning of integrated production, planning, and control systems; forecasting, aggregate planning, scheduling, and recent models of production and inventory control for optimizing continuous and intermittent manufacturing operations. MRP basics and introduction to using a computer to apply scheduling models will be covered. Topics include functional modules in the control of a manufacturing organization, forecasting methods, aggregate planning and master scheduling, linear programming based methods, capacity requirements planning; machine scheduling, job sequencing and line balancing; job shop and flow shop models; material requirements planning and just-in-time production control.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ISE 2103 (may be taken concurrently)

ISE 4105. Facility Planning. 3 Credit Hours.

This course will study strategic planning of production facilities including location, planning, design and maintenance. Emphasis on production systems, machine selection, automation, material handling, storage and warehousing, quality, retrofitting and preventative maintenance.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ISE 2101, ISE 2102, and ISE 2103.

ISE 4106. Service Systems Engineering. 3 Credit Hours.

Services play a vital role in modern economies. In many economies they surpass their manufacturing counterparts in terms of contribution to the Gross Domestic Product, yet they cannot be handled in the exact same manner. The fundamentals of this sector as an engineering field will be discussed as well as the operations of service systems as a customer-centric environment. Topics will include service quality, strategies, operations, electronic services, queuing, service supply chains and managing service projects. Various projects will be handled during the course of the semester focusing on various aspects of the service industry.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ISE 2101 and ISE 4104.

ISE 4107. Systems Engineering Fundamentals. 3 Credit Hours.

Complex system development requires both hard and soft skills to address the challenges in modern engineering. Systems engineering includes human, organization and technical variables that all must be considered in complex system development. This course will cover the foundations of systems science and systems thinking, as well as an overview of the methodology that systems engineers use to bring these systems to fruition. Topics in the methodology that will be covered include identification of needs, requirements development, design and design integration, verification and validation as well as tools used to perform these functions such as technical management, life cycle costing and risk analysis and management. This course will show the breadth of knowledge that is required of a systems engineer to address engineering challenges.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ISE 2101 and ISE 3103.

ISE 4176. Industrial and Systems Engineering Senior Design Project I. 3 Credit Hours.

Your undergraduate career culminates with the Senior Design Project and integrates the Industrial and Systems engineering concepts with a major design experience. Through this experience you will demonstrate your skills for managing and executing a design project in a team setting. Skills you will need include problem identification, constraint specification, alternative analysis selection, design development, analysis and recommendations. In addition, you will have practice learning how to manage impediments that arise in the project development. Through this culminating experience you will integrate knowledge and further your technical, critical thinking, writing and teamwork skills.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Industrial + Sys Engineering.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ENGR 2196 and Complete 2 of the following: ISE 3102, ISE 3103, and ISE 4104.

Intellectual Heritage (IH)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

IH 0851. Intellectual Heritage I: The Good Life. 3 Credit Hours.

Students will read important works of world literature, philosophy, and religion, from ancient epics to graphic novels, with a focus on individual well-being. We will ask questions like: What do we value, and why? What makes for happiness? What's right and wrong? How is what's good for me defined by my relation to others? What is the purpose of life? Note: This course was formerly titled "Mosaic: Humanities Seminar I"; students who received credit for this title will not receive additional credits.

Course Attributes: GY

Repeatability: This course may not be repeated for additional credits.

IH 0852. Intellectual Heritage II: The Common Good. 3 Credit Hours.

Students will read important works of social, political, and scientific thought, with a focus on well-being for societies. We will ask questions like: Where does society come from? How do we balance individual liberty and the public good? What behaviors and practices perpetuate injustice? Can we create a better society? How do power and privilege define our capacity to make change? How do we find truth? Can facts be detached from cultural contexts? Note: This course was formerly titled "Mosaic: Humanities Seminar II"; students who received credit for this title will not receive additional credits.

Course Attributes: GZ, SI

Repeatability: This course may not be repeated for additional credits.

IH 0951. Honors Intellectual Heritage I: The Good Life. 3 Credit Hours.

Students will read important works of world literature, philosophy, and religion, from ancient epics to graphic novels, with a focus on individual well-being. We will ask questions like: What do we value, and why? What makes for happiness? What's right and wrong? How is what's good for me defined by my relation to others? What is the purpose of life? Note: This course was formerly titled "Honors Mosaic: Humanities Seminar I"; students who received credit for this title will not receive additional credits.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GY, HO

Repeatability: This course may not be repeated for additional credits.

IH 0952. Honors Intellectual Heritage II: The Common Good. 3 Credit Hours.

Students will read important works of social, political, and scientific thought, with a focus on well-being for societies. We will ask questions like: Where does society come from? How do we balance individual liberty and the public good? What behaviors and practices perpetuate injustice? Can we create a better society? How do power and privilege define our capacity to make change? How do we find truth? Can facts be detached from cultural contexts? Note: This course was formerly titled "Honors Mosaic: Humanities Seminar II"; students who received credit for this title will not receive additional credits.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GZ, HO, SI

Repeatability: This course may not be repeated for additional credits.

International Business Administration (IB)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

IB 2501. Fundamentals of Asian Business. 3 Credit Hours.

This course is designed to enable students to grasp broad knowledge on Asian business practices. The semester will begin by surveying the wide array of national characteristics that corporate decision-makers must consider prior to making economic decisions on foreign investment. During this section of the course, we will also analyze economic, social, and political conditions in India in order to provide practical examples of how the national characteristics impact the decision-making process. It will then examine the similarities and dissimilarities among Japanese, Chinese, and Korean businesses and the special features of Japanese business, such as the network relationships among companies and groups called keiretsu. Given our understanding of the above issues, we will examine how American companies should compete in Asia.

Repeatability: This course may not be repeated for additional credits.

IB 2502. Fundamentals of Latin American Business. 3 Credit Hours.

This course is designed to give students a solid basis to face a job assignment related to business in a Latin American country and to develop your ability to perceive the importance of cultural diversity and how it influences business activities across Latin American countries. Specifically, this course will help you understand the specific challenges of doing business in Latin America and enable you to perceive and understand the differences in the business environment, business customs, and business practices between countries of Latin America and of the rest of the world.

Repeatability: This course may not be repeated for additional credits.

IB 2503. Fundamentals of European Business. 3 Credit Hours.

This course offers an overview of the European business environment, highlighting its specific challenges and business opportunities. This course analyzes the dual process of European integration and enlargement of the European Union, and the tensions between the two. While mostly focusing on the European Union country members, this course will also examine non-EU countries in Europe. You will understand when and how multinational firms must adapt their business policies and organizations to the specific needs of national environments in Europe. In-depth cases and recent articles from the business press serve as the basis for many class discussions.

Repeatability: This course may not be repeated for additional credits.

IB 2504. Fundamentals of Business in Africa and the Middle East. 3 Credit Hours.

This is an exciting course for students interested in developing skills essential for effectively doing business in and with Africa and the Middle East. We will study the differences, challenges, and benefits that companies encounter when venturing in Africa and the Middle East, and use experiential learning to gain fluency in cultural and business practices.

Repeatability: This course may not be repeated for additional credits.

IB 2509. Short Study Trip Abroad: Doing Business in a Foreign Country. 1 to 3 Credit Hour.

This is a for-credit course paired with a trip to a foreign country, in order to study in depth this country's environment for doing business (cultural, social, economic, legal, political aspects), and how to navigate it successfully, both as a firm and as an individual. The in-country portion of the program will include mostly visits of companies and local organizations, as well as some touristic visits. The course aims to put the foreign country in the broader context of globalization, regional economic integration, and the mutual influence and relationships the country entertains with the rest of the world.

Repeatability: This course may be repeated for additional credit.

IB 3101. Fundamentals of International Business. 3 Credit Hours.

This course offers an introduction to the basic concepts and practices in international business. Topics to be covered include the economic, social, cultural, legal, and political environments of international trade and multinational corporations (MNCs), international institutions and agencies that impact on international business, the nature and characteristics of international business, strategy and structure of MNCs, problems of foreign direct investments, and conflicts between host countries and MNCs, and effects of MNCs on the economy.

Repeatability: This course may not be repeated for additional credits.

IB 3551. International Finance. 3 Credit Hours.

The course surveys the theory and practice of international finance, as it relates to both markets and firms. Topics include issues in international financial systems, currency market and risk management, and international corporate finance.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- (except where noted) in (FIN 3101, FIN 3901, FIN 3503 (C or higher), or 'Y' in FIN3)

IB 3552. International Financial Management. 3 Credit Hours.

The course provides a theoretical and practical analysis of the financing and investment decisions of multinational firms operating in international financial markets. Topics include: international asset valuation, international financing and investments, foreign exchange risk exposure, and country risk management.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FIN 3503 or 'Y' in FIN3)

IB 3553. International Marketing. 3 Credit Hours.

This course identifies and addresses the challenges of marketing and analysis of the internal marketing system of countries with various types of political-economic structures. The strategic impact of economic, cultural, political, and legal differences on marketing are emphasized while issues of international product, price, promotion, and distribution issues are also considered. NOTE: Marketing Majors must earn a grade of C or better in this course to be eligible to take the capstone Marketing course 4501.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MKTG 2101 or MKTG 2901)

IB 3562. International Law. 3 Credit Hours.

Fifty percent of the net profits of most large corporations are generated through international transactions. This course will explore the legal considerations that apply to U.S. businesses abroad and will explore issues of contract negotiations, enforcement of judgments, international conventions, sovereign immunity, and current multinational business issues such as dumping, products liability, and patents and copyrights.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

IB 3563. International Trade. 3 Credit Hours.

An examination of the basic theories of international trade, commercial policy, and factor movements. Topics may include the relation between trade and economic growth, global aspects of U.S. trade policy, international trade agreements, and protectionism.

Repeatability: This course may not be repeated for additional credits.

IB 3564. International Monetary Economics. 3 Credit Hours.

The analysis of the balance of payments and foreign currency markets. Topics include the international payments system, foreign investment and debt, and exchange rate regimes.

Repeatability: This course may not be repeated for additional credits.

IB 3565. International Human Resource Management. 3 Credit Hours.

Focuses on the role of the manager in international organizations and creates awareness of differing legal environments and societal attitudes. Relates national differences to functional areas of human resource management - staffing, compensation, training, and labor relations.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (HRM 1101 or HRM 1901)

IB 3580. Special Topics in International Business. 1 to 6 Credit Hour.

Special topics in current developments in the field of international business.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

IB 3581. International Business Internship. 3 Credit Hours.

The International Business internship is designed to provide experiential learning to students enrolled in the course. Students will apply what they have learned in the classroom to a project to be implemented within an international business environment. Students will engage a business owner or manager in defining and developing a project for mutual benefit and learning. This project will include an objective, a goal, and a work plan to implement work towards achieving that goal. Further, the project will be supervised by the business owner/manager and will be implemented by the student. The project will acquaint the students with a global business mindset and international business operations.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may be repeated for additional credit.

IB 3582. Independent Study. 1 to 6 Credit Hour.

Readings and/or papers under supervision of a faculty member. The student should pursue a topic of interest by getting a faculty member to agree to supervise the student's study. Possible topics of interest to the faculty in the department include: cross-border mergers and acquisitions, foreign direct investment, and global sourcing, among others.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

IB 3585. International Business Internship. 3 or 6 Credit Hours.

The course objective is to enable students to gain practical work experience on a project of relevance to their academic program, while providing the latest best practices and international business concepts on projects for employers. The course consists of an internship with a company involved in international business and the internship location is abroad. Students are encouraged to apply for currently developed internship programs including those with Temple University overseas programs or campuses, other global internship providers, as well as select a reputable organization of their interest. The student will produce a project paper and/or other assignments based on student's internship projects within the organization. NOTE: A minimum of a 2.5 GPA and approval by the professor is required.

Repeatability: This course may not be repeated for additional credits.

IB 3596. Global Entrepreneurship. 3 Credit Hours.

This course is based on a hands-on semester-long global entrepreneurship project that will require you to work through the whole process of setting up an import/export venture, from identifying a trade lead and foreign country to conduct business in, all the way to organizing the delivery of your imported or exported good to the final customer and choosing an appropriate payment method. This course will help you develop practical knowledge in the areas of international market research, cross-cultural negotiations, customs and trade regulations, global logistics, international pricing and payment methods in a foreign country. The course consists of lectures and videos, class discussions and exercises, as well as a group project.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (IB 3101 or IB 3901) and (BA 2196 (may be taken concurrently) or BA 2996 (may be taken concurrently))

IB 3682. Independent Study. 1 to 6 Credit Hour.

Readings and/or papers under supervision of a faculty member. The student should pursue a topic of interest by getting a faculty member to agree to supervise the student's study. Possible topics of interest to the faculty in the department include: cross-border mergers and acquisitions, foreign direct investment, and global sourcing, among others.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

IB 3901. Honors Fundamentals of International Business. 3 Credit Hours.

This course offers an introduction to the basic concepts and practices in international business. Topics to be covered include the economic, social, cultural, legal, and political environments of international trade and multinational corporations (MNCs), international institutions and agencies that impact on international business, the nature and characteristics of international business, strategy and structure of MNCs, problems of foreign direct investments, and conflicts between host countries and MNCs, and effects of MNCs on the economy. NOTE: Honors section of International Business Administration 3101.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

IB 3999. Honors Thesis I. 1.5 Credit Hour.

The first of a two-part sequence of courses in which independent research is conducted under the supervision of a thesis advisor from the International Business Administration department resulting in a substantial piece of original research, roughly 30 to 50 pages in length upon completion of International Business Administration 4999. The student must publicly present his/her findings at a Temple University Research Forum session or the equivalent during one of the two semesters during which these courses are undertaken.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

IB 4587. International Business Practicum. 3 Credit Hours.

This is the capstone senior course for the IBA major. This course covers strategic-level international business issues, such as choosing between local adaptation and international standardization of operations, HQs-subsidiaries relationships, design and coordination of an international supply chain. This course offers opportunities for practical applications of IB knowledge and techniques acquired across the IBA curriculum through two main assignments: an online international business simulation running a multinational corporation; as well as a consulting project requiring an in-depth analysis of an international business situation and practical recommendations. NOTE: This course is open only to IBA majors and must be taken by Senior students in their graduating semester.

Field of Study Restrictions: Must be enrolled in one of the following Majors: International Business.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in IB 3596.

IB 4999. Honors Thesis II. 1.5 Credit Hour.

Independent research conducted under the supervision of a thesis advisor from the International Business Department resulting in a substantial piece of original research, roughly 30 to 50 pages in length. Student must publicly present his/her findings at a Temple University Research Forum session or the equivalent if this was not done in International Business 3999.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in IB 3999.

Italian (ITAL)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ITAL 0815. Language in Society. 3 Credit Hours.

How did language come about? How many languages are there in the world? How do people co-exist in countries where there are two or more languages? How do babies develop language? Should all immigrants take a language test when applying for citizenship? Should English become an official language of the United States? In this course we will address these and many other questions, taking linguistic facts as a point of departure and considering their implications for our society. Through discussions and hands-on projects, students will learn how to collect, analyze, and interpret language data and how to make informed decisions about language and education policies as voters and community members. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0815/0915, Asian Studies 0815, Chinese 0815, CSCD 0815, EDUC 0815/0915, English 0815, PSY 0815, Russian 0815, or Spanish 0815.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

ITAL 0831. Immigration and the American Dream. 3 Credit Hours.

As a Temple student, you go to school and live in a city full of immigrants. Perhaps your own relatives were immigrants to the United States. But have you ever listened to their stories? With an historical and sociological framework as a basis, we will take an in-depth and more personal look at the immigrant experience as expressed through the immigrants' own voices in literature and film, and oral interviews. Topics explored include: assimilation, cultural identity and Americanization, exploitation and the American Dream, ethnic communities, gender, discrimination and stereotyping. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0831, CRIT 0831, History 0831, Italian 0931, Russian 0831, SOC 0831, or SPAN 0831/0931.

Course Attributes: GD, SI

Repeatability: This course may not be repeated for additional credits.

ITAL 0868. World Society in Literature & Film. 3 Credit Hours.

Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindi, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

ITAL 0931. Honors Immigration and the American Dream. 3 Credit Hours.

As a Temple student, you go to school and live in a city full of immigrants. Perhaps your own relatives were immigrants to the United States. But have you ever listened to their stories? With an historical and sociological framework as a basis, we will take an in-depth and more personal look at the immigrant experience as expressed through the immigrants' own voices in literature and film, and oral interviews. Topics explored include: assimilation, cultural identity and Americanization, exploitation and the American Dream, ethnic communities, gender, discrimination and stereotyping. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0831, CRIT 0831, History 0831, Italian 0831, Russian 0831, SOC 0831, or SPAN 0831/0931.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GD, HO, SI

Repeatability: This course may not be repeated for additional credits.

ITAL 0968. Honors World Society in Literature & Film. 3 Credit Hours.

Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindi, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. (This is an Honors course.) NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GG, HO

Repeatability: This course may not be repeated for additional credits.

ITAL 1001. Italian Language I. 4 Credit Hours.

Introduction to the use of Italian as a spoken language. Fundamentals of grammar, basic patterns of oral communication, writing and reading, introduction to Italian culture.

Course Attributes: LA

Repeatability: This course may not be repeated for additional credits.

ITAL 1002. Italian Language II. 4 Credit Hours.

A continuation of the activities of Italian 1001. The basics already learned are practiced, and new patterns of oral communication, reading, and writing are introduced. Additional fundamentals of grammar.

Course Attributes: LA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ITAL 1001, ITAL 1901, 'C1002' in LCIT, 'B1002' in LCIT, 'C1003' in LCIT, 'B1003' in LCIT, or 'EXMPT' in LCIT)

ITAL 1011. Fundamentals - Intensive Basic Language. 6 Credit Hours.

This course meets four times per week and covers the equivalent of a full year of language study (Introductory Italian I and Introductory Italian II). The course is designed for highly motivated students who wish to develop communicative ability in Italian in a relatively short time. The course is conducted mainly in Italian.

Repeatability: This course may not be repeated for additional credits.

ITAL 1901. Honors Italian Language I. 4 Credit Hours.

Introduction to the use of Italian as a spoken language. Fundamentals of grammar, basic patterns of oral communication, writing and reading, introduction to Italian culture.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Italian.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

ITAL 1902. Honors Italian Language II. 4 Credit Hours.

A continuation of the activities of Italian 1901. The basics already learned are practiced, and new patterns of oral communication, reading, and writing are introduced. Additional fundamentals of grammar.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, LA

Repeatability: This course may not be repeated for additional credits.

ITAL 2000. Special Topics. 3 Credit Hours.

Topics vary each semester. See advisor for more information.

Repeatability: This course may be repeated for additional credit.

ITAL 2001. Intermediate Italian I. 3 Credit Hours.

Using a variety of texts, the students will gradually broaden their vocabulary and understanding of culture, learn to organize ideas both in speaking and writing, and begin to appreciate the written text. Since the class will be conducted entirely in Italian, the students' communicative skill in speaking and writing will continue to expand. Grammatical points are reviewed as needed.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ITAL 1002, 'EXMPT' in LCIT, or 'C2001' in LCIT)

ITAL 2002. Intermediate Italian II. 3 Credit Hours.

A continuation of Italian 2001, the course further develops students' communicative proficiency and encourages them to communicate confidently, clearly, and effectively in the target language through the cultivation of writing, speaking, reading, and listening skills. The course is a comprehensive review of grammar topics first introduced in Elementary Italian II, and introduces more complex grammar topics. In addition, the course expands and further cultivates a higher level of vocabulary.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ITAL 2001 or 'EXMPT' in LCIT)

ITAL 2041. Readings in Italian. 3 Credit Hours.

This course provides students with strategies designed to improve their reading skills. Students will also develop their ability to more effectively communicate ideas explored in the reading through discussion of problems of grammar, style, and composition. Elements of Italian culture, past and present, will also be examined in the context of this course.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ITAL 2002.

ITAL 2096. Composition I: Italian Composition and Conversation. 3 Credit Hours.

Intensive work on communicative skills in speaking and writing. Students will expand their ability to express themselves conversationally both by building vocabulary used for debating, discussing, expressing a point of view, and obtaining information, and by engaging in role-playing and extemporaneous conversational situations. Formal and informal writing to improve written fluency in basic narrative prose.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ITAL 2002.

ITAL 2100. Special Topics in Italian Culture. 3 or 4 Credit Hours.

Unique topics arranged each term; subtitle and course description is added to each section for students to review. For more information, consult with the instructor.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ITAL 2001.

ITAL 2221. Italian Culture through Film. 3 Credit Hours.

This course will provide students with a study of Italian cinema from the time of Neorealism, which began in 1945, to the present. Through the vision of movies, students will be introduced to Italian culture, socio-economic conditions, political philosophies, history, and the transformation of the Italian society throughout the years. Taught in English.

Repeatability: This course may not be repeated for additional credits.

ITAL 2401. The Italian Origins of Classic Fairy Tales. 3 Credit Hours.

In this course we will trace the Italian origins of some of the best-known fairy tales of the Western tradition. We will compare versions from the sixteenth and seventeenth centuries with later French and German versions. Furthermore, we will discuss international screen adaptations, including Jean Cocteau's surrealist film *Beauty and the Beast* (1946), Pedro Almodovar's *Talk to her* (2002), and a few Disney adaptations. We will analyze such classics as *Beauty and the Beast*, *Cinderella*, *Sleeping Beauty*, *Jack and the Beanstalk*, and *Pinocchio*. The course will look at how fairy tales have shaped, strengthened or questioned gender stereotypes, normative gender and sexual identity, and traditional power relations through the lens of gender, feminist and queer theory, psychoanalysis, narratology, and social history.

Repeatability: This course may not be repeated for additional credits.

ITAL 2501. Italian for Business. 3 Credit Hours.

This course is designed for students who wish to develop language and professional skills in the context of an international business environment focused on Italy. Attention is also given to Italian culture, manners, and customs as they relate to business practices.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ITAL 2002.

ITAL 3000. Special Topics in Italian Studies (Taught in English). 3 Credit Hours.

Topics vary each semester. See advisor for more information.

Repeatability: This course may be repeated for additional credit.

ITAL 3010. Special Topics in Italian (Taught in Italian). 3 Credit Hours.

Topics vary each semester. See advisor for more information.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ITAL 2002.

ITAL 3020. Special Topics in Italian (Taught in Italian). 3 Credit Hours.

Topics vary each semester. See advisor for more information.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in ITAL 2002.

ITAL 3096. Composition II: Advanced Writing Skills. 3 Credit Hours.

This course has been designed to develop writing skills and reading comprehension, gradually and consistently. The emphasis of the course is practice in writing short essays, and in translating different types of language. Introduction to literary analysis. Attention to grammar, syntax and orthography.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ITAL 2096.

ITAL 3101. Survey of Italian Literature I. 3 Credit Hours.

Reading and discussion of representative works of Italian literature from the origins through the Renaissance. The course will cover such authors as Dante, Petrarch, Boccaccio, Machiavelli and Ariosto.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ITAL 2096, ITAL 2041, or ITAL 2501)

ITAL 3102. Survey of Italian Literature II. 3 Credit Hours.

Reading and discussion of representative works of Italian Literature from the Renaissance to modern times. The course will cover such authors as Marino, Metastasio, Alfieri, Goldoni, Leopardi, Manzoni, Ungaretti, Saba and Montale.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ITAL 2096, ITAL 2041, or ITAL 2501)

ITAL 3182. Independent Study I. 3 Credit Hours.

Arranged each semester, please consult with the instructor. NOTE: Considered only for extraordinary reasons. Does not replace required courses, unless specified and approved by the Italian Advisor.

Repeatability: This course may be repeated for additional credit.

ITAL 3201. Italian Culture and Civilization. 3 Credit Hours.

Depending on the expertise(s) of the teacher and the interests of the students, this multi-disciplinary course will cover major historical and cultural periods and phenomena. Examples: the emergence of Italian language and dialects; medieval, Renaissance, and baroque art and architecture; folk literature and music; opera; the history of the Risorgimento and the Unification; women and feminism; modern Italian culture and politics; and cinema.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ITAL 2002.

ITAL 3202. Italian in the City. 3 Credit Hours.

This course is designed for students who wish to refine their Italian language skills and learn about contemporary Italian culture and society while exploring the neighborhoods of Rome off the beaten tracks. Each unit is introduced through clips from movies, historic documentaries, or passages from literary texts as well as songs, offering students a wide variety of authentic sources to develop their reading, writing, listening and speaking skills. The course includes visits to the neighborhoods under study, during which students will conduct guided observations, interaction with locals, guided research, and cultural "scavenger hunts".

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ITAL 2002.

ITAL 3240. Topics in Italian Cinema and Literature (in English). 3 Credit Hours.

This course is designed to deepen understanding of Italian culture, ethnicity, and universal themes as they are portrayed in Italian film and literature. It explores commonality and difference between two different forms of creative expression, in particular novels that were then adapted for film, as well as works of authors and filmmakers that are not directly linked. Topics vary. Viewing of films, readings. Taught in English. Can be taken as a cognate course for the Italian major.

Repeatability: This course may be repeated for additional credit.

ITAL 3282. Independent Study II. 3 Credit Hours.

Arranged each semester; please consult with the instructor. NOTE: Considered only for extraordinary reasons. Does not replace required courses, unless specified and approved by the Italian Advisor.

Repeatability: This course may be repeated for additional credit.

ITAL 4120. Special Topics. 3 Credit Hours.

Various topics in Italian studies. Arranged each semester. Please consult with the instructor. NOTE: Course offered to cover topics not currently available in the regular course inventory.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ITAL 2096, ITAL 2041, or ITAL 2501)

ITAL 4121. Nobel Prize Winners in Italian Literature. 3 Credit Hours.

Close reading and discussion of a selection of poetry and prose written by Italian authors who received the Nobel Prize in Literature.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ITAL 3101, ITAL 3102, or ITAL 3096)

ITAL 4122. Italian Theater and Performance. 3 Credit Hours.

Readings and discussion of the works of major Italian playwrights from Machiavelli to Goldoni, Pirandello and Eduardo De Filippo. The course culminates in the performance of Italian theater works.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ITAL 2096, ITAL 2041, or ITAL 2501)

ITAL 4130. Topics in Italian Literature. 3 Credit Hours.

This course is designed for students of Italian to concentrate on one period of literature or a particular topic in Italian literature. Topics vary. Taught in Italian.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ITAL 2096, ITAL 2041, or ITAL 2501)

ITAL 4161. Italian American Literature and Culture. 3 Credit Hours.

The focus of this course is the evolution of narrative and lyrical forms and contents of Italian American literature and film over the generations: the first, that wrote in various dialects of Italian and in nascent English with traces of Old World rhetoric; the semi-Americanized second that honored fathers and mothers in style and substance; the third and fourth that, now American, have embraced innumerable tendencies and modes of imagining and writing. Taught in English.

Repeatability: This course may not be repeated for additional credits.

ITAL 4240. Topics in Italian Cinema & Literature. 4 Credit Hours.

This course is designed to deepen understanding of Italian culture, ethnicity, and universal themes as they are portrayed in Italian film and literature. It explores commonality and difference between two different forms of creative expression, in particular novels that were then adapted for film, as well as works of authors and filmmakers that are not directly linked. Topics vary. Viewing of films, readings. Three hours taught in English, with the fourth hour taught in Italian. Written work and readings in Italian for Majors, Minors, Certificate Students.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (ITAL 2096, ITAL 2041, or ITAL 2501)

ITAL 4401. Techniques of Translation. 3 Credit Hours.

An immersion in the theory and practice of translation with a focus on translating into English. The Italian texts, chosen in consultation with the instructor, can be drawn from not only prose fiction, poetry, and drama, but also such other genres as memoir, travel writing, and film soundtracks, as well as the gamut of text types in the human sciences, including cultural theory, philosophy, history, and ethnography. The aim is not just to translate, but to think deeply about translating, to develop writing practices by drawing on the resources of theory, past and present, and by examining translations written by professionals.

Repeatability: This course may not be repeated for additional credits.

ITAL 4920. Honors Special Topics. 3 Credit Hours.

Various topics in Italian studies. Arranged each semester. Please consult with the instructor.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

Japanese (JPNS)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

JPNS 0868. World Society in Literature & Film. 3 Credit Hours.

Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindi, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

JPNS 1001. Japanese Elements I. 4 Credit Hours.

First semester level of Japanese. Assumes no prior knowledge.

Course Attributes: LC

Repeatability: This course may not be repeated for additional credits.

JPNS 1002. Japanese Elements II. 4 Credit Hours.

Second semester level of Japanese.

Course Attributes: LC

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (JPNS 1001, 'C1002' in LCJP, or 'B1002' in LCJP)

JPNS 1003. Oral Intensive Japanese I. 3 Credit Hours.

A bridge between beginning and intermediate Japanese levels, this course emphasizes vocabulary building and the use of spoken Japanese through situational conversational practice. Tests will be in the forms of listening and reading comprehension and structured interviews. An ability to read and write hiragana and katakana is required, as is a mastery of most basic grammatical rules.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (JPNS 1002, 'C2701' in LCJP, or 'B2701' in LCJP)

JPNS 1301. Kanji I. 3 Credit Hours.

Kanji or Chinese characters are an integral part of Japanese orthography system, which is considered as a key factor to learners' reading comprehension and vocabulary building. However, Kanji is considered to be difficult and rather time-consuming to acquire, especially for learners from alphabetic orthography systems such as English speakers. This course is thus designed to promote students' understanding and mastery of 300 basic Kanji and to help them establish a solid foundation to learn novel and complex Kanji in the course of their learning Japanese. By mastering 300 basic Kanji, students will acquire the Kanji proficiency equivalent to JLPT (Japanese Language Proficiency Test) N4, and also improve their reading and writing skills in addition to vocabulary building. More important, students will learn how to "learn" novel Kanji.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (JPNS 1001, 'C1002' in LCJP, or 'B1002' in LCJP)

JPNS 2000. Special Topics I. 3 Credit Hours.

Arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic.

Repeatability: This course may be repeated for additional credit.

JPNS 2001. Intermediate Japanese I. 3 Credit Hours.

Third semester level of Japanese.

Course Attributes: LC

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in JPNS 1002.

JPNS 2002. Intermediate Japanese II. 3 Credit Hours.

Fourth semester level of Japanese.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (JPNS 2001 or JPNS 2701)

JPNS 2003. Oral Intensive Japanese II. 3 Credit Hours.

A bridge between intermediate and advanced Japanese levels, this course focuses on vocabulary acquisition in a variety of conversational situations. Throughout the semester, several vocabulary quizzes and structure tests will be given, while the final exam will be in the form of interviews. Students are required to complete one project involving various communication activities outside the classroom.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (JPNS 1003, JPNS 2002, JPNS 2702, or 'C3001' in LCJP)

JPNS 2011. Survey of Japanese Literature: Pre-Modern. 3 Credit Hours.

A study of memoirs, poetry, novels, and other genres is included in this survey of classical Japanese literature. Knowledge of Japanese language is not required. Note: JPNS 2011 and ASST 2011 are equivalent courses and students will not be able to receive credit for both.

Repeatability: This course may not be repeated for additional credits.

JPNS 2012. Modern and Contemporary Japanese Literature in Translation. 3 Credit Hours.

A survey of modern Japanese literature focusing on novels and short stories. Authors include Tanizaki, Kawabata, and Mishima. Note that knowledge of Japanese language is not required. NOTE: Prior to fall 2009, the course title was "Survey of Japanese Literature: Modern." Note: This course is cross-listed with Asian Studies 2012. Students may only receive credit for one of these courses: ASST 2012 or JPNS 2012.

Repeatability: This course may not be repeated for additional credits.

JPNS 2015. Tokyo in Literature and Film. 3 Credit Hours.

Like all great cities, Tokyo simultaneously fascinates and frightens us. The course explores this fascination and fear through the work of leading writers and directors who have responded to and shaped the city in their work. Readings will include essays, short stories, and novels by authors such as Yasunari Kawabata, Fumiko Hayashi, Banana Yoshimoto, and Haruki Murakami. Films by directors such as Yasujiro Ozu, Satoshi Kon, and Shosuke Murakami will be reviewed and discussed. Note: This course is cross-listed with Asian Studies 2015. Students may only receive credit for one of these courses: ASST 2015 or JPNS 2015.

Repeatability: This course may not be repeated for additional credits.

JPNS 2016. Mystery and Crime Fiction in Japan. 3 Credit Hours.

This course examines mystery and crime fiction in Japan through the work of writers such as Edogawa Rampo, Matsumoto Seicho, and Kirino Natsuo. Through critical analysis of novels and short stories, we'll seek insights into the anxieties and tensions of life in modern and contemporary Japan. We'll explore a range of socio-cultural issues in areas such as family life, education, careers, and gender relations. All readings and discussions are in English. Note: This course is cross-listed with Asian Studies 2016. Students may only receive credit for one of these courses: ASST 2016 or JPNS 2016.

Repeatability: This course may not be repeated for additional credits.

JPNS 2017. Stories of Parents and Children in Japanese Literature and Film. 3 Credit Hours.

This course explores the portrayal of family relationships in modern and contemporary Japanese fiction and film. Topics for study and discussion include the tension between the older and younger generations, and changing understandings of the family within Japanese society. The work of writers and filmmakers such as Soseki Natsume, Yasujiro Ozu, Kafu Nagai, Hirokazu Kore-eda, and Haruki Murakami will be examined. Class discussions and activities, readings, and written assignments aim at developing students' critical skills. Knowledge of Japanese is not required. Note: This course is cross-listed with Asian Studies 2017. Students may only receive credit for one of these courses: ASST 2017 or JPNS 2017.

Repeatability: This course may not be repeated for additional credits.

JPNS 2021. Japanese Literature in Film. 3 Credit Hours.

A look at cinematic adaptations of Japanese novels and short stories. Discussions and assignments develop analytical and critical skills in reading literary and cinematic texts selected from the works of the principal figures of Japanese literature and film, such as Tanizaki, Mishima, and Kurosawa. Note that knowledge of Japanese language is not required. Note: This course is cross-listed with Asian Studies 2021. Students may only receive credit for one of these courses: ASST 2021, ASST 2921, JPNS 2021, or JPNS 2921.

Repeatability: This course may not be repeated for additional credits.

JPNS 2050. The Japanese Writer in Focus. 3 Credit Hours.

This special topics course offers students the opportunity for in-depth reading, study, and discussion of the novels and short stories of one or two modern or contemporary Japanese writers. The work of writers who are highly regarded both in Japan and globally - such as Haruki Murakami, Kenzaburo Oe, Natsume Soseki, and Yukio Mishima - will be the focus of the course. Students will also be introduced to published scholarship on the writer's work. All readings are English translations of work originally published in Japanese. Note: This course is cross-listed with Asian Studies 2050. Students may only receive credit for one of these courses: ASST 2050 or JPNS 2050.

Repeatability: This course may be repeated for additional credit.

JPNS 2111. Japanese Literature: From Classical to Contemporary. 3 Credit Hours.

Students taking this course will have the opportunity to learn about Japan's long literary history by reading, discussing, and analyzing selected novels, short stories, poems, and literary essays. The first half of the semester will focus on work produced up through the pre-modern period, with the second half covering the modern and contemporary periods. Writers ranging from Murasaki Shikibu and Yoshida Kenko to Natsume Soseki and Murakami Haruki will be introduced. Class discussions and assignments will help students become acquainted with current theoretical and methodological approaches in the fields of Japanese studies (and, more broadly, Asian Studies) and literary studies. All readings are English translations of work originally published in Japanese. NOTE: Students can receive credit only once for either ASST 2111 or Japanese 2111.

Repeatability: This course may not be repeated for additional credits.

JPNS 2301. Kanji II. 3 Credit Hours.

This course is a continuation of Kanji I and designed to promote students' understanding and mastery of an additional 300 (or more) Kanji at the intermediate level. By mastering the additional 300 Kanji, students will acquire the Kanji proficiency equivalent to JLPT N3, and also improve their reading and writing skills in addition to vocabulary building.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (JPNS 1301, JPNS 2702, or 'C3001' in LCJP)

JPNS 2522. Basic Writing in Japanese. 3 Credit Hours.

Japanese 2522 is designed to introduce students whose native language is not Japanese to basic-level writing skills that go beyond mere sentence manipulation drills. With a focus on paragraph development, students will learn, step by step, the organizational principles that will help them express themselves effectively in Japanese on familiar topics, such as family, daily activities, personal possessions and experiences. Students will also learn to incorporate newly learned vocabulary and structures effectively into their writing to further enhance their overall Japanese language skills.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (JPNS 2701 or 'C2702' in LCJP)

JPNS 2631. Structure of Japanese Language I. 3 Credit Hours.

This course is designed to accomplish three major objectives to further develop students' Japanese language proficiency. First, it will help students have a strong command of the basic and more complicated rules of Japanese grammar already introduced in Japanese 1001, 1002, 2001, & 2002. Second, it will also help students further improve their fluency in both comprehension and production. Lastly, it will also help students pass N4 of JLPT.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (JPNS 2702 or 'C3001' in LCJP)

JPNS 2701. TUJ - Japanese Intermediate I. 4 Credit Hours.

This is a TUJ unique 2nd year, Intermediate Japanese course, and the first half of the intermediate Japanese language courses. It adopts an integrated approach to develop students' communicative competence for everyday communication. Upon successful completion of the intermediate courses, students will be able to demonstrate the proficiency level equivalent to N4 of JLPT. In addition to the course work and assignment, students are strongly recommended to spend at least one hour per week at the language lab.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (JPNS 1002, 'C2701' in LCJP, or 'B2701' in LCJP)

JPNS 2702. TUJ - Japanese Intermediate II. 4 Credit Hours.

This is a TUJ unique 2nd year Intermediate Japanese course. This is the second half of the intermediate Japanese language courses. It adopts an integrated approach to develop students' communicative competence for everyday communication. Upon successful completion of the intermediate courses, students will be able to demonstrate the proficiency level equivalent to N4 of JLPT. In addition to the course work and assignments, students are strongly recommended to spend at least one hour per week at the language lab.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (JPNS 2001, JPNS 2701, or 'C2702' in LCJP)

JPNS 2782. Independent Study in Japanese. 1 to 6 Credit Hour.

Independent study in Japanese.

Repeatability: This course may be repeated for additional credit.

JPNS 3000. Special Topics in Japanese I. 3 Credit Hours.

Topics will focus on aspects of the language, literature, or culture of Japan.

Repeatability: This course may be repeated for additional credit.

JPNS 3001. Advanced Japanese I. 3 Credit Hours.

Fifth semester level of Japanese.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (JPNS 2002, JPNS 2702, or 'C3001' in LCJP)

JPNS 3002. Advanced Japanese II. 3 Credit Hours.

Sixth semester level of Japanese.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (JPNS 3001 or 'C3002' in LCJP)

JPNS 3003. Advanced Japanese Writing. 3 Credit Hours.

A course for students who feel secure in the fundamentals of writing in the Japanese language but who want additional instruction beyond the introductory composition courses to improve their writing. This course focuses on one of two writing styles depending on the semester: formal and academic essays (ronbun) and personal and impressionistic essays (zuihitsu). Ask the instructor which style will be focused on during the semester for which you are going to register. There will be a lot of speed writing in class for students to prepare for a company essay test. Note that this course may be taken by native speakers of Japanese.

Repeatability: This course may be repeated for additional credit.

JPNS 3010. Special Topics in Japanese II. 3 Credit Hours.

A continuation of Japanese 3000 (Critical Languages 0222). Topics will focus on aspects of the language, literature, or culture of Japan.

Repeatability: This course may be repeated for additional credit.

JPNS 3096. Intermediate Writing in Japanese. 3 Credit Hours.

Students will learn intermediate-level writing skills in Japanese built on their basic writing skills. They will learn to write multiple-paragraph essays appropriate for various Japanese writing styles. For many Japanese learners, not being able to write effectively in Japanese is a major concern, especially for college students. To this end, the course deals with elements that help improve the quality of a written product, including grammar, structure, logic, and most importantly, organization. In the intermediate writing course, students are required to write insightful essays incorporating their experiences and reading/researched materials using appropriate cohesive devices.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (JPNS 3001 or 'C3002' in LCJP)

JPNS 3631. Structure of Japanese Language II. 3 Credit Hours.

This course is designed to accomplish four major objectives. First, it will help students have a strong command of the advanced rules of Japanese grammar already learned in Japanese 3001 and 3002 to practice with complete control. Second, it will help students further improve their fluency both in comprehension and production in academic discourse. Third, it will also help students further develop their communicative competence, focusing on sociolinguistic and pragmatic aspects of Japanese language. Students will learn how to appropriately deal with social dominance, the social distance, and a variety of situations in advanced discourse. Lastly, it will help students pass N3 of JPLT.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (JPNS 3001 or 'C3002' in LCJP)

JPNS 3900. Honors Special Topics: Japanese. 3 Credit Hours.

Topics vary from semester to semester. This is an Honors course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

JPNS 4001. Japanese Advanced III. 3 Credit Hours.

This course has 5 major goals. First, it will help students develop a higher level of reading and writing skills, and familiarize with socio-cultural topics. Second, it will help students improve their levels of formality in speaking in different situations of their everyday conversation and academic discourse. Third, it will also help students develop critical thinking and manners for discussion in Japanese. Fourth, it will help students learn idiomatic expressions and more involved syntactical forms. Lastly, it will help students pass N2 of the JLPT.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (JPNS 3002 or 'C4001' in LCJP)

JPNS 4002. Japanese Advanced IV. 3 Credit Hours.

This is the last one of four courses in a series of Advanced Japanese courses which focuses on the levels of formality or politeness in conversation as well as on fifteen socio-cultural topics in the Japanese speaking community. This course covers chapters 13, 14, and 15 of the textbook. The course is designed to accomplish four major objectives. First, it will help students develop a higher level of reading and writing skills, and familiarize with haiku as well as socio-cultural topics. Second, it will also help students develop critical thinking, interview and debate skills in Japanese. Third, it will help students learn more involved idiomatic expressions and syntactical forms. Lastly, it will help students pass N2 of Japanese Language Proficiency Test (JLPT). To achieve these goals, this course will provide students with three reading topics: Japanese people and Nature, Politics in Japan, and the Future of World and Japan, in a variety of forms (i.e., reading and speaking based discussion). Each topic has its own focus in the speaking section such as interviewing, debating academic and social issues, and agreeing and disagreeing with others' opinions, to appropriately deal with the issues of politeness. Students are expected to use integrated skills to deal with each task presented in each chapter and also to build up their vocabulary and learn Chinese characters (Kanji) while completing reading, speaking, and grammar tasks. Moreover, students are required to conduct interviews with three people about a socio-cultural issue selected and to make a report on the results in two forms: an oral report in class and a written short paper.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (JPNS 4001 or 'C4002' in LCJP)

JPNS 4003. Advanced Oral Japanese. 3 Credit Hours.

This course provides both oral and aural practice in Japanese by introducing theoretical and practical aspects of oral/aural skills. It is designed and intended for students who have successfully completed three years of Japanese language learning (Japanese Advanced II), and requires students' advanced reading/writing skills in order to prepare their speech scripts.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (JPNS 3002 or 'C4001' in LCJP)

JPNS 4182. Japanese Independent Study I. 3 Credit Hours.

An independent-study course arranged each semester. Please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in JPNS 3002.

JPNS 4196. Seminar in Japanese and Japan: Japanese Society and Culture through Newspaper. 3 Credit Hours.

Seminar in Japanese and Japan is a capstone course that builds on the solid foundation of advanced linguistics skills, socio-cultural knowledge, and critical thinking that students have acquired. It also marks their final stage of Japanese language learning. Three topics (Topic I: Socio-cultural, Topic II: Business, Topic III: Literature) are offered alternately and designed to allow students to select and pursue a topic of their interest. In the courses, students will learn to read critically and properly appreciate the original texts of a selected topic. While reading about socio-cultural aspects, topics/issues in business, or literature, students will further their understanding of Japanese language. This course focuses on reading on socio-cultural aspects of Japan by reading newspapers. Newspapers are one of the main sources of information to learn about the society's present status, social and political problems, and perspectives for future. In this course, students will learn the most up-to-date information of Japanese society and develop their reading skills and comprehension by reading newspapers. To achieve those goals, the course is divided into two parts. The first half of the course will be devoted to developing reading skills and building lexicon necessary to understand newspaper articles as well as the stylistics and format characteristic of newspapers (e.g., the use of abbreviations and technical terms in the headlines and leads). In order to increase readiness for reading newspapers, students will read 5-7 short passages a day (with a complete vocabulary list) on a variety of topics. Students' acquisition of new vocabulary and expressions will be tested on a daily basis. In the second half of the semester, students will read Japanese newspaper articles weekly. Each week, two articles will be chosen for a class reading followed by discussions. In addition, each student will choose an article for a weekly oral report. Through reading and class discussions, students are expected to gain in-depth understanding and analytical views of contemporary Japanese society and culture.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in JPNS 4001.

JPNS 4282. Japanese Independent Study II. 3 Credit Hours.

An independent-study course arranged each semester. Please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in JPNS 3002.

JPNS 4296. Seminar in Japanese and Japan: Business. 3 Credit Hours.

Seminar in Japanese and Japan is a capstone course that builds on the solid foundation of advanced linguistics skills, socio-cultural knowledge, and critical thinking that students have acquired. It also marks their final stage of Japanese language learning. Three topics (Topic I: Socio-cultural, Topic II: Business, Topic III: Literature) are offered alternately and designed to allow students to select and pursue a topic of their interest. In the courses, students will learn to read critically and properly appreciate the original texts of a selected topic. While reading about socio-cultural aspects, topics/issues in business, or literature, students will further their understanding of Japanese language. Topic II has a special focus on business, and is designed to introduce students to basic concepts and current issues of business both in the domestic and international markets. Students will explore basic concepts of business, building up new vocabulary items, examining major and important terms used in discussing business and reading short articles on current topics. Moreover, students will explore a variety of short articles concerning current topics in economics, politics, and business law as well, for business is tightly connected with these three topics. Lastly, students will also learn how to conduct, write, and present a simple version of secondary research paper on one of the topics in business.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in JPNS 4001.

Jewish Studies (JST)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

JST 0802. Race & Identity in Judaism. 3 Credit Hours.

Investigate the relationship between race and Judaism from Judaism's early period through today, looking both at how Jews have understood their own racial identity and how others have understood Jews' racial identity. You will explore the idea of racial identity in Judaism in order to examine the complex network of connections between racism and anti-Semitism, as you read primary and secondary texts in Jewish philosophy and history and in the study of race and racism. We hope to illuminate these complex issues as well as to engage with them on a personal and political level, examining the relationship between issues of race, religion, identity, and social justice and injustice, and inquiring into how we, as informed citizens in a global society, can affect change for the better. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Jewish Studies 0902 or Religion 0802/0902.

Course Attributes: GD, SF

Repeatability: This course may not be repeated for additional credits.

JST 0868. World Society in Literature & Film. 3 Credit Hours.

Learn about Israeli culture by taking a guided tour of its literature and film. You don't need to speak a language other than English to take this exciting course, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film include family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

JST 0902. Honors Race & Identity in Judaism. 3 Credit Hours.

Investigate the relationship between race and Judaism from Judaism's early period through today, looking both at how Jews have understood their own racial identity and how others have understood Jews' racial identity. You will explore the idea of racial identity in Judaism in order to examine the complex network of connections between racism and anti-Semitism, as you read primary and secondary texts in Jewish philosophy and history and in the study of race and racism. We hope to illuminate these complex issues as well as to engage with them on a personal and political level, examining the relationship between issues of race, religion, identity, and social justice and injustice, and inquiring into how we, as informed citizens in a global society, can affect change for the better. (This is an Honors course.) NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Jewish Studies 0802 or Religion 0802/0902.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GD, HO, SF

Repeatability: This course may not be repeated for additional credits.

JST 2000. Special Topics in Jewish Studies. 3 Credit Hours.

The specific topic of this course varies from term to term. Please contact the Jewish Studies advisor or the instructor for more information.

Repeatability: This course may be repeated for additional credit.

JST 2109. Jewish Voices in Russian Culture. 3 Credit Hours.

In this course we will study the Jewish experience in the Russian Empire, the Soviet Union, and Post-Soviet Russia, with an emphasis on the 20th century, debunking many of the myths with which many students may have been familiar from the film "Fiddler on the Roof." We will read, in translation, excerpts from memoirs, works of literature and history, and view films, with subtitles by Jewish and non-Jewish scholars, authors, poets, and filmmakers about what Russians have called "The Jewish Question" for more than two centuries. We will also take up issues of anti-Semitism and xenophobia and consider them in the context of European and American history.

Repeatability: This course may not be repeated for additional credits.

JST 2403. Introduction to Judaism. 3 Credit Hours.

This course introduces students to the beliefs, rituals, customs, and practices of the Jewish people in a historical context through an analysis of a variety of religious, cultural, and political texts and artifacts. Note: Formerly titled "What is Judaism?" Students who earned credit under the prior title will not receive additional credits for this course. This course is equivalent to REL 2403; students may receive credit for either JST 2403 or REL 2403.

Repeatability: This course may not be repeated for additional credits.

JST 2405. Introduction to Afro-Jewish Studies. 3 Credit Hours.

This course will introduce students to the study of African and African-Diaspora Jews. Students will examine and critically assess the various past and present methods used to study Africana Jewish communities. The research and readings will provide students with a basic introduction to Afro-Jewish history, culture and religion. It will also analyze the effects of race and racism on the construction of Afro-Jewish identities.

Repeatability: This course may not be repeated for additional credits.

JST 2408. Jewish Secular Thought and Culture from Spinoza to Seinfeld: A History of Jewish Secularism. 3 Credit Hours.

Non-religious Jews come in all shapes and sizes: political radicals, philosophers, scientists, psychoanalysts, feminists, stand-up comics. Secular Jews helped establish the modern age, gave voice to the critique of religion, pushed for separation of Church and State, developed a vibrant Yiddish culture and founded the State of Israel. This course is a survey of issues in modern Jewish history from the philosophical critique of the Bible to tensions between religious and secular Jews in Israel. We will pay close attention to the thinkers who helped frame the transformations of Jewish self-understanding in the West: Spinoza, Mendelssohn, Marx, Freud, Einstein, Arendt...and Seinfeld. [Duplicate Credit Warning: The prior title for this course was "Jewish Secularism/Jewish Civilization I"; students who successfully completed that version of the course will not earn additional credits for this course.]

Repeatability: This course may not be repeated for additional credits.

JST 2409. Secular Jewish Utopian Politics / Jewtopias: The Jewish Romance with Communism, Zionism, and America. 3 Credit Hours.

What is Jewish politics? Jews were involved with three grand political cultures in the 20th century: The Zionist Movement, Communism, and Liberal Democracy. The new "Promised Lands" for Jews in Europe, Russia, Israel, and America were secular and utopian. Through literature, manifesto, fiction and film this course will examine each of these movements and explore the dark side of the attempts to create perfect social justice—how those visionary dreams were tempered if not shattered. Readings will include: Theodor Herzl, Arthur Koestler, Michael Chabon, Michael Walzer, and Tony Kushner's Angels in America. [Duplicate Credit Warning: The prior title for this course was "Jewish Secularism/Jewish Civilization II"; students who successfully completed that version of the course will not earn additional credits for this course.]

Repeatability: This course may not be repeated for additional credits.

JST 2447. Kabbalah and Mysticism. 3 Credit Hours.

Introduction to the basic concepts, worldview and psychology of the Kabbalah. Mystical experiences and spiritual practices of the Kabbalists are situated within the context of comparative mysticism.

Repeatability: This course may not be repeated for additional credits.

JST 2705. Anti-Semitism/Holocaust/Racism. 3 Credit Hours.

A history of anti-Semitism with a focus on the Holocaust and racism. This course will investigate the development and implementation of racial anti-Semitism in Germany and compare Nazi anti-Semitism with other forms of racism and anti-Semitism in Europe and America. It will also explore the connection between anti-Semitism and anti-Zionism, the growth of neo-Nazism, and the complex relationship between American Jews and African Americans. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. Be advised that students will only receive credit once for JST 2705, REL 2705, or HIST 2705.

Course Attributes: RS, SI

Repeatability: This course may not be repeated for additional credits.

JST 2706. Jewish Diaspora/Survey of Jewish History. 3 Credit Hours.

Jewish history from the destruction of the Second Jewish Commonwealth to the creation of the State of Israel. The course will examine minority status, migration, persecution, economic adaptation, gender roles in different environments, acculturation and identity. The survey includes: the medieval Jewish experience under both Christian and Islamic rule; the development of Jewish communities in Eastern Europe, Western Europe, and the United States; the changing role of Jewish women; the rise of Zionism; and the Holocaust.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

JST 2779. Love Themes in Hebrew Literature. 3 Credit Hours.

The development of the different love themes from the "Song of Songs," through the golden age of Spain, Hebrew poetry in Italy, the Enlightenment, revival period, and Israeli literature. Among the themes will be great expectations, happiness and unity, and the happy hell of withered love. Changes in style, form, and content will be emphasized and recurring symbols will be discussed.

Repeatability: This course may not be repeated for additional credits.

JST 2900. Honors Special Topics. 3 Credit Hours.

Course content varies each semester. Honors students can obtain a description of the current version at the Jewish Studies office, Mazur Hall, Room 641.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

JST 3000. Topics in Jewish Studies. 3 Credit Hours.

Course content varies each semester. Students can obtain a description of the current version at the Jewish Studies office, Mazur Hall, Room 641.

Repeatability: This course may be repeated for additional credit.

JST 3082. Independent Jewish Studies. 3 Credit Hours.

This is a course for advanced undergraduates to do sustained work with a professor they have already worked with in the program. The content and scope of the course is determined by the individual professor and the student with the approval of the director of Jewish Studies.

Repeatability: This course may be repeated for additional credit.

JST 3085. Jewish Studies Internship. 3 Credit Hours.

The Jewish Studies internship course is designed to enable Temple students to work in the Jewish community both to do hands-on work in a Jewish cultural, historical, communal or religious organization in Philadelphia's vibrant Jewish community and do a research project on some aspect of their work. With the director of Jewish Studies, the students will work out a set of readings appropriate to their individual research project.

Repeatability: This course may be repeated for additional credit.

JST 3182. Independent Study. 1 to 4 Credit Hour.

Students make arrangements with faculty in their departments to take an individual program of study. Course is by arrangement. Contact department chair for information.

Repeatability: This course may be repeated for additional credit.

JST 3221. Jewish Experience in America. 3 Credit Hours.

This course considers the evolution of the Jewish community in the United States from its colonial beginnings to the present day. Topics include: the immigrant experiences of various waves of migration; the development of the major religious movements within Judaism: Reform, Conservative, Orthodox and Reconstructionist; the role of Jews in American life and politics; the changing roles of American Jewish women; American anti-Semitism; Black-Jewish relations; relationship between American Jews and Israel; assimilation and identity.

Repeatability: This course may not be repeated for additional credits.

JST 3250. Topics: Jews & Film. 3 Credit Hours.

This course will vary by semester offering various approaches to issues of Jews and film. It will include topics such as: Eastern and Central European Jewish films; American Jews and Hollywood; films about Jews, Israeli film, and selected Jewish filmmakers and their works. NOTE: Sometimes, depending on the topic, this course will be cross-listed with Hebrew or Religion.

Repeatability: This course may be repeated for additional credit.

JST 3406. Women in Judaism. 3 Credit Hours.

This interdisciplinary course will explore issues of gender in various Jewish texts and practices. Using feminist theory it will ask questions about how normative notions of Jewish masculinity and femininity have been constructed in different texts from different historical periods. Students will engage in close readings of contemporary and ancient texts.

Repeatability: This course may not be repeated for additional credits.

JST 3408. Israel in the Middle East. 3 Credit Hours.

Law, geography, education, religion, politics, eastern and western communities, and culture examined by experts in three fields. NOTE: This course will be offered in English.

Repeatability: This course may not be repeated for additional credits.

JST 3411. The Philosophies of Judaism. 3 Credit Hours.

Close study of works by one or more Jewish and political philosophers, stressing their relevance to an understanding of contemporary politics and issues of Jewish identity, culture, and religion.

Repeatability: This course may not be repeated for additional credits.

JST 3571. Israel, History, Politics and Society. 3 Credit Hours.

Development of Israel and its relationship with its Arab neighbors. Includes a discussion of the evolution of Zionism, the growth of Arab nationalism, the creation of the Jewish State, the plight of the Palestinian refugees, and an evaluation of peace prospects in the Middle East.

Repeatability: This course may not be repeated for additional credits.

JST 3711. Israelis and Palestinians. 3 Credit Hours.

The course explores the Israeli/Palestinian relationship, beliefs and feelings from the beginning of the 20th century till today, as it is represented in both Israeli and Palestinian literature and art. A strong emphasis is on the development of the image of the other in each group and its connection to self identity. NOTE: The course will be conducted in English. Previously titled "Mideast Literature in Translation."

Repeatability: This course may not be repeated for additional credits.

JST 3720. Topics in Hebrew Culture. 3 Credit Hours.

Topics from Hebrew culture, which are of general and current interest based on reading Hebrew texts in translation. Lectures, audiovisual presentations, and large and small group work used to explore the significance of the texts.

Repeatability: This course may be repeated for additional credit.

JST 3900. Honors Special Topics. 3 Credit Hours.

Course content varies each semester. Honors students can obtain a description of the current version at the Jewish Studies office, Mazur Hall, Room 641.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

JST 4096. Independent Study in Jewish Studies. 3 Credit Hours.

Intensive study under individual guidance in a specific area suggested by the student and approved by the faculty advisor from the Jewish Studies faculty. NOTE: Capstone course. This course is required for all Jewish Studies majors.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

JST 4406. Ancient Judaism. 3 Credit Hours.

This course will look at the processes and stages involved in the formation of the Torah/Pentateuch (the books of Genesis-Deuteronomy), the formation of the Talmud (the anthology of Rabbinic thought), and the historical, social, and intellectual forces that shaped both. While the Jewish religious tradition typically sees the Torah as written by Moses, the critical perspective adopted by the course will look at how different scribal and priestly groups in ancient Israel contributed to a work that would only later be regarded as authored by Moses. Likewise, while traditional Judaic religion views the Talmud as a direct outgrowth of the Torah, this course will explore the diverse factions, debates, and battles between groups that either accepted or rejected the Torah in various forms, leading up to the emergence of the Rabbinic movement and the preservation of different views within their literature. Note: Prior to summer 1, 2016, the course title was "Secular Study of Ancient Jewish History: Between the Torah and the Talmud." Duplicate credit warning: Students who took JST 4406 or REL 4406 under the previous title will not earn additional credits for this course.

Repeatability: This course may not be repeated for additional credits.

JST 4411. Secularism: Jewish and Muslim Women. 3 Credit Hours.

In its three-hundred-year history as a Western concept, secularism is often defined as the opposite of religion. Religious women have alternately found western secularism to be a source of liberation (as it grants them greater civil rights) and a source of oppression (as it putatively shrinks the religious sphere). In creating feminisms through Jewish and Muslim experience, feminisms that are both secular and religious, these religious women have complicated the meanings of secularism. They have also challenged the notion that feminism is necessarily secular. This course looks at examples of Jewish and Muslim women's lives and feminist thought in the US, Europe, and the Middle East. The course will compare and contrast the feminism of these two groups of religious women, in order to more fully understand the role of concepts like secularism, feminism, and religion. NOTE: Students will earn credit only once for either JST 4411, GSWS 4411, or REL 4411.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Journalism (JRN)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

JRN 1101. Elements of Writing. 2 Credit Hours.

This course focuses on the fundamentals of style and language usage necessary for effective writing.

Repeatability: This course may not be repeated for additional credits.

JRN 1111. Journalism and Society. 3 Credit Hours.

The purpose of this course is to acquaint students with concepts and functions of journalism and the related industries of advertising and public relations in American society. Students will gain knowledge about the history, economics and industry structure of these industries, focusing on how mass media content is determined and disseminated. We will explore underlying values associated with journalism, relationships between journalism and other social institutions, and current issues facing journalists. NOTE: (1) Departmental core course. Normally taken as the first Journalism course. A grade of C or higher is required in order to take higher-level Journalism courses. (2) This course can be used to satisfy the university Core Individual and Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: IN

Repeatability: This course may not be repeated for additional credits.

JRN 1113. Audio/Visual Newsgathering. 3 Credit Hours.

This course will present students with additional story-telling tools by introducing them to basic techniques of reporting with and editing sound and video. The emphasis of this course will be on the use of digital audio and video recorders in the field to produce news stories for radio, television and the web. This course requires that students use the computer software that is used in the industry. NOTE: Special authorization required for non-majors.

Repeatability: This course may not be repeated for additional credits.

JRN 1114. Design for Journalists. 3 Credit Hours.

This course introduces students to the fundamental elements of visual design and their application in various types of journalistic publications both in print and online. Students will learn and use a variety of tools that will allow them to think and create journalistic elements visually. NOTE: Special authorization required for non-majors.

Repeatability: This course may not be repeated for additional credits.

JRN 1196. Writing and Reporting. 3 Credit Hours.

Introduction to and practice in writing stories for various mass media. Effective writing, journalistic style, and language skills are emphasized. NOTE: Departmental core course. This course is the prerequisite for all department writing courses. A grade of C- or higher is required in order to take upper level journalism courses.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

JRN 2101. Journalism Research. 3 Credit Hours.

Introduction to research used in journalism, including library materials, the World Wide Web, and electronic databases. Course includes retrieval, analysis, and presentation of data with final projects. NOTE: Departmental advanced core course.

Repeatability: This course may not be repeated for additional credits.

JRN 2111. The Practice and Process of News. 3 Credit Hours.

This course gives students an understanding of the kinds of work and industrial practices that go into the news. Students will learn how to write news articles, learn about workflow inside the newsroom, and explore the business and industrial pressures news organizations face. This is different than JRN 1196 - Writing for Journalism in that it offers a window into the way news is produced, while giving students skills and experience with writing, editing, and producing news for a publication. This course will offer in-depth engagement with some of the professional issues students encounter in JRN 1111 - Journalism and Society, but taught in a smaller class size. Students receive reporting and production assignments for news stories alongside readings and assignments that cover legal, ethical, and sociological issues in the news industry.

Repeatability: This course may not be repeated for additional credits.

JRN 2114. Journalism Innovation and Design. 3 Credit Hours.

This course explores how news organizations (and some non-news organizations) are using innovative approaches to storytelling across platforms and devices. It extends prerequisites focused on writing, reporting, and audiovisual news production by exploring the interrelationship among storytelling, user experience, and design, with an increased emphasis on creative visual presentation and experimentation.

Repeatability: This course may not be repeated for additional credits.

JRN 2201. Public Affairs Reporting. 3 Credit Hours.

Reporting and writing public affairs news stories. NOTE: News-Editorial sequence requirement.

Repeatability: This course may not be repeated for additional credits.

JRN 2202. Editing the News. 3 Credit Hours.

Editing copy, writing headlines and picture captions. Some layout, coordinating news values with space limitations. Consideration of management and ethical problems. NOTE: News-Editorial sequence requirement.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in JRN 1196.

JRN 2301. Introduction to Magazines. 3 Credit Hours.

Overview of industry structure; magazine markets and audiences; and what professionals do: editing, writing, design, and advertising, circulation, concept development. NOTE: Strongly recommended as preparation for Journalism 3304 (0381).

Repeatability: This course may not be repeated for additional credits.

JRN 2396. Magazine Article Writing. 3 Credit Hours.

Writing, analyzing, and marketing factual articles for general and specialized magazines. Subject research, investigation of editorial needs, ethical and legal problems, and manuscript preparation.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

JRN 2501. Broadcast Newswriting. 3 Credit Hours.

Students learn skills necessary to write for radio and television under deadline pressure, analyze how broadcast news is presented, develop interview skills, and write newscasts and editorials.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (JRN 1111, 'Y' in JRN1, or 'Y' in CRJR01) and (JRN 1196 or 'Y' in CRJR04)

JRN 2551. Broadcast Performance. 4 Credit Hours.

Explores the variety of skills required to communicate effectively through radio and television. Emphasis on performance techniques, creativity, writing and analytical skills needed to communicate effectively using various formats, such as interviews, editorials, commercials, and newscasts.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (JRN 1113 or 'Y' in CRJR02)

JRN 2701. Approaches to Research in Journalism Studies. 3 Credit Hours.

This course offers an overview of theories and methods that are used to undertake research in journalism studies. Theoretical inquiries related to audience, news content, and news production including news effects, agenda setting, and gatekeeping, are the focus of class discussion and student activities. Students are introduced to quantitative and qualitative methods such as surveys, content analysis, textual/discourse analysis, in-depth interviews, and focus groups, and learn to use them appropriately.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (JRN 1111 or CMST 1111)

JRN 2702. News Literacy. 3 Credit Hours.

This course is designed to teach students how to take skillful possession of their power as citizens by becoming more discriminating news consumers. Armed with critical thinking skills, a firm grasp on the history of journalism, and practical knowledge about news media, students learn how to find the reliable information they need to make decisions, take action, or make judgments. At a time when the digital revolution is spawning an unprecedented flood of information and disinformation each day, this course seeks to help students recognize the differences between news and propaganda, news and opinion, bias and fairness, assertion and verification, and evidence and inference.

Repeatability: This course may not be repeated for additional credits.

JRN 2705. Journalism Goes to the Movies. 3 Credit Hours.

This course surveys how films have depicted journalism over the years, from the earlier sound era to contemporary times. Students will discover through screenings, discussions, lectures and written assignments how the press and news media have been depicted, the impact journalism has had on culture and society, and what relevance the portrayals have in today's chaotic media landscape. The films screened will cover such topics as investigative reporting ("All the President's Men"); the tabloid approach to news ("Park Row"); TV news ("Good Night, and Good Luck"); magazines ("Almost Famous"); photojournalism ("Under Fire"); media manipulation ("Wag the Dog"); and more.

Repeatability: This course may not be repeated for additional credits.

JRN 2800. Special Topics in Journalism. 3 Credit Hours.

Subject matter varies each semester. Please consult the Course Schedule for further information.

Repeatability: This course may be repeated for additional credit.

JRN 2810. Special Topics in Journalism. 1 Credit Hour.

Subject matter varies each semester. Please consult the Course Schedule for further information.

Repeatability: This course may be repeated for additional credit.

JRN 3101. Journalism Law and Ethics. 3 Credit Hours.

This course should improve students' writing and critical-thinking skills and help them understand the legal foundation for freedom of speech and press in America. Students will discuss First Amendment cases, and their ethical implications, to better understand how judicial values are linked to the professional lives of journalists and the free-expression rights of citizens.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

JRN 3201. Investigative Reporting. 3 Credit Hours.

Advanced instruction and practice in writing news stories with emphasis on investigative and other in-depth reporting techniques. NOTE: Special authorization required for non-majors.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in JRN 1196.

JRN 3251. Business Writing. 3 Credit Hours.

This course focuses on news reporting and writing about business and finance. Topics of coverage may include reporting on personal finance issues, banking, government economic and regulatory policies, and corporations and other forms of business.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (JRN 1196 or 'Y' in CRJR04)

JRN 3252. Opinion Writing. 3 Credit Hours.

Conceptualizing, researching, and writing effective opinion pieces for the mass media.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (JRN 1196 or 'Y' in CRJR04)

JRN 3253. Health and Environmental Writing. 3 Credit Hours.

Instruction and practice in writing popular science articles for newspapers and magazines. Translation of scientific language, familiarization with science literature, and interviewing scientists.

Course Attributes: SF, SS

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (JRN 1196 or 'Y' in CRJR04)

JRN 3254. International Reporting. 3 Credit Hours.

This course focuses on interpreting and reporting about governments, politics, and cultures outside of the United States and ethnic groups within the United States.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (JRN 1196 or 'Y' in CRJR04)

JRN 3255. Sports Writing. 3 Credit Hours.

Instruction and practice in reporting and writing stories on a variety of sports topics. Traditional play-by-play reporting and locker room interviewing; less traditional sports activities. Students attend sports events and write outside of class.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (JRN 1196 or 'Y' in CRJR04)

JRN 3256. Writing Humor. 3 Credit Hours.

Understanding various forms of humor: wit, satire, parody, and irony. Practical assignments in writing humor.

Repeatability: This course may not be repeated for additional credits.

JRN 3257. Advanced Sports Reporting. 3 Credit Hours.

The goal of this course is to produce off-the-beaten path sports stories in a variety of formats, honing your sports reporting and writing skills. You'll be heading into the surrounding communities and the city to unearth and report on under-reported sports stories. You'll improve your multi-media skills in terms of putting together both audio and video packages, and you'll learn more about writing sports features and longer format pieces.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (JRN 3255 or 'Y' in CRJR08)

JRN 3258. Solutions Journalism. 3 Credit Hours.

This course introduces students to the practice of solutions-oriented reporting, an outcome-focused form of journalism, and assesses its impact on communities and issues.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in JRN 1196.

JRN 3261. Beyond the Lines: Producing Sports Journalism. 3 Credit Hours.

This is an ESPN style feature television course where students will develop long-form audio and video documentaries on various aspects of sports, from the games to the players and communities that support them. The focus is on producing sports personality stories "beyond the field" of individuals and communities that dare to dream, strive to advance and inspire others.

Repeatability: This course may not be repeated for additional credits.

JRN 3263. Travel Writing. 3 Credit Hours.

This course explores international communication, intercultural competence, and the nature of travel (why and how we travel, and what we can learn from it) through a travel writing curriculum.

Repeatability: This course may not be repeated for additional credits.

JRN 3297. Writing Arts Criticism. 3 Credit Hours.

The mission of the course is to explore critical reviewing in many areas, which may include theater, dance, music, film, art, museum exhibitions, books and food. In addition to reading the works of reviewers, students will consider the different dynamics at play in reviewing in each art or discipline, and will go on assignment to write reviews. Students will present their reviews in a writing-workshop setting led by the instructor. By the end of the course students should be able to think about arts and entertainment in ways that lead to solid assessments, and should be able to write clear and organized arts criticism.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (JRN 1196 or 'Y' in CRJR04)

JRN 3301. Magazine Editing. 3 Credit Hours.

This class will cover not only "macro" aspects of the magazine industry, but also the "micro" processes of article acquisitions and editing - how to evaluate query letters, shape a manuscript, work with designers - because those skills constitute the core of what all good editors must be able to do, issue after issue.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in JRN 2301.

JRN 3302. Longform Magazine Writing. 3 Credit Hours.

This class will help students develop story ideas, match those ideas with appropriate markets, write professional query letters and deliver publishable magazine articles. The focus is on longer articles and in-depth reporting. Note: Prior to spring 2017, the course title was "Advanced Magazine Writing."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in JRN 1196.

JRN 3303. Magazine Design. 3 Credit Hours.

This course introduces students to the specifics of magazine design. There will be an emphasis on creating portfolio pieces including table of contents, features, departments, and cover designs. Current trends and historical, cultural, and ethical dimensions of magazine design are also explored. There will be extensive use of desktop publishing and image manipulation software. Some knowledge of InDesign software will be helpful preparation.

Repeatability: This course may not be repeated for additional credits.

JRN 3304. 14th Street Magazine. 3 Credit Hours.

This is an experiential class in the editorial and business aspects of magazine production and distribution. Students write, edit, photograph, and design both print and online versions of a magazine; they also conduct reader research and sell advertising space. Note: Prior to spring 2017, the course title was "Philadelphia People."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in JRN 2301.

JRN 3351. Magazine Fiction Workshop. 3 Credit Hours.

Fiction has been an integral part of magazine publishing since the medium's earliest days. This course teaches students how to write with power both within and beyond the short story form. Emphasis is given to a hands-on, working application of narrative forms and techniques central to both fiction and new literary journalism. Publication of worthy student stories is encouraged. NOTE: Previously titled "Short Story Writing."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (JRN 1196 or 'Y' in CRJR04)

JRN 3352. Ripped from the Headlines. 3 Credit Hours.

In this class we will learn how to use journalistic tools and techniques to craft fiction, where fiction can be in the form of a novel and/or short stories. Students will practice doing the work of an investigative journalist - story generation, reporting, interviewing, and research - but with the end goal of creating a work of fiction instead of a news article. We will study the work of other journalists turned novelists and take inspiration from the world of film, television and theater. Students will also consider how and why fiction is useful when trying to make sense of the events that fill the daily news cycle.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (JRN 1196 or 'Y' in CRJR04)

JRN 3401. Photography. 4 Credit Hours.

An introductory course in digital photography where each student produces a portfolio of photographs based on weekly assignments covering a variety of topics. The course includes small-group field trips, weekly lab sessions focusing on digital darkroom applications and in-class critiques of student work. Historic, contemporary, legal and ethical considerations are also explored. Digital SLR cameras are available for semester-long checkout.

Repeatability: This course may not be repeated for additional credits.

JRN 3402. Photojournalism. 2 Credit Hours.

The practical side of working as a photographer for newspapers, magazines, and wire services as well as freelance. Picture editing and handling.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in JRN 3401.

JRN 3403. Documentary Photography. 3 Credit Hours.

This course will expose students to both the history and practice of documentary photography. This course offers students the opportunity to hone their research, shooting and editing skills and refine their portfolio through documentary projects.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (JRN 3401 or CMST 1111)

JRN 3404. Photography Seminar I. 2 Credit Hours.

First of two seminar courses in the Photography for the Mass Media sequence. Current topics in photography. Participation in a long-term project documenting and presenting the works of various photographers representing a variety of genre. Start-to-finish production of a book, CD version of same, or both. NOTE: Generally taken in the junior year.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in JRN 3401.

JRN 3405. Photography Seminar II. 2 Credit Hours.

Second of two seminar courses in the Photography for the Mass Media sequence. Current topics in photography. Participation in a long-term web-based effort presenting the works of various photographers from earliest times to the present. Start-to-finish production of a book, CD version of same, or both. NOTE: Generally taken in the senior year.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in JRN 3401.

JRN 3451. Photographic Portfolio. 2 Credit Hours.

Production, organization, and presentation of a photographic portfolio.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (JRN 3401 or 'Y' in CRJR06)

JRN 3482. Photography Special Projects. 1 to 4 Credit Hour.

Individual work in areas of special interest including, but not limited to, formal and informal portraiture, nature of photography, underwater photography, medical or scientific photography, or special research in photography.

Repeatability: This course may be repeated for additional credit.

JRN 3501. Radio News Reporting. 3 Credit Hours.

The overall goal of this course is to help develop the technical skills and journalistic acumen necessary for reporting, writing, interviewing, recording, and editing news and news related audio stories. Students will work on storytelling techniques such as voicers, wraps, readers, sound portraits, and audio documentaries.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (JRN 1113 or 'Y' in CRJR02) and (JRN 2501 or 'Y' in CRJR05)

JRN 3502. TV News Reporting. 3 Credit Hours.

The overall goal of this course is to help develop the journalistic acumen and technical skills necessary for reporting, writing, shooting/recording, field producing and editing news and news-related stories for television.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in JRN 1113 and JRN 2501.

JRN 3504. Broadcast News Documentary. 3 Credit Hours.

This course focuses on longer-term journalistic documentaries for broadcast outlets. Students will have the opportunity to develop several enterprise stories over the course of the semester.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in JRN 1113 and JRN 2501.

JRN 3505. Experimental Journalism. 3 Credit Hours.

This course focuses on the evolving forms of broadcast journalism coverage, including blogs, podcasts and mobile media. Students will also create multimedia stories, and explore social media and its journalistic uses.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (JRN 1113 or CMST 1111)

JRN 3506. Broadcast News Producing. 3 Credit Hours.

This course focuses on the behind-the-scenes aspects of pulling a broadcast newscast together. Students will produce several newscasts during the semester. Topics will include stories assignments, newscast structure and pacing, and interaction with reporters and anchors.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in JRN 1113 and JRN 2501.

JRN 3551. Advanced Video Newsgathering. 3 Credit Hours.

This course is designed to teach you advanced video news reporting techniques. You will research, produce, write, shoot, and edit video news stories. You will gain further understanding of field lighting and audio recording, and strengthen your abilities to produce journalistic video narrative.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (JRN 1113 or 'Y' in CRJR02)

JRN 3552. Crossroads: TUTV News Magazine. 3 Credit Hours.

Crossroads is a TV news magazine program for TUTV. Students will produce story packages for multiple episodes of this program on topics which may include profiles of interesting people, political pieces, stories about arts, media and entertainment, or developments in medicine, law or social justice.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in JRN 1113 and JRN 2501.

JRN 3554. A Broader View. 3 Credit Hours.

This is a hands-on production course where students will produce and host the TV public affairs talk show, A Broader View, that will air on TUTV and an individual student-created show that will air live on Blog Talk Radio. Over the course of the semester, students will research topical issues, book relevant guests, produce video and audio segment set-up pieces and serve as hosts of the programs. Emphasis is on interviewing skills. PLEASE NOTE: Prior to taking this course, students should know how to use digital audio and video equipment and edit.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in JRN 1113.

JRN 3556. The Temp: A New Kind of News Show. 3 Credit Hours.

This class will produce a student-driven and student-conceived magazine-format news show about news, politics, lifestyle and entertainment. The presentation will be in the style of Vox and Vice, encouraging outside-the-box thinking to produce topical, edgy stories. In addition to a broadcast on TUTV, The Temp will have a strong online presence, particularly on social media. Enrollment is open to students in all majors. Students rotate through roles as anchor, reporter, producer and social media producer, graphics, camera operator etc. In this way, all students will learn some of the different roles involved in producing a news magazine show.

Repeatability: This course may not be repeated for additional credits.

JRN 3575. Podcasting and Audio Journalism. 3 Credit Hours.

Curious about podcasting? Want to sharpen your audio storytelling and interview skills? In this course we will work on the fundamentals of interviewing, producing and hosting programs, and audio editing. Students will have opportunities to produce podcast content, meet professional podcasters and community storytellers, and get feedback on their work. You will have an opportunity to work both in teams and individually.

Repeatability: This course may not be repeated for additional credits.

JRN 3587. WRTI Radio News Workshop. 3 Credit Hours.

In this course designed for majors focused on radio as a career area, students work in the newsroom at WRTI-FM, Temple's public radio station. Students hold positions as producers, reporters, and anchors, and cover stories alongside local journalists in the nation's fourth largest broadcast market.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in JRN 1113 and JRN 2501.

JRN 3605. Data Journalism. 3 Credit Hours.

In this class, students will learn the skills needed to create visually exciting and thought-provoking online journalism. Topics include data journalism, data analysis, computer-assisted reporting, [painless] coding for journalists, and data visualization. The class is designed for an interdisciplinary group of students interested in writing, editing, visual design, or technology. Student-created projects will influence the path of the class: in a given semester, we may create infographics, investigate current political or economic issues, or develop innovative news apps.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in JRN 1196.

JRN 3696. Philadelphia Neighborhoods. 3 Credit Hours.

An advanced multimedia course examining the production and design of online journalistic content. Topics will include online storytelling, website planning, organization, and production. Students will produce a comprehensive multimedia news website, taking advantage of the convergence of print and broadcast media. Additionally, conceptual issues related to publishing on the Internet will be discussed.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in JRN 1113.

JRN 3700. Journalism Studies Special Topics. 3 Credit Hours.

Subject matter varies each semester. Please consult the Course Schedule for further information.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (JRN 1111, 'Y' in JRN1, or 'Y' in CRJR01)

JRN 3701. Contemporary Issues in Journalism. 3 Credit Hours.

Discussion, research, and analysis of issues of current interest and importance in journalism, public relations, and advertising areas. Examples of topics include coverage of elections by news and advertising, First Amendment issues, and media and the courts. NOTE: Topics announced in advance.

Repeatability: This course may not be repeated for additional credits.

JRN 3702. Race and Racism in the News. 3 Credit Hours.

This online course explores how the media address issues of race and class. Students will develop critical skills and perspectives necessary for journalists and others to understand and report the news in our culturally diverse society. Students will examine the power of the media, how editorial decisions are made and by whom, and will begin to define the roles they can play as consumers or managers of media. Class discussions will take place through various online venues. NOTE: Special authorization required for non-majors.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

JRN 3703. History of Journalism. 3 Credit Hours.

Development of American media with emphasis on freedom of the press, the relationship of journalism to social, economic, and political history, and the growth of magazines, book publishing, radio, television, and the Internet.

Repeatability: This course may not be repeated for additional credits.

JRN 3704. Ethical Issues in Journalism. 3 Credit Hours.

This study of journalism ethics should give students a better understanding of ethical issues confronting journalists and systematic, well-reasoned ways to address those issues. Focus in this course is not on what journalists legally can and cannot do, but instead on how they decide what they should and should not do.

Repeatability: This course may not be repeated for additional credits.

JRN 3705. Gender and American Mass Media. 3 Credit Hours.

This course explores the role of gender in both media reception and media practice. While it focuses primarily on cultural and professional notions about women's roles in American society, it also considers masculine stereotypes in the media world. The course examines the history and current practice of various media, including newspapers, magazines, broadcast news and entertainment shows, advertising, online media, film, and music.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

JRN 3706. Journalism and Globalization. 3 Credit Hours.

An interdisciplinary and comparative approach to mass media systems of the world and their structures and functions. Topics include cultural exchange or invasion, international news flow, freedom of the press, socialist and developing nations' theories of press, mass media, and modernization.

Repeatability: This course may not be repeated for additional credits.

JRN 3707. Visual Communication. 3 Credit Hours.

This course requires students to examine the many roles that photographs, both still and motion images, play in society. Through the analytic study of visual expression (mainly journalistic, advertising and documentary) students will be introduced to the tools necessary to understand all forms of visual communication.

Repeatability: This course may not be repeated for additional credits.

JRN 3708. Newsroom Management. 3 Credit Hours.

This course enables students to develop their critical-thinking and problem-solving skills by working through key supervision and leadership issues facing managers in a typical newsroom setting. Students are provided with case studies, techniques and strategies for addressing team-building issues and the ethical and other concerns surrounding newsroom leadership, whatever the newsroom platform, print, broadcast, or online.

Repeatability: This course may not be repeated for additional credits.

JRN 3709. The Entrepreneurial Journalist. 3 Credit Hours.

With traditional news organizations in crisis, there have never been more opportunities for journalists to become entrepreneurs. This course will explore the future of news, from individual bloggers to digital startups, and how journalists can help shape this future.

Repeatability: This course may not be repeated for additional credits.

JRN 3710. Journalism Studies Special Topics. 3 Credit Hours.

Subject matter varies each semester. Please consult the Course Schedule for further information.

Repeatability: This course may be repeated for additional credit.

JRN 3711. Ethnic and Alternative News Media. 3 Credit Hours.

This course focuses on ethnic, immigrant, and alternative media organizations and the communities and audiences they serve. Topics include: an overview of the cultural histories of ethnic, immigrant and alternative communities; the creation and development of media organizations that serve these communities; the functions of these media organizations; analyses of the ownership, culture, organizational structures, and newsroom operations.

Repeatability: This course may not be repeated for additional credits.

JRN 3712. The Business of Journalism. 3 Credit Hours.

This course examines the evolution of business models to support journalism, exploring not only how those models work but also why they have emerged and how new models are being envisioned and created for the future. By exploring how business models affect journalistic content, practice and audiences, this course prepares students to be more informed citizens as well as more innovative news producers.

Repeatability: This course may not be repeated for additional credits.

JRN 3719. Research Colloquium in Journalism Studies. 3 Credit Hours.

This course will enroll a small group of students interested in spending the semester dedicated to pursuing a research project and under the group supervision of a faculty member. It is analogous to a portfolio-creation course. Students in this course will produce papers for TURF-CreWS as well as regional and national conferences (e.g. Association for Education in Journalism and Mass Communication; Eastern Communication Association; National Communication Association).

Repeatability: This course may not be repeated for additional credits.

JRN 3720. Journalism Studies Special Topics. 3 Credit Hours.

Subject matter varies each semester. Please consult the Course Schedule for further information.

Repeatability: This course may be repeated for additional credit.

JRN 3730. Journalism Studies Special Topics. 3 Credit Hours.

Subject matter varies each semester. Please consult the Course Schedule for further information.

Repeatability: This course may be repeated for additional credit.

JRN 3751. Foreign Studies in Journalism. 3 or 6 Credit Hours.

Written report of research in journalism and mass communication by a student during a trip of at least two weeks abroad. NOTE: Paper must be presented by end of semester following return from trip.

Repeatability: This course may be repeated for additional credit.

JRN 3763. The Influence of Sports Media on Modern Society. 3 Credit Hours.

This course is mandatory for everyone in the Sports Media certificate. It examines how the media interpret the impact of sports on life in America. It serves as a reporting, writing and analytical guide for students in the sports certificate program with an emphasis on understanding and communicating the perspectives of race, ethnicity, gender, geography, age, and class. It features the history of sports from the early days of storytelling and public consumption. Students will study a range of media, from newspapers, radio and TV to the founding of ESPN, blogs, podcasts, advertising, marketing, publicity, and outlets operated by the MLB and NFL. The course will use a variety of demographic perspectives to study how to cover sports managers, business trends, career opportunities, fan groups, ethics, and how certain sports came to dominate American life.

Repeatability: This course may not be repeated for additional credits.

JRN 3764. Race, Ethnicity and Gender Influence on Sports Coverage. 3 Credit Hours.

Students will focus on emersion techniques required to understand the impact that race, ethnic, gender identities and various cultures have on how Americans view sports games, figures and decisions. This course will offer a variety of case studies and discussion projects, as well as writing, broadcast or web assignments dealing with a cross-section of professional and amateur sports.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

JRN 3790. Special Topics in Journalism. 1 Credit Hour.

Subject matter varies each semester. Please consult the Course Schedule for further information.

The course may be taken more than once for credit.

Repeatability: This course may be repeated for additional credit.

JRN 3800. Special Topics in Journalism. 3 Credit Hours.

Subject matter varies each semester. Please consult the Course Schedule for further information.

Repeatability: This course may be repeated for additional credit.

JRN 3801. Business Practices for Writers and Editors. 1 Credit Hour.

This course will introduce students to a number of areas relevant to freelancing as a writer and/or editor. Issues to be covered will include marketing and branding, contracts, taxes, pricing, copyright and more.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (JRN 1111, 'Y' in JRN1, or 'Y' in CRJR01)

JRN 3802. Business Practices for Visual Journalists. 1 Credit Hour.

The goal of this course is to introduce students to the best business practices for running a freelance media business. Topics will include marketing and branding, insurance, taxes, pricing, intellectual property rights and licensing, contracts and more.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (JRN 1111, 'Y' in JRN1, or 'Y' in CRJR01)

JRN 3805. Demo Reel Development. 2 Credit Hours.

This course helps students prepare a reel of their on-camera news stories, a critical part of their portfolio as they seek to enter the field of broadcast journalism. You will produce a professional demo reel and portfolio website while sharpening your shooting and editing skills. Students will work in the classroom and out in the field. Reporter standup shoots and coaching will also be included. This class should be your "last stop" before applying for a job at a television news station.

Repeatability: This course may not be repeated for additional credits.

JRN 3810. Special Topics in Journalism. 3 Credit Hours.

Subject matter varies each semester. Please consult the Course Schedule for further information.

Repeatability: This course may be repeated for additional credit.

JRN 3820. Special Topics in Journalism. 3 Credit Hours.

Subject matter varies each semester. Please consult the Course Schedule for further information.

Repeatability: This course may be repeated for additional credit.

JRN 3830. Special Topics in Journalism. 3 Credit Hours.

Subject matter varies each semester. Please consult the Course Schedule for further information.

Repeatability: This course may be repeated for additional credit.

JRN 3840. Special Topics in Journalism. 2 Credit Hours.

Subject matter not covered by regular departmental course offerings. Courses are sometimes taught by distinguished professionals or visiting faculty. NOTE: Topics announced in advance.

Repeatability: This course may be repeated for additional credit.

JRN 3850. Special Topics in Journalism. 3 Credit Hours.

Subject matter not covered by regular departmental course offerings. Courses are sometimes taught by distinguished professionals or visiting faculty. NOTE: Topics announced in advance.

Repeatability: This course may be repeated for additional credit.

JRN 3860. Special Topics in Journalism. 4 Credit Hours.

Subject matter not covered by regular departmental course offerings. Courses are sometimes taught by distinguished professionals or visiting faculty. NOTE: Topics announced in advance.

Repeatability: This course may be repeated for additional credit.

JRN 3870. Special Topics in Journalism. 3 Credit Hours.

Subject matter varies each semester. Please consult the Course Schedule for further information.

Repeatability: This course may be repeated for additional credit.

JRN 3880. Special Topics in Journalism. 1 Credit Hour.

Subject matter not covered by regular departmental course offerings.

Repeatability: This course may be repeated for additional credit.

JRN 3882. Special Projects. 1 to 4 Credit Hour.

A special course of study in a particular area of Journalism. NOTE: Candidates should submit a detailed project outline prior to registration.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Journalism.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

JRN 3885. Internship. 1 to 3 Credit Hour.

Organized professional work, under supervision, on selected media or news organizations. NOTE: Candidates should have a 3.0 GPA. For Journalism majors only.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

JRN 3887. High School Journalism Workshop. 3 Credit Hours.

This course allows Temple students to work directly in Philadelphia high schools, helping students there develop their own journalistic products. Students will work with a high school teacher and local journalists in leading a journalism club. The course will meet once a week at Temple, and twice a week in an area high school. Students will examine issues facing public education, as well as media coverage of education issues.

Repeatability: This course may be repeated for additional credit.

JRN 3890. Special Topics in Journalism. 1 Credit Hour.

Subject matter not covered by regular departmental course offerings.

Repeatability: This course may be repeated for additional credit.

JRN 3900. Honors Special Topics in Journalism. 3 Credit Hours.

Subject matter not covered by regular departmental course offerings. Courses are sometimes taught by distinguished professionals or visiting faculty. NOTE: Topics announced in advance. This is an Honors course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

JRN 3901. Honors: Comics Journalism. 3 Credit Hours.

This course examines a new form of journalism that is quickly edging its way into broader awareness: comics journalism. This form marries nonfiction narratives (a genre pioneered by magazines) with sequential art to deliver important stories in a compelling way, a way that uniquely engages the reader's imagination. The new form is a natural fit for intensely personal stories.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

JRN 3902. Honors: Media, Memory, and Social Change. 3 Credit Hours.

"Honors: Media, Memory, and Social Change" is an Honors seminar on the role of media in the construction of "social memory." Our shared ideas about the past inform media content and production, allowing new voices to enter the public conversation and creating a sense of continuity between past and present activism. We will focus especially on how historical narratives function as foundations for social movements -- for instance, in the Black Lives Matter movement's reuses of iconic civil-rights images, in news coverage and political rhetoric about immigration and ethnicity, and in resistance to misogyny and violence, such as the #metoo and March for Our Lives campaigns, which gained support through a blend of social and mainstream media. We'll also take popular culture seriously, analyzing how "social-impact" advertising campaigns, celebrity tributes, and several new television shows and films tell the stories of "pioneers" to mobilize past struggles for present purposes. Finally, we'll explore the role that media play in everyday life, in ways that construct future memory of our families, our friends, and the places we live.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

JRN 3905. Honors: Gender and American Mass Media. 3 Credit Hours.

In this course, we'll study how gender ideals and identity are expressed in media, including news coverage, magazines, television, film, advertising, social media, and other forms of mediated communication. We also will learn about how gender affects people's experiences working in media industries. Our thematic focuses will range from political campaigns to popular music, from fashion to sports, and from reality TV stars to Supreme Court justices. Across all of those themes, we will focus on the role of gender in intersectional social change. There will be a mix of types and formats of assessment, and you'll have some choice about which assignments you do and how you complete them. Most of these involve class participation (synchronously and asynchronously), your responses to weekly readings (or listenings), and a series of case-study assignments. You also will complete an individual research project or creative work that you design.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

JRN 3908. Honors True Stories: Narrative Nonfiction Journalism. 3 Credit Hours.

This is a course in narrative nonfiction, which employs the techniques of fiction to tell true stories. Students read some of the best nonfiction of our time, by such writers as Joan Didion, Gay Talese, Truman Capote, David Foster Wallace, and Katherine Boo. Students also view a documentary and listen to podcasts.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

JRN 4173. Philadelphia Neighborhoods II: Audio Visual Storytelling. 4 Credit Hours.

The goal of this course is to deepen students' grounding in audio and visual journalism skills and give them opportunities to produce professional-quality work. Students will have hands-on opportunities to contribute to Philadelphia Neighborhoods on TV (PNTV), a Philadelphia Neighborhoods podcast, as well as additional online, social, and broadcast platforms via media partners. Students will produce work using a range of formats based on their interests. These may include: short video documentaries (1-3 min.) and news reports, long form video documentaries, and audio news reports, features, and documentaries. Students will also learn industry standards and best practices for television, radio, online, social media and podcast program production - as well as strategies for distribution of materials on social media.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in JRN 2101 and JRN 3601.

JRN 4174. Philadelphia Neighborhoods II: The Magazine. 4 Credit Hours.

This is a hands-on, semester-long project. In it, you will learn the interrelationship of all aspects of magazine editing and production, all the way through to the printing process. You will apply everything you have learned in lower-level magazine courses, including Introduction to Magazines, Magazine Article Writing, and Magazine Editing, as well as more specialized instruction from Publication Design, Innovation and Design, Photography and multimedia disciplines. The project is, simply, the publication of an ink-on-paper magazine and the iterations in digital and social media that are now a critical part of what the magazine industry itself terms "magazine media." The publication will be conceived, written, designed, edited and photographed entirely by students. Only the name is dictated in advance.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in JRN 2101 and JRN 3601.

JRN 4175. Philadelphia Neighborhoods II: Data, Development and Design. 4 Credit Hours.

This capstone course enables students to demonstrate their mastery of multimedia and immersive storytelling. During the semester, you will produce a significant piece (or pieces) of journalism utilizing a variety of media: text, images, video, data, graphics, interactives, etc. This could be one large project or a series of smaller pieces. The only requirement is that the student must utilize nontraditional story forms and methods in the process of reporting and/or publishing their project.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in JRN 2101 and JRN 3601.

JRN 4196. Philadelphia Neighborhoods Capstone: News Beat. 4 Credit Hours.

Consider this course a hands-on lab and field experience centered on the promises and pitfalls of a multimedia newsroom and urban news coverage. The course incorporates and builds upon the skills you acquired in previous courses, such as writing, video production, photography, data visualization, etc. Furthermore, the class is a functioning news operation - PhiladelphiaNeighborhoods.com. The stories you produce through your assignments for the class may be published on the site, but that is not a guarantee. The work must meet and adhere to journalistic standards and norms. NOTE: For Journalism majors only. Special authorization required for all. Prior to Fall 2010, the course title was "Multimedia Urban Reporting Lab." Prior to Fall 2019, the course title was "PhiladelphiaNeighborhoods.com."

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (JRN 3696 or JRN 3601)

JRN 4197. Philadelphia Neighborhoods II: The Magazine. 4 Credit Hours.

This is a hands-on, semester-long project. In it, you will learn the interrelationship of all aspects of magazine editing and production, all the way through to the printing process. You will apply everything you have learned in lower-level magazine courses, including Introduction to Magazines, Magazine Article Writing, and Magazine Editing, as well as more specialized instruction from Publication Design, Innovation and Design, Photography and multimedia disciplines. The project is, simply, the publication of an ink-on-paper magazine and the iterations in digital and social media that are now a critical part of what the magazine industry itself terms "magazine media." The publication will be conceived, written, designed, edited and photographed entirely by students. Only the name is dictated in advance.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in JRN 3696.

JRN 4203. Communicating Sports Statistics and Data. 3 Credit Hours.

This course is specifically designed for students who are completing the Klein College Sports Media certificate, but it is open to all undergraduate students. Students will learn how to understand, evaluate, and criticize sports statistics and data related to sports issues and game coverage. Examples will come from sports websites, social media, newspapers, magazines, broadcasts, and scholarly journals. The goal is to learn how to distinguish between informative and misleading uses of statistics and data in the popular media, and how to make informed decisions on relating information.

Repeatability: This course may not be repeated for additional credits.

JRN 4571. International Studies in Media and Communication. 1 to 6 Credit Hour.

This course is an immersive study of media and communication institutions, practices, norms, societal, governmental, and legal structures in a culture outside of the U.S. that is conducted during a Klein GO! program. Klein faculty lead students, while living abroad, in media consumption, in comparative analysis and evaluation of media and non-mediated communication, in interaction with local media and communication leaders in the program location. The specific aspects of media and communication to be covered will vary from city to city, and semester to semester, depending on the events of the day. Available only to student participating in a Klein GO! Program.

Repeatability: This course may be repeated for additional credit.

JRN 4596. Broadcast Journalism Practicum. 4 Credit Hours.

This practicum exposes students to the skills and protocols required to conceptualize, produce and deliver television news. It is an intensive, hands-on production course simulating a newsroom operation in which students will learn to research and propose story ideas, conduct interviews, write, report and edit news stories and fill control room and studio positions including producer, director, audio, computer graphics, floor manager, studio camera operator and web producer. Students produce a weekly broadcast news show, Temple Update, created in cooperation with student volunteers. Note: Digital video editing is a skill students should know prior to taking this course. They should also be familiar with digital video cameras, tripods, and microphones for field production. Prior volunteer experience with Temple Update is strongly recommended.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in JRN 1113 and JRN 2501.

JRN 4597. Sports Production Practicum. 4 Credit Hours.

This Sports Update capstone class is a specialized, intensive hands-on production course for students interested in a career in the writing, producing, and directing of sports programming. Students will experience the real-world feel of a real sports programming environment that includes researching, writing and reporting, shooting, editing, producing and directing. By creating a weekly sports newscast aimed at informing viewers of important sports news, with an emphasis on the local college teams, including Temple, students learn, firsthand, the realities of enterprising their own stories, working postgame interviews, handling deadline pressure and writing in the clear and unique style specifically required to communicate effectively in the sports world.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in JRN 1113 and JRN 2501.

Kinesiology (KINS)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

KINS 1000. Special Topics in Fitness. 1 or 2 Credit Hour.

The KPAP Special Topics courses are designed to educate students on how to become, and stay, physically fit through proper fitness and health related practices. This includes physical exercise through the exposure of, and instruction in, lifestyle based physical movement. Student learning outcomes include learning, developing and demonstrating the components of health-related fitness skills, while participating in a safe and healthy environment. The components of health-related fitness include muscular strength/endurance, aerobic fitness, flexibility and body composition. Course topics vary from one semester to another and may include topics such as: advanced yoga, bodyweight training, advanced Pilates, dance and suspension training. Please contact the KPAP Director for upcoming course offerings.

Repeatability: This course may be repeated for additional credit.

KINS 1001. Cardiovascular Fitness for a Healthy Lifestyle. 2 Credit Hours.

Cardiovascular Fitness for a Healthy Lifestyle is a course focused on the promotion of health through physical activity. Physical activity is defined as any bodily movement that results in energy expenditure. Through activities designed for the development and maintenance of the circulatory and respiratory systems aerobic capacity, participants engage in activities that increase muscular strength and flexibility through exercise. Additionally, participants will acquire information on developing and assessing aerobic fitness and the benefits of regular exercise on combating cardiovascular risk factors.

Repeatability: This course may not be repeated for additional credits.

KINS 1002. ZUMBA from Around the World. 2 Credit Hours.

ZUMBA is a course focused on the promotion of aerobic dance and fitness through physical activity. Designed for the development and maintenance of aerobic capacity, participants engage in activities that increase muscular strength and flexibility. Advanced practical knowledge on planning, choreography, skill building, physical assessment, and health and nutrition from a global perspective will be explored. Additionally, the physiological and psychological benefits of aerobic fitness and physical activity through aerobic fitness and dance will be investigated.

Repeatability: This course may not be repeated for additional credits.

KINS 1003. Adventure Climbing I. 2 Credit Hours.

This course focuses on the physical, cognitive, and social skills necessary to safely participate in climbing at ropes courses and related settings for a lifetime. Particular areas of emphasis include: safety and spotting, climbing equipment, knot tying, Prusik climbing, rappelling, and belaying. Psychological skills training and values of the activity are included.

Repeatability: This course may not be repeated for additional credits.

KINS 1005. Aikido I. 2 Credit Hours.

This course introduces the art of self-defense based on non-resistance rather than strength. No attempt is made to stop attacks in Aikido; they are met and guided in a way that causes attackers to be thrown by the directional force of their own attack. Physical and psychological preparation and values of the activity are included.

Repeatability: This course may not be repeated for additional credits.

KINS 1006. Aikido II. 2 Credit Hours.

This course advances the basic skills learned in beginning Aikido to include the use of weapons and the history and philosophy of self-defense. Physical and psychological preparation and values of the activity are included.

Repeatability: This course may not be repeated for additional credits.

KINS 1007. Aqua Aerobics I. 2 Credit Hours.

This course deals with the theory and practice of aerobics using the water as the exercise environment. The course leads to the improvement of cardio-respiratory fitness and the knowledge and skills for developing and maintaining fitness using the water as the exercise medium.

Repeatability: This course may not be repeated for additional credits.

KINS 1009. Backpacking and Camping I. 2 Credit Hours.

This course introduces the techniques of low impact, all-weather backpacking and camping, including choosing equipment, planning trips, finding the way, cooking, and survival. Class meetings are rescheduled into weekend trips after initial instruction and planning meetings on campus. Physical and psychological preparation and values of the activity are included.

Repeatability: This course may not be repeated for additional credits.

KINS 1012. Badminton I. 2 Credit Hours.

This course introduces the skills, strategies, etiquette, knowledge of the rules and how to select proper equipment, as well as opportunities for participation in badminton. Physical and psychological preparation and values of the activity are included.

Repeatability: This course may not be repeated for additional credits.

KINS 1016. Fencing I. 2 Credit Hours.

This course introduces fencing for form and/or competition. It includes defensive and offensive strategies; care and selection of proper equipment; rules, officiating, injury prevention, and chivalry. Physical and psychological preparation and values of the activity are included.

Repeatability: This course may not be repeated for additional credits.

KINS 1018. Fitness for Life. 2 Credit Hours.

This course introduces the principles and activities for the development of optimal levels of cardiovascular endurance, muscular strength and endurance, flexibility, body weight, and body composition. Assessment of fitness level, development of an individual activity program commensurate with personal goals, and current research findings concerning exercise and nutrition are included. Physical and psychological preparation and values of the activity are included.

Repeatability: This course may not be repeated for additional credits.

KINS 1019. Golf I. 2 Credit Hours.

This course introduces the skills, strategies, etiquette, knowledge of the rules, and how to select proper equipment, as well as opportunities for participation in golf. Physical and psychological preparation and values of the sport are included. NOTE: Transport costs and greens fees are the responsibility of the student.

Repeatability: This course may not be repeated for additional credits.

KINS 1021. Golf II. 2 Credit Hours.

This course advances the skills learned in Golf I and is intended for the intermediate golfer wishing to enhance their knowledge, skills, and abilities on the golf course. Physical training and psychological skills training will also be included. NOTE: Transportation and greens fees must be supplied by the student.

Repeatability: This course may not be repeated for additional credits.

KINS 1022. Gymnastics I. 2 Credit Hours.

This course introduces the skills of floor exercise, tumbling, trampoline, and vaulting (for men and women); rings, horizontal bar, parallel bars, and side horse (for men); balance beam and uneven bars (for women). Physical and psychological preparation and values of the sport are included.

Repeatability: This course may not be repeated for additional credits.

KINS 1024. Judo I. 2 Credit Hours.

This course introduces the principles and techniques of falling, throwing, grappling, and the rules and customs of judo as a sport. Physical and psychological preparation and values of the activity are included.

Repeatability: This course may not be repeated for additional credits.

KINS 1026. Karate I. 2 Credit Hours.

This course introduces the principles and techniques of striking, kicking, punching, blocking, the code of ethics of karate, and the rules of competition. Physical and psychological preparation and values of the activity are included.

Repeatability: This course may not be repeated for additional credits.

KINS 1027. Karate II. 2 Credit Hours.

This course advances the basic skills learned in beginning karate. New striking and kicking techniques are introduced and more advanced kata (forms) are taught. Emphasis includes: concentrating focus and power; pro per distancing in partner drills; moving, shifting and pivoting the body; and combining techniques smoothly and powerfully. Physical and psychological preparation and values of the activity are included.

Repeatability: This course may not be repeated for additional credits.

KINS 1028. Lifeguard Training. 3 Credit Hours.

This course introduces the skills and knowledge in water safety, rescue skills, and pool operation and management skills. Physical and psychological preparation and values of participation in the activity are included. NOTE: This course can lead to ARC Lifeguard Certification. Certification fee required.

Repeatability: This course may not be repeated for additional credits.

KINS 1029. Martial Arts I: Capoeira Angola (Brazilian Martial Arts). 2 Credit Hours.

Capoeira Angola can be described visually as an art, dance, fight, and game, which incorporates corporal expression in diverse movements with music, instruments, and song. It is a dialog of bodies in motion, questions and answers through bodily improvisation to musical rhythms that are unique to its appearance. To gain an authentic understanding of Capoeira's philosophy and practice, students will regularly engage in intense physical training and music instruction, while also discussing books, articles, and films that illuminate the cultural legacy of Africa and Brazil. Students will immerse themselves in a living lineage of tradition, history, and legendary masters. Special attention will be paid to the lineage of Mestre Pastinha, regarded by many as the guardian of Capoeira Angola.

Repeatability: This course may not be repeated for additional credits.

KINS 1031. Aquatics Workshop I. 1 Credit Hour.

This workshop is designed to enable students to develop the knowledge and skills needed to participate at a beginning level in aquatic activities: water safety, skin diving, swimming, synchronized swimming, etc. NOTE: For a list of activities offered each semester, contact the workshop coordinator in the Department of Kinesiology in Pearson Hall. Kinesiology 1031 begins on the first Tuesday of each semester and runs for the first seven weeks of the semester.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Kinesiology.

Repeatability: This course may be repeated for additional credit.

KINS 1032. Fitness Workshop I. 1 Credit Hour.

This workshop is designed to enable students to develop the knowledge and skills needed to participate at a beginning level in fitness activities: weight training, aerobics, walking, etc. NOTE: For a list of activities offered each semester, contact the workshop coordinator in the Department of Kinesiology in Pearson Hall. Kinesiology 1032 begins on the first Tuesday of each semester and runs for the first seven weeks of the semester.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Kinesiology.

Repeatability: This course may be repeated for additional credit.

KINS 1033. Lifestyle Workshop I. 1 Credit Hour.

This workshop is designed to enable students to develop the knowledge and skills needed to participate at a beginning level in lifestyle activities: volleyball, badminton, tennis, yoga, etc. NOTE: For a list of activities offered each semester, contact the workshop coordinator in the Department of Kinesiology in Pearson Hall. Kinesiology 1033 begins on the first Tuesday of each semester and runs for the first seven weeks of the semester.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Kinesiology.

Repeatability: This course may be repeated for additional credit.

KINS 1034. Survival Workshop I. 1 Credit Hour.

This workshop is designed to enable students to develop the knowledge and skills needed to participate at a beginning level in survival activities: adventure climbing, personal defense, fencing, etc. NOTE: For a list of activities offered each semester, contact the workshop coordinator in the Department of Kinesiology in Pearson Hall. Kinesiology 1034 begins on the first Tuesday of each semester and runs for the first seven weeks of the semester.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Kinesiology.

Repeatability: This course may be repeated for additional credit.

KINS 1036. Personal Defense for Women. 2 Credit Hours.

This course introduces a five-stage approach to personal protection (awareness, avoidance, prevention, physical action, and follow up). Physical defensive skills involve "live" simulations while focusing on the concerns and needs of women. Physical and psychological preparation and values of the activity are included.

Repeatability: This course may not be repeated for additional credits.

KINS 1043. Lifestyle Workshop II. 1 Credit Hour.

This workshop is designed to enable students to develop the knowledge and skills needed to participate at a beginning level in lifestyle activities: volleyball, badminton, tennis, yoga, etc. NOTE: For a list of activities offered each semester, contact the workshop coordinator in the Department of Kinesiology in Pearson Hall. Kinesiology 1043 begins on the eighth Tuesday of each semester and runs for the second seven weeks of the semester.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Kinesiology.

Repeatability: This course may be repeated for additional credit.

KINS 1044. Survival Workshop II. 1 Credit Hour.

This workshop is designed to enable students to develop the knowledge and skills needed to participate at a beginning level in survival activities: adventure climbing, personal defense, fencing, etc. NOTE: For a list of activities offered each semester, contact the workshop coordinator in the Department of Kinesiology in Pearson Hall. Kinesiology 1044 begins on the eighth Tuesday of each semester and runs for the second seven weeks of the semester.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Kinesiology.

Repeatability: This course may be repeated for additional credit.

KINS 1045. Pilates I. 2 Credit Hours.

The Pilates I course introduces the knowledge and skills necessary to plan and participate in a Pilates driven fitness program. Discussion and experiential learning of various types of exercises based on the Pilates method are discussed. Students will gain knowledge of the principles of physical fitness and exercise. Students will develop and obtain the ability to apply these skills in a safe, effective and responsible manner. Pilates, originally developed by Joseph Pilates, is designed to help strengthen and condition muscles. This mind-body exercise helps improve posture, flexibility, balance and enhance overall well-being.

Repeatability: This course may not be repeated for additional credits.

KINS 1046. SCUBA Diving I. 3 Credit Hours.

This course introduces the skills and knowledge necessary to develop into a competent, safe, and responsible scuba diver capable of making independent decisions. Specifically, students will develop the ability to recognize and implement alternative solutions for coping with stressful problems. Equipment is provided for campus coursework. Physical and psychological preparation and values of participation in the activity are included. NOTE: Lab fee required. Students can earn NAUI Certification by signing up for an open water trip. (The student at the end of the course must rent SCUBA equipment.)

Repeatability: This course may not be repeated for additional credits.

KINS 1048. Swimming for the Non-Swimmer. 2 Credit Hours.

This course introduces students to basic personal aquatic safety skills for the purpose of developing confidence in the water. Physical and psychological preparation and values of participation in the activity are included. NOTE: For students who are not comfortable in shallow water or with their faces in the water.

Repeatability: This course may not be repeated for additional credits.

KINS 1049. Swimming I. 2 Credit Hours.

This course introduces students to basic aquatic skills to assure confidence and mobility in aquatic activities as well as the development of confidence in deep water. Physical and psychological preparation and values of participation in the activity are included. NOTE: For students with little or no swimming ability.

Repeatability: This course may not be repeated for additional credits.

KINS 1051. Swimming II. 2 Credit Hours.

This course advances the skills learned in Swimming I and focuses on stroke improvement and swimming endurance. Physical and psychological preparation and values of participation in the activity are included.

Repeatability: This course may not be repeated for additional credits.

KINS 1052. Tae Kwon Do I. 2 Credit Hours.

This course introduces the skills and knowledge for using the hands, arms, legs, and feet to attack and defend oneself; breathing and muscle control; competitive rules; the ranking system; safety; fitness; and history, values, and etiquette. Tae Kwon Do is a Korean form of martial arts and is taught from a traditional perspective and supplemented by modern scientific principles. Physical and psychological preparation and values of participation in the activity are included.

Repeatability: This course may not be repeated for additional credits.

KINS 1053. Tae Kwon Do II. 2 Credit Hours.

This course advances the skills learned in Tae Kwon Do I and applies them in two areas. First, students will learn how to design and teach a complete martial arts class that will focus the material in a manner easily understood by students while at the same time keeping students stimulated, interested, and challenged. Second, students will be able to design a training regimen for martial arts students interested in competing in Olympic-style sport martial arts. Physical and psychological preparation and values of participation in the activity are included.

Repeatability: This course may not be repeated for additional credits.

KINS 1054. Tennis I. 2 Credit Hours.

This course provides opportunities to develop the skills, strategies, etiquette, knowledge of the rules and how to select proper equipment, as well as opportunities for participation in tennis. Physical and psychological preparation and values of the sport are included. Emphasis is on preparing students to be lifelong participants in tennis.

Repeatability: This course may not be repeated for additional credits.

KINS 1055. Tennis II. 2 Credit Hours.

This course advances the skills learned in Tennis I through the refinement of skills and techniques and by developing more sophisticated skills and strategies in tennis. Physical and psychological preparation and values of participation in the activity are included.

Repeatability: This course may not be repeated for additional credits.

KINS 1056. Volleyball I. 2 Credit Hours.

This course introduces the skills, strategies, etiquette, knowledge of the rules, and how to select proper equipment, as well as opportunities for participation in volleyball. Physical and psychological preparation and values of participation in the activity are included.

Repeatability: This course may not be repeated for additional credits.

KINS 1058. Walking/Jogging/Running I. 2 Credit Hours.

This course focuses on the physical, cognitive, and social skills necessary to safely participate in walking and jogging for a lifetime. Areas of emphasis include, but are not limited to, site selection, safety, equipment, heart rate and perceived exertion, different methods of training, fitness principles, and/or record keeping.

Repeatability: This course may not be repeated for additional credits.

KINS 1059. Yin Yoga: The Other Half of Yoga. 2 Credit Hours.

Yin Yoga is a complementary yoga practice to the more dynamic vinyasa (Yang) style that is predominant in today's western culture. These styles such as Bikram or Astanga are geared towards strengthening and stretching the muscles through rhythmic, flowing, and repetitive movements resulting in increased muscle strength and flexibility, and improved cardiovascular fitness. Yin Yoga is "the other half of yoga" with an emphasis on long-held passive stresses of the deeper connective tissues. A deceptively simple practice, yin yoga promotes the transformation of an asana (posture) into a static form where it is held, often with support of blocks and bolsters, anywhere from three to eight minutes, allowing the deep fascia that surrounds and interweaves muscles to be therapeutically and gently stretched and made more pliable resulting in a deeply relaxing practice preparing the mind and the body for a deeper experience of meditation. This course will be a combination of yin yoga and vinyasa flow practices.

Repeatability: This course may not be repeated for additional credits.

KINS 1061. Water Safety Instructor. 3 Credit Hours.

This course introduces skills in teaching aquatics through formal training in the American Red Cross methods of teaching the following types of aquatic programs: Adapted, Preschool, Competitive, Springboard Diving, Learn to Swim, and Water Safety. Physical and psychological preparation and values of participation in the activity are included.

Repeatability: This course may not be repeated for additional credits.

KINS 1062. Weight Training I. 2 Credit Hours.

This course introduces the knowledge and skills needed to train with weights for sport, recreation, health, and fitness. Muscular contraction, overload, specificity of training, progression, and various types of exercise and programs are taught. Students learn to develop and participate in personal weight training programs. Physical and psychological preparation and values of the activity are included.

Repeatability: This course may not be repeated for additional credits.

KINS 1063. Weight Training II. 2 Credit Hours.

This course furthers the knowledge and skills needed to train with weights for sport, recreation, health and fitness. Advanced forms of muscular contraction, overload, specificity of training, progression, and various types of exercise and programs are taught. Students further develop their ability to participate in personal weight training programs at more advanced levels. Psychological preparation and values of activity are included.

Repeatability: This course may not be repeated for additional credits.

KINS 1064. Yoga I. 2 Credit Hours.

This course introduces the principles of yoga for developing fitness in the individual as a whole and for the reduction of stress. The concept of body image and developing the fundamental skills for making yoga a safe, daily practice is included. Physical and psychological preparation and values of the activity are included.

Repeatability: This course may not be repeated for additional credits.

KINS 1107. Bodyweight Training. 2 Credit Hours.

Bodyweight Training is an introductory course of progressive resistance exercise where students learn effective exercises, from simple to advanced, using your own body weight, biomechanics and simple to find items around your living environment. Muscular strength and muscular endurance will be studied, along with muscular structure and muscular function. Training techniques such as overload principle, specificity of training, progression, and various types of exercise training programs are taught. Students will develop personal goals for a personal bodyweight training program, and learn how to participate in and enjoy lifelong muscular endurance activities. Students will also examine the psychological preparation and values that accompany weight training. Students will apply these skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

KINS 1114. Advanced Yoga. 2 Credit Hours.

The Advanced Yoga course expands upon the principles of yoga introduced in KINS 1064 Yoga I and translates the knowledge from individual to instructional. This course will take the foundations, history and movements of yoga as it pertains to individual practice and direct students toward certification as a yoga instructor. The students in this course will learn ethics of yoga teaching, skill of sequencing, practice hours teaching poses, instructional methods, and classroom management. Anatomy, physiology, motor development and biomechanics are expanded from the basic principles in Yoga I. Individual practice and teaching practice will include asana (posture), pranayama (breathing), and meditation sometimes led by the instructor and sometimes by fellow students.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in KINS 1064.

KINS 1139. Pickleball. 2 Credit Hours.

Pickleball is a racquet/paddle sport that combines the elements of tennis, badminton and ping-pong. The course introduces the skills, strategies, etiquette, knowledge of the rules and how to select proper equipment, as well as opportunities for participation in Pickleball. Physical and psychological preparation and values of the activity are included. Students will apply skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

KINS 1152. Soccer. 2 Credit Hours.

This course introduces students to the playing skills, strategies, history, etiquette, and rules necessary for participation in soccer as a lifetime recreational sport. Physical, psychosocial factors and values of participation in the activity are included. Students will apply skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

KINS 1153. Basketball. 2 Credit Hours.

This course introduces the skills, strategies, etiquette, knowledge of the rules, and how to prepare for opportunities for participation in basketball as a lifetime recreational sport. Physical and psychological preparation and values of participation in the activity are included. Students will apply skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

KINS 1201. Introduction to Kinesiology in Public Health. 3 Credit Hours.

Introduction to Kinesiology in Public Health provides students with foundational knowledge about the discipline of Kinesiology within public health, and how Kinesiology serves society through the work of professionals who help people reap the benefits of physical activity to live healthy and fulfilling lives. The main topics of the course include: (a) an overview of the scientific basis of Kinesiology; (b) benefits of physical activity - physically, intellectually, socially, emotionally, and spiritually; (c) Kinesiology's role in public health, particularly in relation to addressing the major public health issue of physical inactivity; (d) primary approaches to promoting physical activity at the individual level (provider-to-client/patient) and population level (community-based); and (e) professional practice in Kinesiology, including career pathways in the fields of physical activity, health promotion, and fitness/wellness. The aim of the course is to expose students to how practitioners and researchers trained in Kinesiology work collaboratively with colleagues from other disciplines to promote the physical activity, health, and well-being of clients.

Repeatability: This course may not be repeated for additional credits.

KINS 1203. Introduction to Exercise and Sport Science. 3 Credit Hours.

The course explores in detail the relationship between physical activity and health. It also examines roles and responsibilities of the health-fitness specialist and the exercise specialist as defined by the American College of Sports Medicine. This course serves as an introduction of the professional applications in Exercise and Sport Science to include fitness promotion, preventative (wellness), and rehabilitative (clinical) exercise programming. The student will be encouraged to investigate the nature and scope of the health-fitness professional, to define applications of the physiology of exercise, and to integrate the concepts into their personal health-fitness, or exercise programs.

Repeatability: This course may not be repeated for additional credits.

KINS 1221. Principles of Anatomy and Physiology I. 3 Credit Hours.

Kinesiology 1221 is the first in a two course sequence dealing with the structure and functional systems of the human body. Emphasis is placed upon systems integration as well as the manner in which organ systems undergo homeostatic regulation. This course considers general body organization and the skeletal, muscular, nervous, and endocrine systems. NOTE: To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor. This course is not equivalent to Kinesiology 1223 (Anatomy and Physiology with Lab) and cannot be used to replace the grade earned in Kinesiology 1223.

Repeatability: This course may not be repeated for additional credits.

KINS 1222. Principles of Anatomy and Physiology II. 3 Credit Hours.

Kinesiology 1222 is the second in a two course sequence dealing with the structure and functional systems of the human body. Emphasis is placed upon systems integration as well as the manner in which organ systems undergo homeostatic regulation. This course considers the cardiovascular, respiratory, lymphatic, and reproductive systems to include nutrition, metabolism, and electrolyte balance. NOTE: To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor. This course is not equivalent to Kinesiology 1224 (Anatomy and Physiology with Lab II) and cannot be used to replace the grade earned in Kinesiology 1224.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in KINS 1221.

KINS 1223. Human Anatomy and Physiology I. 4 Credit Hours.

This course is the first of a two-course sequence dealing with the anatomical and functional relationships of the human body. Emphasis is placed on systems integration leading to an understanding of the functions of the human organism. Kinesiology 1223 covers basic structure and function of the body (cells and tissues, organs, systems) through detailed investigations of the skeletal, muscular, and nervous systems. NOTE: To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor. This course is not equivalent to Kinesiology 1221 (Principles of Anatomy and Physiology I) and cannot be used to replace the grade earned in Kinesiology 1221.

Course Attributes: SA

Repeatability: This course may not be repeated for additional credits.

KINS 1224. Human Anatomy and Physiology II. 4 Credit Hours.

This course is the second in a two-course sequence dealing with the anatomical and functional relationships of the human body. Emphasis is placed on systems integration leading to an understanding of the functions of the human organism through detailed investigations of the endocrine, circulatory, digestive, urinary, and reproductive systems. NOTE: (1) Lab fee required. (2) To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor. This course is not equivalent to Kinesiology 1222 (Principles of Anatomy and Physiology II) and cannot be used to replace the grade earned in Kinesiology 1222.

Course Attributes: SB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in KINS 1223.

KINS 1225. General Human Anatomy & Physiology. 3 Credit Hours.

The purpose of this course is to provide an overview of the human body's general organization; and integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive systems. NOTE: This course is for Social Work majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Social Work, Social Work - Undergraduate.

Repeatability: This course may not be repeated for additional credits.

KINS 1923. Honors Anatomy and Physiology I. 4 Credit Hours.

Kinesiology 1923 is the first of two courses dealing with the anatomical and functional relationships of the human body. As future clinicians and allied health professionals, students will focus on the integration of body systems leading to an understanding of the human body. Foundational knowledge about a healthy human organism will be introduced along with common human disease processes in order to challenge students to develop analytical skills and to further their understanding of the material. This first course deals specifically with the general organization of the body and the integumentary, skeletal, muscular, and nervous systems. The laboratory section of this course will involve the examination of models and the dissection of cadavers, along with other activities. NOTE: To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

KINS 2001. Social Determinants of Health and Physical Activity. 3 Credit Hours.

Social Determinants of Health (SDOH) are defined as the complex circumstances in which individuals are born and live that impact their health. They include political, socioeconomic, and cultural constructs, as well as access to healthcare and education systems, safe environmental conditions, well-designed neighborhoods, and availability of healthful food. Many issues pertaining to physical activity, nutrition, and other preventive health behaviors can be addressed through examining the SDOH that influence access to, and participation in, health behaviors. This course will provide students with a critical foundation in SDOH, health equity and social justice knowledge so they may apply this lens to future course work and in professional settings.

Repeatability: This course may not be repeated for additional credits.

KINS 2203. Physiology of Physical Activity. 4 Credit Hours.

This course is a fundamental course on the basic concepts and principles of the physiology of physical activity/exercise. It is one of the core courses required of Exercise and Sport Science (ESS) and Kinesiology majors and serves as a prerequisite for the advanced level course in exercise physiology (KINS 4311) required for the ESS majors. Organ functions (i.e., at the system, organ, and cellular level) that contribute to exercise will be described and contrasted for different exercise conditions. Description and explanation will be provided of the functional physiological changes brought about by single or repeated bouts of exercise sessions with the intent to improve the exercise responses and functional capacity and promote health-related physical fitness. Laboratory experiences include the measurement of muscular, metabolic, cardiovascular, and pulmonary functions during rest and exercise, as well as related topics of energy balance, body composition, and fitness assessments.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Exercise & Sport Science, Health Professions, Kinesiology.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (KINS 1224 or 'Y' in CRK103)

KINS 2204. Motor Behavior. 3 Credit Hours.

This course provides an overview of the psychological and physiological basis of human movement behavior including motor development, motor learning, perceptual motor behavior, and individual differences.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Exercise & Sport Science, Health Studies, Health Professions, Kinesiology, Recreational Therapy, Therapeutic Recreation.

Repeatability: This course may not be repeated for additional credits.

KINS 2205. Exercise Assessment and Programming. 4 Credit Hours.

The course explores the roles and responsibilities of the exercise professional in performing exercise assessments and interpretation, and then prescribing appropriate exercise programs in both apparently healthy and diseased populations. Accordingly, the student will apply their knowledge, skills, and abilities (as defined in the ACSM's Guidelines for Exercise Testing and Prescription) in both lecture and laboratory experiences; and demonstrate competencies and proficiencies in standard exercise testing procedures of the various components of health- and skill-related fitness. Accordingly, students will learn to conduct a complete fitness evaluation according to the guidelines established by the ACSM and prescribe the appropriate exercise program. Methods of quantifying the energy cost of activity and the development of exercise / wellness programs for people with known disease, those at high risk, and the apparently healthy individual will be explored. As the penultimate class in the student's program of study, this class is designed to help students integrate and synthesize a large body of knowledge. Upon completion of this course, students should be prepared to successfully complete the American College of Sports Medicine (ACSM) Certified Exercise Physiologist credentialing exam, and have significant background in preparing for the Certified Clinical Exercise Physiologist credentialing exam.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (KINS 2203 or 'Y' in CRKI05)

KINS 2424. Functional Anatomy for Kinesiology. 3 Credit Hours.

This course is designed to introduce the student to the basic principles of kinesiology and functional anatomy as they relate to normal movement. Basic neuromusculoskeletal assessment techniques such as identification and palpation will be emphasized in the course.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (KINS 1223, 'Y' in KIN1, or 'Y' in CRKI02)

KINS 2501. Physical Activity Across the Lifespan. 3 Credit Hours.

Physical Activity Across the Lifespan will introduce students to the role of physical activity in promoting human health and well-being throughout life, starting in infancy through older adulthood. The main topics of the course include: (a) basic effects of physical activity on physical health, mental health, and disease conditions; (b) how physical activity relates to contemporary models of human well-being; (c) the role of physical activity in the prevention, management, and treatment of major chronic diseases; (d) approaches to promote physical activity in different age populations; (e) challenges/barriers to promoting physical activity among people of various ages; and (f) an introduction to physical activity surveillance and the primary ways physical activity levels are measured. An aim of the course is to engage students' imagination about how changes to the physical (built) environment of neighborhoods can help promote physical activity and quality of life for people of all ages.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

KINS 2502. Physical Activity for Individuals with Disabilities. 3 Credit Hours.

Physical Activity for Individuals with Disabilities examines the role of physical activity in promoting the health of individuals with intellectual, physical, and other developmental disabilities. The main topics of the course include: (a) an introduction to the area of Adapted Physical Activity; (b) health and functional benefits of physical activity for people with disabilities; (c) descriptions of common physical and intellectual disabilities, and the trajectory of these disabilities across the lifespan; (d) disability-related laws and advocacy efforts; and (e) planning and implementing physical activities that match with clients' specific disability needs. An aim of the course is to provide students with practical experience working with individuals of various ages who have disabilities.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

KINS 3096. Cultural Competency in Health and Healthcare. 3 Credit Hours.

Cultural competence goes beyond language, ethnicity, race and sex. This course will examine those components in the context of cultural traditions, gender issues, aging, and (dis)ability. There is a need for such background knowledge to develop the skills to effectively interact with diverse groups of people to improve the patient experience in healthcare, eliminate cultural and linguistic barriers during clinical encounters, develop sensitivity to gender/age/ability bias, ensure compliance with all care requirements and protocols, and improve the overall quality of care. This interaction includes (but is not limited to) patients, patients' families, and the health care team. This course is reflective of the needs expressed by the National Institutes of Health to best prepare the future public health and healthcare workforce.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

KINS 3101. Historical and Philosophical Dimensions of Physical Activity. 3 Credit Hours.

Historical and Philosophical Dimensions of Physical Activity examines how people's physical activity experiences are shaped by historical events and philosophical perspectives. The course will explore three main topics: (a) historical events surrounding the origin and development of physical activity pursuits in the U.S. and around the world, (b) branches of philosophy and worldviews used to explain why people engage in physical activity, and (c) ethical principles utilized in professional roles for Kinesiology related careers. The course will also help students argue persuasively about the importance of physical activity for human health and well-being.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

KINS 3196. Psychology of Physical Activity. 3 Credit Hours.

Psychology of Physical Activity examines the psychological factors that contribute to people's engagement in physical activity and exercise. Psychological factors such as attitude, motivation, and confidence will be presented as well as evidence-based ways to enhance them. In addition, students will learn about the important role of physical activity in the promotion of cognitive function and psychological well-being. The course will also introduce students to the types of behavior-change interventions that integrate psychological knowledge and skills to promote physical activity, health, and well-being among diverse populations.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

KINS 3202. Biomechanics of Physical Activity. 4 Credit Hours.

This course focuses on the anatomical and functional relationships among the skeletal and muscular systems and the basic mechanical principles involved in physical activity.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Exercise & Sport Science, Health Professions, Kinesiology, Pre-Health Professions.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (KINS 1223, 'Y' in KIN1, or 'Y' in CRKI02)

KINS 3203. Exercise Assessment and Programming. 4 Credit Hours.

The course explores the roles and responsibilities of the exercise professional in performing exercise assessments and interpretation, and then prescribing appropriate exercise programs in both apparently healthy and diseased populations. Accordingly, the student will apply their knowledge, skills, and abilities in both lecture and laboratory experiences; and demonstrate competencies and proficiencies in standard exercise testing procedures of the various components of health-related fitness. Students will learn to conduct a complete fitness evaluation according to the guidelines established by the American College of Sports Medicine (ACSM) and prescribe the appropriate exercise program. Methods of quantifying the energy cost of activity and the development of exercise / wellness programs for people with known disease, those at high risk, and the apparently healthy individual will be explored.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (KINS 2203 or 'Y' in CRKI05)

KINS 3213. Human Movement and Development. 3 Credit Hours.

Human Movement and Development examines the processes by which people acquire and utilize movement skills across the lifespan, and how movement experiences contribute holistically to human development - physically, cognitively, socially, emotionally, spiritually, and culturally. Motor development from infancy through older adulthood will be presented as well as how aging affects the major body systems and the acquisition, maintenance, and loss of movement skills. In-class activities will give students hands-on practice with course content, including administering assessments of movement proficiency. An aim of the course is to expose students to real-world settings where movement experiences are used to support multiple areas of children and adults' development.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (KINS 2204, 'Y' in KIN4, or 'Y' in CRKI06)

KINS 3252. Exercise Psychology and Adherence. 3 Credit Hours.

Exercise Psychology and Adherence examines how Kinesiology professionals help clients adopt and adhere to physical activity and exercise programs. The main topics of the course include: (a) conceptual models of exercise psychology and adherence; (b) physical, psychological, social, demographic, and cultural factors that affect exercise adoption and adherence; and (c) evidenced-based behavioral and motivational strategies for exercise adoption and adherence. The aim of the course is to expose students to how exercise psychology and adherence principles can be used to promote a physically active lifestyle that enhances self-concept, health, and well-being among diverse populations.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in KINS 4596.

KINS 3316. Principles of Personal Fitness. 4 Credit Hours.

The course involves an in-depth study of neuromuscular anatomy and physiology with special attention to the acquisition and expression of muscular strength. The scientific basis of muscle performance will be thoroughly investigated. Contemporary training theories for the modification of strength, endurance, speed and power of human skeletal muscle will be reviewed and the results applied to special populations across the movement spectrum. This course is designed to help students integrate and synthesize a large body of knowledge in regard to the role of strength in people's lives and how to best construct exercise-training programs whose outcomes aim to improve neuromuscular function. Via the laboratory component of this course, students will develop experience in exercise performance and exercise programming for optimal strength, endurance, speed and power as well as help prepare students pursuing the NSCA-Certified Strength and Conditioning Specialist (CSCS) credential.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Kinesiology.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (KINS 2203 or 'Y' in CRK105)

KINS 3362. Olympic and Powerlifting. 3 Credit Hours.

Students pursuing careers in exercise and sports science must know how to perform and coach the events in Olympic and Powerlifting. The purpose of this course is to explain, demonstrate, and perform the Olympic (Snatch, Clean, Jerk) and Power (Squat, Bench, Deadlift) lifts. Technique, and teaching/coaching strategies for these events will be emphasized. This course will progress through sequences of teaching the various skill progressions. This course will also address the variety of training programs developed. Biomechanical, physiological, and psychological foundations of weightlifting technique and training will be introduced.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Kinesiology.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Exercise & Sport Science.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (KINS 2203 or 'Y' in CRK105)

KINS 3363. Basic Electrocardiography. 3 Credit Hours.

Basic Electrocardiography (EKG) presents the fundamentals of electrocardiography. Structure and function of the heart and circulatory system, the electrical and mechanical events of the cardiac cycle, and normal and abnormal EKG responses at rest and during exercise will serve as the primary course content. The course is designed to provide the Exercise and Sport Science student with both a theoretical knowledge base about the heart and circulatory system and a practical working understanding of the resting and stress electrocardiogram. The student will develop the necessary skills to administer and interpret a 12-lead resting electrocardiogram as well as an exercise EKG as part of graded exercise testing.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Kinesiology.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in KINS 3203 (may be taken concurrently)

KINS 3364. The Science of Health-Related Fitness. 3 Credit Hours.

The focus of this course is on how physical activity and exercise contribute to health-related fitness, and on the linkage between health-related fitness and optimal health/wellness. The components of health-related fitness will be presented as well as evidence-based ways to develop them. Students will engage in health-related fitness assessments, develop personalized health-related fitness programs, and identify the role of health-related fitness for people of all ages, including those with chronic conditions. The course will also introduce students to the topic of epidemiology of physical activity, including content about the prevalence and patterns of physical activity among Americans and the relationship between physical activity and certain chronic conditions. Laboratory activities are integrated into class meetings to give students hands-on practice with course content.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (KINS 2203 or 'Y' in CRK105)

KINS 3368. Principles of Health Fitness Program Management. 3 Credit Hours.

This course deals with the economics of health-fitness programs on personal, commercial, community, and corporate levels. Topics include: health care cost containment, absenteeism, productivity, and the public/personal relations value of corporate and community programs, along with financial and managerial considerations in successful commercial ventures. Students will study various models based upon specific objectives as well as investigate strategies for the implementation of the various models. Practical and theoretical aspects of designing and managing a health-fitness facility, along with techniques of marketing and promotion to ensure long term adherence and program success are also covered.

Repeatability: This course may not be repeated for additional credits.

KINS 3444. General Medical Conditions in Athletic Training. 3 Credit Hours.

This course examines current issues in athletic training and sports medicine not previously presented in the undergraduate athletic training curriculum to include conditions of the thorax and abdomen, and systemic diseases. Fall only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Athletic Training.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (KINS 1224 or 'Y' in CRKI03)

KINS 3501. Research Methods in Kinesiology. 4 Credit Hours.

Research Methods in Kinesiology will introduce students to how the scientific method is applied to create the evidence base for the discipline of Kinesiology and how to interpret and use the evidence as a Kinesiology professional. The main topics of the course include: (a) scientific methods, (b) searching the literature and how to evaluate the literature, (c) types of research, (d) techniques for measuring physical activity, and (e) ethical issues in research. An aim of the course is to help students be good consumers of research about physical activity and exercise so they can accurately interpret information from media sources, magazines, and peer-reviewed scientific journals and critically assess the quality of that information. Laboratory activities will provide students with hands-on practice and opportunities to apply course concepts.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Kinesiology.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

KINS 4001. Physical Activity Promotion for Health Professionals. 3 Credit Hours.

This course will provide an overview of physical activity participation and promotion applied to various health settings. The class will include three units and topics areas: 1) Physical Activity Basics, 2) Physical Activity and Common Chronic Conditions, and 3) Physical Activity Promotion. Students will learn about physical activity recommendations across the lifespan, domains, and dimensions of physical activity, the role that physical activity plays in the prevention and treatment of common chronic conditions, and the application of behavior change theories used in physical activity promotion.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (Complete 2 of the following: (KINS 1223 or 'Y' in CRKI02) and (KINS 1224 or 'Y' in CRKI03), Complete 2 of the following: (BIOL 1111, BIOL 1911, 'Y' in CRBI02, or 'Y' in CRBI03) and (BIOL 2112, BIOL 2912, 'Y' in CRBI04, or 'Y' in CRBI10), or SBS 2001)

KINS 4096. Introduction to the Narrative in Patient-Centered Health Care. 3 Credit Hours.

This is a multidisciplinary course that uses a variety of ways to help students understand the human experience in the context of health and illness and explore the linkage between the story and the body. In order to help develop narrative competence, students will learn how a narrative approach to health and disease is different from the conventional biomedical approach. The focus of narrative medicine is on the individual patient, a person with a past, a person with pain, and a person with agency. Students will learn about the ways in which the patient's story and physiology are related, how the story can be used in a clinical setting, and how to improve their ability to interpret narratives. It will provide students with the skills of respecting multiple perspectives. It will help them hear and mediate competing voices (e.g. those of authority, the patient, the patient's family), and it will help them engage in the dynamics of movement between empathy and emotional detachment. The goal for this course is interprofessional, patient-centered, and humanistic; and it is intended to promote compassionate clinical care through valuing the patient's, and the practitioner's, own unique experiences.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (KINS 3096 or 'Y' in CRKI09) and (HRPR 2103, HPM 2214, or 'Y' in CRHP01)

KINS 4196. Sociology of Physical Activity. 3 Credit Hours.

Sociology of Physical Activity examines how people's engagement in physical activity and exercise is shaped by social factors and conditions within societies. Social factors such as race and ethnicity, gender, and social class will be presented as well as current research about how these factors are considered in interventions to promote physical activity, health, and well-being among diverse populations. The course will also help students develop an appreciation for the cultural influences and social inequalities surrounding access to and participation in physical activity experiences across the lifespan.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

KINS 4238. Sports in American Society. 3 Credit Hours.

The focus of this course is the unique role sports play in American society. The course deals with advanced theory in the sociology of physical activity. Topics include, but are not limited to, sexuality and sports, youth sports, violence in sports, mass media and sports, nationalism, and aging and physical activity.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (KINS 3296 or 'Y' in CRK111)

KINS 4239. Self-Development Through Physical Activity. 3 Credit Hours.

This course engages a group process-based experience in which students explore the impact of physical activity upon their lives. Emphasis is placed on interpreting past movement experiences from the present context and planning for a fit and active life.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (KINS 3296 or 'Y' in CRK111)

KINS 4242. Exercise, Nutrition and Behavior. 3 Credit Hours.

This course will provide an overview of the interaction among exercise, nutrition and behavior, specifically from a psychosocial approach. Students will learn about psychological factors, health behavior change, assessment and intervention strategies for exercise and nutrition. Course content is particularly relevant for undergraduate students in the social science and bioscience aspects of kinesiology, psychology, public health, and other health professions.

Repeatability: This course may not be repeated for additional credits.

KINS 4282. Independent Study in Kinesiology. 1 to 6 Credit Hour.

This course provides an opportunity for independent investigation and analysis of the intellectual, physical, social, psychological, and ethical bases of human movement.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (KINS 1201, 'Y' in KIN3, or 'Y' in CRK101), (KINS 3296 or 'Y' in CRK111), and Completed 2 of the following: (KINS 2203 or 'Y' in CRK105), (KINS 2204, 'Y' in KIN4, or 'Y' in CRK106), and (KINS 3202 or 'Y' in CRK110)

KINS 4283. Directed Readings and Study in Kinesiology. 1 to 6 Credit Hour.

This course provides an opportunity to participate in a variety of independent experiences (readings and study) in Kinesiology as directed by a faculty mentor.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

KINS 4290. Special Topics in Kinesiology. 3 Credit Hours.

The focus of this course is a topic important to the discipline of Kinesiology or one of its subdisciplines. Different topics will be covered in different semesters. The emphasis will be on current trends and new knowledge as it relates to one or more of the critical areas of investigation in Kinesiology.

Repeatability: This course may be repeated for additional credit.

KINS 4311. Advanced Physiology of Exercise. 3 Credit Hours.

This course examines the interactive mechanisms of regulation of the metabolic, cardiovascular, pulmonary, and muscular/skeletal systems in response to an acute bout of exercise and as chronic adaptation to various types of exercise training regimens. Training principles for human performance and health/fitness promotion are derived based on these interactive physiological mechanisms and responses.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (KINS 2203 or 'Y' in CRK105)

KINS 4312. Exercise and Nutrient Metabolism. 3 Credit Hours.

This course applies the physiological principles controlling the relationship between exercise and nutrition to metabolism, weight control/management, human performance, and disease processes. The mechanisms whereby exercise can be used in the prevention and treatment of various disease processes are discussed.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (KINS 4311 or 'Y' in CRK116)

KINS 4313. Exercise and Aging. 3 Credit Hours.

This course examines the influence of exercise interventions on the aging process as indicated in current research. An examination of the scientific principles that govern aging and the influences of various modalities on these processes are also discussed.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (KINS 2203 or 'Y' in CRK105)

KINS 4314. Principles of Personal Fitness. 4 Credit Hours.

The course involves an in-depth study of neuromuscular anatomy and physiology with special attention to the acquisition and expression of muscular strength. The scientific basis of muscle performance will be thoroughly investigated. Contemporary training theories for the modification of strength, endurance, speed and power of human skeletal muscle will be reviewed and the results applied to special populations across the movement spectrum. This course is designed to help students integrate and synthesize a large body of knowledge in regard to the role of strength in people's lives and how to best construct exercise-training programs whose outcomes aim to improve neuromuscular function. Via the laboratory component of this course, students will develop experience in exercise performance and exercise programming for optimal strength, endurance, speed and power as well as help prepare students pursuing the NSCA-Certified Personal Trainer (CPT) credential.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (KINS 2203 or 'Y' in CRK105)

KINS 4315. Applied Performance Nutrition. 3 Credit Hours.

Applied Performance Nutrition seeks to address the unique nutritional demands of highly active and athletic populations. The course will provide undergraduate students who have an interest in working with a variety of athlete based populations the knowledge, skills, and abilities to perform a nutritional needs analysis for sport, develop a periodized nutrition plan, and differentiate the magnitude of factors leading to dietary success.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Exercise & Sport Science, Kinesiology, Nutrition.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (KINS 4242 or 'Y' in CRK112)

KINS 4316. Principles of Strength and Conditioning. 4 Credit Hours.

The course involves an in-depth study of how to achieve high levels of human performance through evidence based training practices. The course is designed to outline how the fitness characteristics needed for success in sport, including endurance, strength, power, and speed can be achieved through a systematic periodized approach. The course will provide undergraduate students with an interest in coaching, sport, strength and conditioning, and athletic training specific programming knowledge and practice to increase physical preparation for success in sport performance. This course will prepare students with the knowledge, skills, and abilities to sit for National Strength and Conditioning Association (NSCA) Certified Strength and Conditioning Specialist (CSCS).

Field of Study Restrictions: Must be enrolled in one of the following Majors: Exercise & Sport Science, Kinesiology.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (KINS 4314 or 'Y' in CRK119)

KINS 4333. Clinical Cardiovascular Pulmonary Exercise Physiology. 3 Credit Hours.

The course explores the roles and responsibilities of the clinical exercise professional in performing clinical exercise test procedures and programming exercise for populations with specific known cardiovascular and pulmonary diseases.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Kinesiology.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in KINS 3203 (may be taken concurrently)

KINS 4334. Principles and Practices of Graded Exercise Testing and Exercise Program Development. 4 Credit Hours.

The course explores the role of exercise and wellness programming in health and disease. Techniques of functional capacity determination through exercise testing will be studied and practiced. Methods of quantifying the energy cost of activity and the development of exercise and wellness programs for people with known disease, those at high risk, and the apparently healthy individual will be emphasized. As the penultimate class in the student's program of study in Exercise and Sport Science, this class is designed to help students integrate and synthesize a large body of knowledge. The students will develop a strong rationale for the role of exercise and physical activity in the lives and health of all people. They will learn how to perform risk stratification and determine the necessity, if any, for closely supervised exercise programs. Specifically the students will develop expertise in exercise testing and exercise programming for one group or special population. They will demonstrate this expert knowledge through written as well as oral communication. NOTE: Lab fee required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (KINS 3363 or 'Y' in CRK118) and (KINS 4311 or 'Y' in CRK116)

KINS 4335. Clinical Exercise Physiology. 3 Credit Hours.

This course explores the roles and responsibilities of the clinical exercise professional in performing clinical exercise test procedures and prescribing exercise programs in populations with specific known chronic diseases. The course will cover the basic pathophysiology of a wide variety of chronic diseases and disorders, the effect on the exercise response, and common management and medications. A review of the effects of exercise training will be conducted and recommendations regarding exercise testing and programming will be discussed for each disease/disorder. Diseases/disorders covered include cardiovascular disease, pulmonary disease, metabolic disease, immunological and hematological disorders, orthopedic diseases/disabilities, and neuromuscular disorders.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in KINS 3203 (may be taken concurrently)

KINS 4364. Business Management for Exercise Professionals. 3 Credit Hours.

This course will provide an overview of business management for exercise professionals. This course will build upon the foundational information that was introduced in Health Fitness Program Management and will provide students with critical skills for transitioning from an exercise professional to successful business manager. Topics will include managing human resources and financial resources, establishing policies for managing fitness facilities, and developing marketing plans to promote the business to potential clients. The use of effective communication for fostering an engaged workplace, as well as for developing professional relationships with other allied health professionals will be included.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Kinesiology.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in KINS 3368.

KINS 4385. Exercise and Sport Science Internship I. 3 Credit Hours.

This internship is part one of a two-course, culminating experience designed to provide hands-on, practical experiences for undergraduate Exercise and Sport Science students. Students will have the opportunity to apply their knowledge and advance their practical skills in a physical activity-related field under the supervision of a department faculty member and a site preceptor. As part of their internship experience, students will spend 10-15 hours per week working at their internship site. Class sessions will allow students to reflect on their internship experiences and integrate knowledge gained from their previous coursework. Throughout the semester, students will also examine topics related to interprofessional practice, as well as diversity, equity and inclusion at the internship site and in the field of physical activity.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in KINS 3203 and KINS 3316.

KINS 4396. Research and Writing in Exercise and Sport Science. 3 Credit Hours.

Research and Writing in Exercise and Sport Science introduces students to research methods and the application of research. The main topics of the course include a) developing research questions based on gaps in scientific literature, b) study designs, c) methods of data collection, d) statistical approaches to data analysis, e) writing a research grant proposal, f) presenting scientific literature, and e) ethical issues in research. This is a writing intensive course; writing assignments in this course will be completed and submitted in small groups to replicate the team writing approach most commonly used in the professional discipline of Exercise and Sport Science.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Exercise & Sport Science.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in KINS 3196.

KINS 4485. Exercise and Sport Science Internship II. 3 Credit Hours.

This internship is part two of a two-course, culminating experience designed to provide hands-on, practical training for undergraduate Exercise and Sport Science students. Students will have the opportunity to apply their knowledge and advance their skills in a physical activity-related field under the supervision of a department faculty member and a site preceptor. As part of their internship experience, students will spend 10-15 hours per week working at their internship site. Class sessions will allow students to reflect on their internship experiences and integrate knowledge gained from their previous coursework as well as build upon the lessons learned from their first internship. Throughout the semester students will examine topics related to professional development in their chosen career path such as workplace competencies and certifications, communication strategies and leadership styles, and creating inclusive and equitable fitness environments.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Kinesiology.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in KINS 4385.

KINS 4501. Program Planning and Leading Physical Activity and Fitness. 3 Credit Hours.

Program Planning and Leading Physical Activity and Fitness examines how to effectively plan and safely lead physical activity and fitness programs for individuals with diverse backgrounds, abilities, and needs. The main topics of the course include: (a) determining clients' readiness to participate in physical activity and fitness programs, (b) planning physical activity and fitness programs, (c) instructional and motivational strategies for leading one-on-one and group-based physical activity and exercise sessions, and (d) safety precautions for leading physical activity and exercise sessions. The course will also introduce students to leadership roles and responsibilities of Kinesiology professionals whose work involves planning and leading physical activity and fitness programs in a variety of settings. Opportunities for students to plan and lead physical activity and exercise sessions are integrated into class meetings.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in KINS 3364.

KINS 4808. Sport Concussion. 3 Credit Hours.

This online course is designed to provide students information about sport concussion. It is designed for undergraduate and graduate students seeking to augment their sport concussion education. Students will receive targeted course lectures, readings, and online resources on topics such as concussion pathomechanics, pathophysiology, recognition, assessment, management, and return to play guidelines.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (KINS 1223, 'Y' in KIN1, or 'Y' in CRKI02)

Klein College of Media and Communication (KLN)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

KLN 0873. Media in a Hyper-Mediated World. 3 Credit Hours.

The Internet-fueled democratization of media creation has enabled anyone to be a publisher, and has given audiences almost infinite choices -- with both great and questionable effects. In a world of information abundance, it can be difficult to discern fact from opinion and truth from fiction. We need to know how to wade through this barrage of information with a critical eye, to be better informed and ultimately become creators of media ourselves. Media in a Hyper-Mediated World is designed to help students navigate 21st century media, starting by becoming active users of media, not just passive consumers. Students will employ principles of media literacy in analyzing and creating messages on a variety of topics using a combination of writing, image production, sound production and creative work with digital media. In order to become active participants in an information society, students will examine the factors that assist them in acting responsibly in media environments.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

KLN 1001. Klein First-Year Seminar. 1 Credit Hour.

The Klein First-Year Seminar introduces incoming students in the college to the purposes of higher education and to the skills needed to use academic resources and technology successfully, both in college and beyond. The course covers topics such as time management and study skills, as well as university support services and areas of interest specific to Klein students. Note: This course is for Klein College of Media and Communication students only.

Class Restrictions: Must be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Media & Comm, Klein College.

Repeatability: This course may not be repeated for additional credits.

KLN 1002. Klein College Introduction to Professional Development. 1 Credit Hour.

This course prepares students to explore professional development opportunities as part of their college experience. Students will use self-evaluation tools to determine strengths and possible career paths. Students will create and refine resumes and cover letters and explore the application process for internships. The class will introduce students to on-campus groups and organizations, internship opportunities, Klein career resources, curriculum, graduate school options, and global opportunities.

Repeatability: This course may not be repeated for additional credits.

KLN 1101. Field Experience. 1 Credit Hour.

The Klein College of Media and Communication Field Experience course introduces first-year students in the college to the variety of ways that those in the communication industry apply their skills. It will incorporate a number of field trips to nearby sites and guest speakers, giving students exposure to the city of Harrisburg and the many ways that communications is incorporated into a career, from the private and public sectors to entrepreneurs. We'll take advantage of the fact that you're studying in the state's capitol city to make several trips to the state Capitol. All but two destinations are a short walk away. The destinations or guests will be locked into each week by the first week of the semester.

Class Restrictions: Must be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Media & Comm, Klein College.

Repeatability: This course may not be repeated for additional credits.

KLN 2001. Klein College Experience. 1 Credit Hour.

The Klein College Experience class provides support during transfer students' transition to Temple University and planning for major and career. Included among many topics are discussions of academic skills, identity and diversity, academic integrity, and financial literacy. In addition students will become familiar with academic and career planning; emotional needs of transfer students; study away/abroad; Klein College and campus resources; and post-graduation options. NOTE: This course is for Klein College of Media and Communication students only.

College Restrictions: Must be enrolled in one of the following Colleges: Media & Comm, Klein College.

Repeatability: This course may not be repeated for additional credits.

KLN 3001. Klein Launch: Professional Development Seminar. 3 Credit Hours.

Klein Launch is a concentrated professional development class. Students research occupations or fields of study after graduation. Topics include mentor relationships, job seeking strategies, networking, personal brands, effective interviewing using various platforms, personal finances, and the onboarding process in the workplace.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits.

Repeatability: This course may not be repeated for additional credits.

KLN 3385. Diamond Peer Teachers - Internship I. 1 Credit Hour.

The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

Repeatability: This course may be repeated for additional credit.

KLN 3386. Diamond Peer Teachers - Internship II. 1 Credit Hour.

The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

Repeatability: This course may be repeated for additional credit.

KLN 4111. Interdisciplinary Approach to Communication Campaigns. 3 Credit Hours.

Drawing from across the media and communication disciplines, students from different communication and media-related majors will learn the knowledge and skills of working together to develop a carefully and thoughtfully designed communication campaign. Students will engage with people from neighborhoods near Temple University to address specific needs of the areas surrounding Temple University, learn their needs and perspectives about specific health needs, and work together in teams to design a communication campaign that will address those needs.

Repeatability: This course may not be repeated for additional credits.

Korean (KRN)

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KRN 1001. Korean Elements I. 4 Credit Hours.

First semester level.

Repeatability: This course may not be repeated for additional credits.

KRN 1002. Korean Elements II. 4 Credit Hours.

Second semester level.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in KRN 1001.

KRN 2001. Korean Intermediate I. 3 Credit Hours.

Third semester of Korean.

Course Attributes: LC

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in KRN 1002.

KRN 2002. Korean Intermediate II. 3 Credit Hours.

Fourth semester of Korean.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in KRN 2001.

KRN 3001. Korean Advanced I. 3 Credit Hours.

Fifth semester of Korean.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in KRN 2002.

KRN 3002. Korean Advanced II. 3 Credit Hours.

Sixth semester of Korean.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in KRN 3001.

KRN 3183. Korean Directed Readings I. 3 Credit Hours.

Mentored reading/study between a faculty member and student.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in KRN 3002.

KRN 3283. Korean Directed Readings II. 3 Credit Hours.

Mentored reading/study between a faculty member and a student.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in KRN 3002.

Landscape Architecture (LARC)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

LARC 0841. Sustainable Design. 3 Credit Hours.

What can you do about climate change, other global environmental problems, and their resultant social and economic inequity? You can be better informed about the basis of these problems and well-equipped with real-life tools to help solve them. These are the tools of sustainable design. Through the lens of scientific principles and the scientific method, you will learn the causes and effects of climate change and human impacts on the environment. You will examine the laws of matter and energy, biogeochemical cycles, and the concepts of biodiversity and explore how humans shape our environment through planning and design. You will explore physical design solutions and research existing and alternative green approaches to complex systems including agriculture, energy production, supply chains, transportation networks, landscape design, and architecture. Your research will allow you to critically compare the ecological, social, and economic impacts of these systems and work on a design project that proposes ethical, ecologically sound solutions. This course will inform and empower you to accurately articulate causes and challenges of climate change so that you can apply sustainable design strategies in your personal and professional lives, preparing you for global citizenship as an agent of change in real-world communities. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core.

Course Attributes: GS, SE, SF

Repeatability: This course may not be repeated for additional credits.

LARC 0852. Green vs. Gray: Improving and Sustaining Urban Ecosystems. 3 Credit Hours.

Explores urban ecosystems and methods of improving and sustaining urban environments using the City of Philadelphia as a living laboratory. Students learn about urban ecology, urban field experiments, and the work required to sustain green infrastructure within a city landscape. As a Community-Based Learning (CBL) course, students engage in four to six hours of field work and environmental stewardship which can range from the Pennsylvania Horticultural Society's Tree Tender training, tree planting, restoring urban ecological systems and vacant lots, working in sustainable urban agriculture and/or greening school rooftops. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core.

Course Attributes: GS, SE, SF, SP, SS

Repeatability: This course may not be repeated for additional credits.

LARC 1013. Natural and the Built Environment. 3 Credit Hours.

An introduction to the interrelated disciplines of Landscape Architecture, Horticulture, Planning, and Architecture. Explores existing and natural site conditions and their impact on influencing and shaping the built environment. Also examines key issues in the interrelationships and applications of these allied professions. NOTE: This course should not be taken by students who have successfully completed LARC 0841.

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

LARC 1044. Landscape Architecture Foundation I. 3 Credit Hours.

This course is an introduction to fundamental design principles, drawing and graphic communication skills. Students learn to 'see' and 'express' the landscape around us in terms of a new language of form, mass, space, line and composition. Emphasis is placed on exploring 2D and 3D aspects of space making principles, combining plans, sections, 3D renderings and models to develop a comprehensive understanding of spatial forms.

Repeatability: This course may not be repeated for additional credits.

LARC 1111. Introduction to Green Careers in Landscape Architecture. 1 Credit Hour.

This entry level course provides an introduction to the discipline of landscape architecture and how it prepares students for careers in the growing green and sustainability fields. Students will learn how landscape architects, with their knowledge of natural systems, are at the forefront of creating new and innovative sustainable or green practices in the design of our environments.

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

LARC 1144. Landscape Architecture Foundation II. 3 Credit Hours.

This course is a further exploration and understanding of the visual language, principles, and design elements and processes used in landscape architecture. Students will apply elements and principles introduced in Foundation I to the design of real and imaginary spaces using modes of 2D, 3D drawings and model making. Ideas of abstraction, experience and time will be introduced and explored in design exercises. Students will advance freehand drawing, graphic and model making skills while also learning some basic digital media applications.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in LARC 1044.

LARC 1244. Surveying. 3 Credit Hours.

Focuses on the fundamentals of plane surveying: basic measurement of distance, angle and elevation; use of basic surveying equipment: total station, levels and tapes, field notes; and basic computations: traverse closure and determination of areas.

Repeatability: This course may not be repeated for additional credits.

LARC 1544. Landscape Architecture Computer Technology I. 3 Credit Hours.

An introduction to modeling, mapping, drafting, and representation software that is currently used in landscape architectural practice. Focuses on learning the basic commands for drawing, rendering, and formatting digital representations of work for presentations.

Repeatability: This course may not be repeated for additional credits.

LARC 1982. Honors Projects. 1 to 3 Credit Hour.

For exceptional students interested in pursuing independent, in-depth study. Credits are based on the quantity and quality of work fulfilling the established course outline.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

LARC 2143. Landscape Architecture Design Studio I. 6 Credit Hours.

Development of the student's comprehension of important elements in the ecologically based landscape design process. Projects lead students through typical design processes that include inventory and analysis, case studies, evaluation of opportunities and constraints, development of conceptual ideas, and detailed landscape designs. The design process is applied to a variety of small scale, urban and suburban site design projects. Using a combination of computer, mechanical and free hand presentation techniques, studio work typically includes: site inventory and research and analysis; program development; concept alternatives; master planning; and detail design studies.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in (LARC 1142 or LARC 1144)

LARC 2144. Landscape Architecture Design Studio II. 6 Credit Hours.

The development of mixed use and sustainable communities within the natural, social, cultural and economic context of development or redevelopment. Investigations of large-scale land use and community planning projects in the urban or rural context. Real world projects range from preparing community based revitalization plans and designs for inner city neighborhoods or redeveloping a rural or suburban area.

Course Attributes: SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in LARC 2143.

LARC 2241. Landscape Engineering I. 3 Credit Hours.

Emphasizes the basic concepts, ideas, and techniques that deal with the visual, functional, and ecological aspects of grading and landform manipulation.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Horticulture, Landscape Architecture.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Science.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in (LARC 1142 or LARC 1144)

LARC 2243. Landscape Engineering II. 3 Credit Hours.

This landscape engineering course for landscape architects integrates technical skills, esthetics considerations and sustainability in the use and applications of the 'hardscape' elements of landscape architecture such as walls, paving, steps, etc., as well as advanced landform design and stormwater management.

Course Attributes: SE, SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in LARC 2241.

LARC 2457. American Traditions of Landscape Architecture. 3 Credit Hours.

Examination of ideas, needs, visions, and values that have shaped both the designed and the common landscapes of America from the colonial period until the early 1900s.

Repeatability: This course may not be repeated for additional credits.

LARC 2496. Landscape Traditions. 3 Credit Hours.

Presents a comprehensive overview of civilization's efforts to create useful, beautiful, and symbolic spaces and places from ancient times until the modern day. NOTE: This is a writing intensive class. Students are urged to complete English 0802 or equivalent prior to registering for this class.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

LARC 2551. Landscape Architecture Computer Technology II. 3 Credit Hours.

This course builds on the basic computer knowledge introduced in LA Computer Technology I. The focus of this course is on learning the Adobe Suite applications to aid in developing professional quality presentations and exploring how to select the most useful software for a particular project.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in LARC 1544.

LARC 2553. Landscape Architectural Computer Graphics. 3 Credit Hours.

Focuses on the use of digital media for visual presentation. Exposes students to image editing, publishing, and/or computer-aided design programs. Students learn how to create illustrative and technical drawings and/or portfolio work. NOTE: Course may be repeated once for a maximum of six credits.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of D- in LARC 1544.

LARC 2564. Landscape Architecture Computer Technology III. 3 Credit Hours.

Addresses more advanced concepts within and between drafting, rendering, modeling, mapping, and representation software that are commonly employed in landscape architectural practice. Products are project-based and prepare students for professional standards.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in LARC 1544.

LARC 2754. Water Design in the City. 2 Credit Hours.

Cities throughout history have thrived or failed because of water. Every society's ability to secure its water supply, clean stormwater, and address flooding issues impacts the quality of life of its citizens and the aesthetic dimension of the urban landscape. Learn about artistic strategies for dealing with urban stormwater and how cities throughout the U.S. and the world are redesigning their streets, parks, and buildings to more effectively manage urban water resources. Discover aspects of green infrastructure that address strategies for water filtration, conveyance, and storage. The City of Philadelphia is the laboratory for the case studies and for building an understanding of artful stormwater management strategies.

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

LARC 2758. Summer Field Ecology. 3 Credit Hours.

Students learn to "read" the landscape through the exploration of the landscape provinces of the Delaware River Basin. Through visiting natural landscapes in each of the sub-regions, students see how the relationship of geology, soils, hydrology, plant communities, and land use history reveals an understanding of the visual characteristics, opportunities, and constraints of development inherent in the natural environment.

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in BOT 1112.

LARC 2870. Special Topics. 1 to 3 Credit Hour.

Variable offerings from semester to semester of selected topics not part of the regular listing of courses. The topic can be in an area of specialization of a faculty member or an examination of a current development in the field. NOTE: Students may obtain a description of the current version at the department office and in the schedule of classes. This course may be repeated for credit.

Repeatability: This course may be repeated for additional credit.

LARC 2885. Internship. 1 Credit Hour.

This internship requires a minimum of one semester or 350 hours of employment with a landscape architecture firm, landscape contractor, or in a related field. During the internship, students should test concepts developed in class with real work experience. NOTE: Work should be completed between sophomore and junior years.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Landscape Architecture.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Science.

Repeatability: This course may be repeated for additional credit.

LARC 3145. Landscape Architecture Design Studio III. 6 Credit Hours.

Addresses issues pertinent to the design of parks and open space. Students analyze the site context in terms of open space and recreational opportunities, study and discuss comparable park systems and park designs. and may work closely with community groups and elected officials in developing an appropriate design program. The goal is to apply an ecological design process to the design of a park appropriate for a particular neighborhood context.

Course Attributes: SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in LARC 2144.

LARC 3146. Landscape Architecture Design Studio IV: Design/Build. 6 Credit Hours.

Provides individuals the opportunity to build and implement elements of their own design. Students prepare the necessary construction documentation and then actually construct their designs. Working with construction materials enables the student to learn the opportunities and limitations of these materials. This hands-on approach is vital to understanding the relationship between design and implementation processes.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in LARC 3145 and (LARC 2242 or LARC 2243)

LARC 3243. Landscape Engineering III. 3 Credit Hours.

Includes the principles, processes, and techniques of site engineering for the "hard" elements of landscape architecture such as walls, paving, steps, decks, etc. Based on the understanding and appreciation of ecological principles, functional requirements, and aesthetic considerations. Includes elements of design/engineering such as siting buildings, grading design of simple structures, understanding the nature of construction materials, and the preparation of working drawings.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in LARC 2242.

LARC 3345. Planting Design. 3 Credit Hours.

Considers the integration of plants into the design process and emphasizes scale, development density, natural site characteristics, natural plant associations, and individual plant characteristics. Planting design studies in a variety of contexts are included.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in (LARC 1142 or LARC 1144), LARC 3146, and HORT 1212.

LARC 3644. Professional Practice. 3 Credit Hours.

This course focuses on codes of professional and environmental ethics, the requirements of professional licensure, current business practices, and current and emerging challenges in landscape architectural practice. The course emphasizes the leadership role of landscape architects on interdisciplinary design teams. Students gain an understanding of different professional avenues and opportunities.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Landscape Architecture.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Science.

Repeatability: This course may not be repeated for additional credits.

LARC 3665. Grant Writing. 3 Credit Hours.

Develop skills in researching grant funding possibilities, identifying and developing appropriate restoration projects with potential for grant funding, and writing grant proposals.

Repeatability: This course may not be repeated for additional credits.

LARC 3789. Landscape Restoration Workshop. 3 Credit Hours.

Students learn principles and practices of ecological restoration through hands-on experience. They visit restored landscapes, conduct field measurements in an old growth forest, and contribute to a restoration project on the Ambler Campus. An overnight camping trip is required. By the end of the course, students understand various technical strategies involved in restoration through drawing and writing their field observations, assessing proper techniques for restoration, and then implementing those techniques on a real site.

Repeatability: This course may not be repeated for additional credits.

LARC 3882. Independent Study. 1 to 3 Credit Hour.

Explorative study or research not met in any established course. Initiated by the student, the project must be sponsored by a faculty member with an approved agreement outlining the content and requirements, including readings, meetings, and papers. NOTE: Special authorization required for all students. Students must have the agreement of a faculty sponsor and must submit a formal proposal to this faculty member and Department before registering for the course.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Landscape Architecture.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Science.

Repeatability: This course may be repeated for additional credit.

LARC 4147. Landscape Architecture Design Studio V: Fall Senior Studio. 6 Credit Hours.

Focuses on large-scale, complex planning projects dealing with growth management issues and an understanding of all phases of the planning process. The scope of the project includes analysis and evaluation of existing conditions, programming, and creation of conceptual plans, master plans, and detail designs.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in LARC 3146.

LARC 4198. Landscape Architecture Design Studio VI: Spring Senior Studio. 6 Credit Hours.

The final senior studio deals with a variety of projects that may include landscape design projects involving fine arts, urban design, and town planning. Students are challenged to achieve a comprehensive understanding of the ideas, processes, and concepts. NOTE: Fulfills the capstone writing intensive requirement for the Landscape Architecture major.

Course Attributes: SI, WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in LARC 4147.

Latin (LAT)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

LAT 1001. Latin 1. 4 Credit Hours.

Latin was the language of commerce, government, and the arts in much of Europe and the Mediterranean from antiquity until the early modern period. One year of Latin instruction will allow students to read the speeches, documents, and histories of the ancient Romans, from the grand oratory of the late Republic to the martyr accounts of early Christians. This course, combined with 1002, will introduce grammar, vocabulary, and word forms, and lead students through readings of increasing difficulty until they are prepared for authentic Latin texts. Through the textbook and the ancient authors, students will be introduced to the peoples and places of the Roman world.

Course Attributes: LA

Repeatability: This course may not be repeated for additional credits.

LAT 1002. Latin 2. 4 Credit Hours.

This course builds on LAT 1001, developing students' knowledge of the language with increasingly difficult readings, enriched with short excerpts of unadapted texts. By the end of the course, students are prepared to read a wide range of Latin authors.

Course Attributes: LA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (LAT 1001, 'C1002' in LCLA, 'B1002' in LCLA, or 'EXMPT' in LCLA)

LAT 2001. Latin 3. 3 Credit Hours.

In LAT 2001, students review and fortify their knowledge of the Latin language through close reading of authentic texts. This course concentrates on Latin prose, usually oratory (such as Cicero's often inflammatory speeches) or history (such as Julius Caesar's accounts of his own wars).

Course Attributes: LB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (LAT 1002 or 'EXMPT' in LCLA)

LAT 2002. Latin 4. 3 Credit Hours.

Students move on from prose to selections from the wide world of Latin poetry. In this course, students will not only read works such as Ovid's *Metamorphoses* (our primary source for many myths) or Vergil's *Aeneid* (an epic about the foundation of Rome by a Trojan hero) but will learn about the history of such literature and the contexts in which it was composed.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in LAT 2001.

LAT 3002. Readings in Latin Literature II. 3 Credit Hours.

In this course, students will read from a rotating selection of Latin genres, including epic, history, oratory, drama, love elegy, and the novel. Usually concentrating on a single author, this course prepares students for advanced critical study of Latin texts by expanding their knowledge of historical contexts and modern scholarship. After completion of this course, students may pursue graduate study or a career in Latin instruction.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in LAT 2002.

LAT 3096. Readings in Latin Literature I. 3 Credit Hours.

In this course, students will read from a rotating selection of Latin genres, including epic, history, oratory, drama, love elegy, and the novel. Usually concentrating on a single author, this course prepares students for advanced critical study of Latin texts by expanding their knowledge of historical contexts and modern scholarship. After completion of this course, students may pursue graduate study or a career in Latin instruction. Latin 3096 is writing intensive and may be repeated for credit.

Course Attributes: WI

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in LAT 2002.

LAT 4000. Special Topics. 3 Credit Hours.

In this course, students will read from a rotating selection of Latin genres, including epic, history, oratory, drama, love elegy, and the novel. Usually concentrating on a single author, this course prepares students for advanced critical study of Latin texts by expanding their knowledge of historical contexts and modern scholarship. After completion of this course, students may pursue graduate study or a career in Latin instruction.

Repeatability: This course may be repeated for additional credit.

LAT 4001. Cicero: Selections. 3 Credit Hours.

Readings in a range of the works of Cicero.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in LAT 3002.

LAT 4009. Roman Epic Poets. 3 Credit Hours.

Readings from the works of various Roman epic poets.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in LAT 3002.

LAT 4082. Independent Study. 1 to 6 Credit Hour.

Concentrated work at an advanced level on a topic chosen by student and teacher. Weekly sessions.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in LAT 2002.

Latin American Studies (LAS)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

LAS 0833. Race & Poverty in the Americas. 3 Credit Hours.

The transatlantic slave trade was one of the most brutal and momentous experiences in human history. Attitudes toward Latino, Caribbean, African, and Asian immigrants in the United States today can only be fully understood in the contexts of slavery and the "structural racism," "symbolic violence" (not to mention outright physical violence), and social inequalities that slavery has spawned throughout the region. Although focusing primarily on the United States, we will also study the present entanglements of poverty and race in Brazil, Haiti, and other selected nations of "The New World," placing the U.S. (and Philadelphia in particular) experience in this historical context. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0833, LAS 0933, REL 0833/0933, or SOC 0833.

Course Attributes: GD, SI

Repeatability: This course may not be repeated for additional credits.

LAS 0854. Latino Immigration. 3 Credit Hours.

In order to examine Latino immigration today, it is necessary to understand the long-term, complex relations between the USA and Latin America. From this perspective, we analyze past and present immigration laws and policies and their impact on immigrants and their countries of origin; the changing push/pull factors involved in immigration; the immigration history and situation of Latino immigrants in Philadelphia and beyond; reactions towards Latino immigrants; the impact of immigration on every aspect of daily life. Students will discuss, compare and evaluate USA and Latin American news sources on current, often controversial, topics each week and will have the opportunity to learn about Philadelphia agencies that work with Latino immigrants. Course materials include analytical documents, case histories, films and literature by and about Latin American immigrants. NOTE: Students cannot receive credit for this course if they have successfully completed SPAN 0854.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

LAS 0868. World Society in Literature & Film. 3 Credit Hours.

Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindi, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under the Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

LAS 0968. Honors World Society in Literature & Film. 3 Credit Hours.

Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindi, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. (This is an Honors course.) NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GG, HO

Repeatability: This course may not be repeated for additional credits.

LAS 1001. Perspectives on Latin America. 3 Credit Hours.

Interdisciplinary examination of social change in Latin American societies. Provides historical context and includes changing approaches to economic development, class and ethnic issues, religious traditions, art, music, and literature. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors.

Course Attributes: IS

Repeatability: This course may not be repeated for additional credits.

LAS 1022. Latin American Social Struggles. 3 Credit Hours.

An examination of Latin America's contemporary history from the Cuban Revolution in 1959 through the end of the Cold War to the present. The course explores such matters as revolution and counter-revolution; human rights and institutional accountability; city life and social change; the movement of people, narcotics, goods; and new forms of political and cultural conflict. Methods of instruction include paperback readings, the internet, and video clips. Note: Students will receive credit only once for either LAS 1022 or HIST 1022.

Repeatability: This course may not be repeated for additional credits.

LAS 1010. Topics in Latin American Studies I. 3 Credit Hours.

Course topics vary each semester and may include the media in Latin America, Latin American music, race and ethnicity, and social movements. NOTE: Students can obtain a description of the current version at the Latin American Studies Center.

Repeatability: This course may be repeated for additional credit.

LAS 2020. Topics in Latino Studies. 3 Credit Hours.

Course topics vary and may include the study of Latino migration to the United States, Latino communities in the United States, and Latino political and cultural movements. NOTE: Students can obtain a description of the current version at the Latin American Studies Center.

Repeatability: This course may be repeated for additional credit.

LAS 2030. Topics in Caribbean Studies. 3 Credit Hours.

Course topics vary each semester and may include the history of Puerto Rico, the history of the Hispanic Caribbean, culture and music of the Caribbean. NOTE: Students can obtain a description of the current version at the Latin American Studies Center.

Repeatability: This course may be repeated for additional credit.

LAS 2040. Special Topics. 4 Credit Hours.

Topics vary each semester. Please consult with the instructor and/or check the course schedule for specific topic.

Repeatability: This course may be repeated for additional credit.

LAS 2072. Puerto Ricans in Philadelphia. 3 Credit Hours.

This course looks at the migration of Puerto Ricans to the United States in the 20th century, a group that is the second largest Hispanic group in the country. It examines the specific community of Puerto Ricans in Philadelphia and its relationship with other racial and ethnic groups and the social, political, and economic situation of Puerto Ricans in the city. NOTE: Students will earn credit only once for either LAS 2072 or AMST 2072.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

LAS 2097. Writing Seminar I. 3 Credit Hours.

Course topics vary each semester and may include the media in Latin America, Latin American music, race and ethnicity, and social movements. NOTE: Students can obtain a description of the current version at the Latin American Studies Center.

Course Attributes: WI

Repeatability: This course may be repeated for additional credit.

LAS 2098. The Legacy of Mesoamerica. 3 Credit Hours.

The course briefly reviews the nature of Prehispanic Mexico and Central America by examining its earliest manifestations in the Pre-Classic Period through the Late Post-Classic Period, right before European contact. Cultures examined will include the Maya, Nahuatl, Tarascan, and Mixtec among others. We will then study the Spanish Conquest of the region and how the indigenous peoples adapted to Spanish rule during the Colonial period. Following independence from Spain, indigenous peoples of Mesoamerica dealt with a new sort of adaptation. Specifically, that of integration into the new nation-states of Mexico and Guatemala will be examined. Modern Mesoamerica will also be discussed, particularly in terms of how the indigenous peoples have adapted to a new "globalized" world.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

LAS 2101. Latin America through Film and Fiction. 3 Credit Hours.

Economic and political change; role of institutional forces including the military and church. Cultural and intellectual traditions and trends, past and present. Multi-media approach.

Repeatability: This course may not be repeated for additional credits.

LAS 2169. Archaeology of South America. 3 Credit Hours.

A survey of prehistoric cultures of South America. Concentrates on (1) the initial entry and spread of human populations into South America and the West Indies, (2) origins of tropical and highland agriculture, (3) the rise of urbanism, civilization, and the state in the Andes, and (4) the impact of prehistoric cultures on the environment.

Repeatability: This course may not be repeated for additional credits.

LAS 2173. Ancient Mesoamerica. 3 Credit Hours.

Ancient Mesoamerica is a general survey of the pre-Columbian cultures of Mexico and Middle America before the Spanish Conquest of the Aztec Empire in A.D. 1521. In this course we will examine the long history of Mesoamerica beginning with the first peopling of the Americas at least 15,000 years ago and ending with the Spanish Conquest and the creation of "Latin America."

Repeatability: This course may not be repeated for additional credits.

LAS 2220. Special Topics - LASS Seminar. 2 to 3 Credit Hours.

Arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic. NOTE: Given in Spanish as part of the LASS program.

Repeatability: This course may be repeated for additional credit.

LAS 2231. Comparative Political Systems in Latin America. 3 Credit Hours.

A comparative consideration of selected Latin American political systems. NOTE: Students will receive credit only once for either LAS 2231 or POLS 2231.

Repeatability: This course may not be repeated for additional credits.

LAS 2361. Peoples of Latin America. 3 Credit Hours.

Starting in 1492, Native American isolation from Europe and Africa ended in the region of the Americas that became Latin America. Despite five hundred years of colonial and nation-state domination, indigenous peoples in Latin America continue to assert their basic human right to resist cultural hegemony. Not only have indigenous populations survived, they are also growing. Today they constitute a majority in Bolivia, Ecuador, Guatemala, and Peru and a substantial plurality in Brazil, Mexico, and Colombia. The focus here is on this remarkable struggle for physical and cultural survival. Attention will be given to the lived experiences of people struggling for human dignity on the lowest strata of regional class structures. Issues of land rights, environmental, health, political, and economic self-determination will be examined.

Repeatability: This course may not be repeated for additional credits.

LAS 2362. Peoples and Cultures of the Caribbean. 3 Credit Hours.

Shaped by conquest and colonial transnational desires, first of sugar and then of tourism, the Caribbean has been wrought since its very inception by the displacement of people, goods and ideas from Africa, Asia, Europe, and Latin America, presenting a challenge for the anthropological study of socio-cultural change through time and space. In this introductory course on the Caribbean we will critically examine "creolization" processes at social, religious, political, economic, and artistic levels as they were driven by various groups, from pirates, privateers, maroons, exiles, to tourists, in the context of colonialism, nation building, and globalization. Examining specific sites such as music, display events, folklore, and religion we will ponder about, for instance, the effects of European revolutions on the creation of elites in the Caribbean, and the impact of slave cultures and peasantries on the formation of creole religions. How has the image of the sensuous/threatening mulatta evolved since the plantation? On what kind of histories and emotions do "zombies" feed upon? Why did Reggae and Merenge succeed on the global stage? How does the display of national icons in Trinidadian carnival reflect on their socio-political conflicts? How is the colonial past re-packaged for global consumption? Format: Seminar with short lectures, class presentations, video screenings and class discussions.

Repeatability: This course may not be repeated for additional credits.

LAS 2502. Fundamentals of Latin American Business. 3 Credit Hours.

This course is designed to give students a solid basis to face a job assignment related to business in a Latin American country and to develop your ability to perceive the importance of cultural diversity and how it influences business activities across Latin American countries. Specifically, this course will help you understand the specific challenges of doing business in Latin America and enable you to perceive and understand the differences in the business environment, business customs, and business practices between countries of Latin America and of the rest of the world.

Repeatability: This course may not be repeated for additional credits.

LAS 2512. Mexican Migration to the United States. 3 Credit Hours.

Illegal immigration remains a volatile and divisive question for the United States. Most discussions in the political system and in the mass media ignore the extensive history of Mexican migration to the United States. We will examine the pervasive influence of that history upon the present as well as the tight connections that exist between Mexican labor migration and phenomena that most US citizens prize -- the spread of American culture and influence abroad, international political stability, reliable domestic economic growth, and the availability of inexpensive goods and services. Instruction takes place through discussion, lecture, film, and computer projection. Readings include both primary documents stemming from historical events themselves as well as secondary academic studies. Note: Students will receive credit only one time for either LAS 2512 or HIST 2512.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

LAS 2514. Historical Continuity and Social Change in Latin America. 3 Credit Hours.

Overview of Latin American history from a social change/social problems perspective. Some of the historical themes addressed include: social inequality and unequal exchange, cultural domination and resistance, racial minorities and indigenism, the role of women in Latin American societies, political imposition and democracy, and national independence.

Repeatability: This course may not be repeated for additional credits.

LAS 2515. Civilization and Modernity in the Caribbean. 3 Credit Hours.

This course surveys post-Emancipation Caribbean history, regarding it as a complex process dominated by notions of "civilizing" and "modernizing." We will address the significance of both terms, exploring what they have meant for the diverse peoples inhabiting the region. What did civilizing mean for the labor practices and religious expressions of free blacks and indentured Indians in the late 19th century? What did modernizing mean for concepts of peoplehood, cultural production and representation in the 20th century? Who have been the primary agents of "civility" and "modernity"? And how have others responded to - resisted, embraced, negotiated - their efforts and ambitions? In answering these questions, we will turn to a range of disciplines including history, anthropology, literature and political science. NOTE: Students will receive credit only once for either LAS 2515 or HIST 2515.

Repeatability: This course may not be repeated for additional credits.

LAS 2522. Spanish Conquest of the Americas. 3 Credit Hours.

In 1492, Columbus sailed the ocean blue and ... either discovered or destroyed America, depending on your point of view. By 1542, Spain had claimed most of the Americas and Lopez de Gomara, the private secretary of Hernan Cortes, wrote, "The greatest event since the creation of the world." Later, in the 18th and 19th centuries, both Adam Smith and Karl Marx would make the same claim in their writings. From the very beginning, not only the magnitude but also the meaning of the Conquest of the Americas has been a point of controversy and acclaim. In this class, we will examine the Indigenous societies of the Americas and the Iberian Peninsula on the eve of their cataclysmic encounter, the processes by which the Spanish Conquistadors overran Indigenous territories, the ways in which each of these distinct societies impacted one another, and the hybrid societies that emerged on the other side. DUPLICATE CREDIT WARNING: Students can receive credit only once for either HIST 2522, ANTH 2522, or LAS 2522.

Repeatability: This course may not be repeated for additional credits.

LAS 2525. Maya Language and Culture. 3 Credit Hours.

This course will introduce students to the language and cultures of the Maya area of Mesoamerica. Students will acquire basic conversational elements of one of the Maya languages, study Maya culture, including the indigenous literature of the area where applicable, and generally gain a deeper understanding of this diverse part of Latin America.

Repeatability: This course may not be repeated for additional credits.

LAS 3010. Topics in Latin American Studies II. 3 Credit Hours.

Course topics vary each semester and may include the media in Latin America, Latin American music, race and ethnicity, and social movements. NOTE: Students can obtain a description of the current version at the Latin American Studies Center.

Repeatability: This course may be repeated for additional credit.

LAS 3020. Topics in Latino Studies. 3 Credit Hours.

Course topics vary and may include the study of Latino migration to the United States, Latino communities in the United States, and Latino political and cultural movements. NOTE: (1) Students can obtain a description of the current version at the Latin American Studies Center. (2) This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: RS

Repeatability: This course may be repeated for additional credit.

LAS 3101. Latino Identity in the United States. 3 Credit Hours.

Latino Identity in the U.S. is a general survey of the cultural-historical experiences of Latinos in the United States from pre-colonization to the present with concentration on the time period of the civil rights movement to the present. The course will explore the impact of Latinos in U.S. cultural-history and artistic expressions, across all disciplines; specifically on how this impact has reflected itself in the development of Latino identity formation and how Latinos fit within race/ethnic/gender cultural politics in the United States. Note: Students will receive credit only once for either LAS 3101 or AMST 3101.

Repeatability: This course may not be repeated for additional credits.

LAS 3229. Latin American and Latinx Philosophy. 3 Credit Hours.

This course surveys central ideas and debates in the Latin American and Latinx philosophical traditions. We will pay special attention to the impact of European colonialism in the production and reception of philosophical ideas in Latin America and Latinx communities in the US. This survey ranges from pre-colonial indigenous philosophy to the present. We will discuss classical and contemporary Andean and Mesoamerican indigenous philosophies and why they are often not treated on par with Western forms of knowledge. We will also cover philosophical debates in colonial and post-colonial Latin America. We will examine how the colonial experience shaped Latin American philosophers' ideas around race, gender, nationhood, education, progress, and authenticity. We will also reflect on aspects of the lived experience of Latinxs in the United States, such as immigration and the controversies around Latinx identity. NOTE: This course is regularly cross-listed with PHIL 3229 and SPAN 3229. Students may receive credit for only one of the following: PHIL 3229, LAS 3229, or SPAN 3229.

Repeatability: This course may not be repeated for additional credits.

LAS 3267. Sociology of Music: Nation, Race, Class and Gender in Argentina and Brazil. 3 Credit Hours.

The initial developments of the sociology of music were linked to the work of scholars who played pivotal roles in the history of sociology, such as Max Weber and Theodor Adorno. The sociology of Latin American music usually followed the theoretical developments occurring in the industrialized countries of the West, but, at the same time, it was characterized by a peculiar twist in the way it understood the complex relationship between music and society. In this course we delve into this important literature and grapple with the social and cultural foundations of music, with particular emphasis on the relationship between music and society in Brazil and Argentina. Due to the complex social organization of these two countries in terms of race, ethnicity, regionalisms, class, gender and religion, the course will explore the articulation of that complexity in the way people use music in their everyday life to understand who they are and what to do in the context of an ever changing social reality.

Repeatability: This course may not be repeated for additional credits.

LAS 3561. History of Brazil. 3 Credit Hours.

Modern and contemporary Brazilian themes including democracy, globalization, and nationalism, cultural and ideological dissent, and popular social movements. Course materials include Brazilian writings, documents, and films. NOTE: Course title prior to fall 2009: "Contemporary Brazilian Scene."

Repeatability: This course may not be repeated for additional credits.

LAS 3562. Contemporary Mexico. 3 Credit Hours.

Over the past several years, Mexico has become increasingly integrated with the United States economically, socially, and culturally; a phenomenon that has presented new challenges to both countries to organize this irreversible process constructively. We will look at the present-day questions between the United States and Mexico through the experience of Mexico's history since 1940. This period includes decades of industrialization, city growth, labor migration to the United States, cultural flourishing, political restlessness, the emergence of narcotics trafficking, and incorporation into the North American Free Trade Agreement (NAFTA). This course concludes with some speculative considerations about the future. Instruction takes place through discussion, lecture, film, computer projection, and readings from the new historical scholarship that has emerged on post-1940 Mexico.

Repeatability: This course may not be repeated for additional credits.

LAS 3563. Puerto Rican History. 3 Credit Hours.

This course explores particular issues related to the political, economic, and social development of Puerto Rico with special emphasis given to the 19th and 20th centuries. The course will not only address historical paragons but also questions of interpretations. In each class a combination of readings, discussion, lectures, and videos will be used to view the various issues in a comprehensive manner.

Repeatability: This course may not be repeated for additional credits.

LAS 3566. Race, Gender, and Empire in the Iberian World. 3 Credit Hours.

Latin America is a culturally rich and diverse region. Its complex and fascinating history is the product of different worlds and cultures coming together in the 16th century. In this course we will analyze this encounter and its consequences by looking at two main topics: race and gender. Following a chronological order that starts with the conquest of the Americas by Spaniards and Portuguese in the 16th century and ends with the breakdown of the Spanish empire in the early 19th century, the course will explore the ways in which different peoples have interacted. We will discuss the various roles men and women assumed in these societies and the significance of race. In so doing, we will attempt a deeper analysis of the social dynamics of Latin America in the past that will give us a better understanding of its present and future. Note: For history majors, this course is in the "Global/Comparative" category.

Repeatability: This course may not be repeated for additional credits.

LAS 3601. "Other Voices" in Latin American Literature. 3 Credit Hours.

This course looks at race, color, and gender in Latin American creative literature. The literature explores key cultural dimensions of the Latin American society and psyche. Focus is on the presence of Afro-Latinos, the role of Indigenous peoples, and feminist perspectives in the different Latin American societies.

Repeatability: This course may not be repeated for additional credits.

LAS 3602. Caribbean Literature and Culture. 3 Credit Hours.

The Caribbean is an immensely rich, virtually untapped cultural matrix for most North American students. This confluence of many old world cultures really is the brave new world, home of four Nobel laureates and a vast multi-lingual literature that runs in deep currents through our own national psyche. This course will focus on Caribbean artists and social movements that have had a major impact on modern culture, especially in the United States.

Repeatability: This course may not be repeated for additional credits.

LAS 3801. African Culture in Brazil. 3 Credit Hours.

This course is an interdisciplinary examination of the cultural history of Africans and their descendents in Brazil. Particular attention will be paid to the northeastern state of Bahia - the earliest and most important point of entry for Africans transported to Brazil during the Atlantic slave trade. Special focus will be paid to Bantu-Kongo culture of West Central Africa and to the Yoruba and Fon cultures of Western Africa transferred to Brazil from the late 16th through the 19th centuries.

Repeatability: This course may not be repeated for additional credits.

LAS 4082. Independent Study. 1 to 9 Credit Hour.

Independent research on a specific topic related to Latin America. This course will enable undergraduate students the option of taking an independent study through the Latin American Studies Center.

Repeatability: This course may be repeated for additional credit.

LAS 4097. Latin American Studies Seminar. 3 Credit Hours.

This course serves as the capstone for the Latin American Studies major. Students write a substantial research paper (20-25 pages) dealing with the general theme selected for the semester. This course is open to non-LAS majors with permission of the Director of Latin American Studies. Should be taken in the fall of the senior year. NOTE: Fulfills the Capstone writing course requirement for the Latin American Studies major. Special Authorization required for all students.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Latin American Studies.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Law - Undergraduate Courses (LAWU)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

LAWU 0801. Border Crossings: Gendered Dimensions of Globalization. 3 Credit Hours.

Explore the ways in which gender "works" in different cultural and national contexts, and the impact globalization has on gender relations. "Gender" indicates the ways in which our social lives are organized around categories of male and female - in relation to work, family, sexuality, culture, and nation. "Globalization" describes the transfer of economic and cultural goods between nations and peoples. Questions we will ask include: What is globalization and how do women and men experience it differently? Do women and men work the same jobs in the global labor market, and do they get paid the same wages? How does immigration affect families? Does a growing connectedness between cultures and nations change traditional gender roles? How different are experiences of women in the "Third World" from those of women in the "First World," and why? NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed GSWS 0801 or WMST 0801.

Course Attributes: GG, SI

Repeatability: This course may not be repeated for additional credits.

LAWU 0825. The United States Constitution and Popular Culture. 3 Credit Hours.

What does popular culture have to do with the U.S. Constitution? The relationship between them is a two-way street: constitutional law regulates and inspires popular culture, while popular culture parodies, dilutes, and reinforces constitutional law. We will discover how websites, internet mash-ups, comics, films, music, and comedy television intersect with constitutional principles. In class, students will watch and hear popular culture works, including full-length films, video parodies, cartoons, and music. We will identify parts of popular culture restricted by the Constitution as well as those parts the Constitution celebrates. Using the lens of popular culture, we will explore how the U.S. Supreme Court operates and how the Constitution protects rights such as free speech, criminal procedure protections, and other freedoms. The course will trace popular culture references to court decisions about medical marijuana, love triangles, violent video games, cross burning, abortion, homosexual conduct, interracial marriage, obscenity, gun rights, women's rights, and school desegregation.

Course Attributes: GU

Repeatability: This course may not be repeated for additional credits.

LAWU 0833. Law and Literature, Law in Fact. 3 Credit Hours.

Of what does fairness consist? One important component is, of course, decision according to rule, rendered by a neutral, impartial decision maker. But the rule of law ideal does not exhaust our conceptions of what is fair. Where strict application of rules seems unduly harsh, it may seem more fair to show mercy. Or sometimes we may prefer a decision maker who is not strictly impartial, but who can empathize with the person being judged. And sometimes it is important to focus on results rather than on procedure. This interdisciplinary course will use short stories (including Susan Glaspell's famous tale, A Jury of Her Peers), novels (including Herman Melville's Billy Budd), and a Shakespeare play (Measure for Measure) to examine different visions of fairness in the law. These materials present questions of enormous social and ethical relevance, such as whether and when we might "excuse" murder or whether and when it is permissible to lie in the service of truth. Through in-class discussions, a mock trial, and writing exercises, students will be asked to bring differing images of fairness to bear on an actual legal problem that arose right here in Philadelphia, in order to see how alternative ideas of fairness might affect the way in which we understand how to behave in morally complicated situations. Students will learn to think critically about ideas such as blame, responsibility and authority, to communicate those ideas both orally and in writing, and to consider how works of fiction can show us what is true about the world in which we live.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

LAWU 0834. Understanding Justice. 3 Credit Hours.

This course will explore the idea of justice, with particular emphasis on how justice might be achieved through law. That exploration will incorporate conceptualizations of justice in political philosophy (Aristotle, Hobbes, Hume, Mill, and Rawls), as well as presentations of themes of justice in literature (Bible stories, Greek tragedy, and modern fiction). In the core portion of the course we will use these philosophical and literary materials, together with distinctively legal materials (cases, statutes, constitutional provisions), to probe the relationship between justice and law by examining the idea of legal rights (What are they? Who has them? Where do they come from? How are they related to notions of liberty and equality?), by considering how justice can be achieved through the way law is administered (What are "due process" and "equal protection"?), and by identifying the responsibilities of judges and lawyers with respect to the realization of justice through the legal system (What does it mean for a judge to be impartial? What is the responsibility of lawyers for the impact of their advocacy and counseling on third parties and on the larger society?). We will do all this by focusing on specific contemporary legal issues that raise vital questions of justice, including affirmative action, same-sex marriage, vaccination of children, workers protection laws, access to contraception, and abortion, among others.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

LAWU 0854. Education in the Global City. 3 Credit Hours.

We are in the midst of vast global change. How does it impact cities like Philadelphia and the people who live here? In this course we focus mainly on education in the city, but this doesn't mean we look only at schools. Globalization is creating new possibilities for learning: we have instant access to vast networks of information, migration is bringing rich cultural diversity to our doorsteps, and we learn in many different types of schools and communities. But globalization is also creating new problems that education must address: new kinds of poverty, increasingly separate lives, mounting intolerance, a digital divide. This course explores what education in all its forms can do to support the American dream for people in the city, nation, and the world. Our exploration goes beyond the classroom, linking academic and community-based learning. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed URBE 0854.

Course Attributes: GU, SI

Repeatability: This course may not be repeated for additional credits.

LAWU 0875. Law Beyond Borders. 3 Credit Hours.

Law Beyond Borders examines how law impacts world affairs and, in turn, how world affairs impact our understanding of law. We will examine high-profile and controversial current events ranging from U.S. cyber-operations in Iran to the Syrian civil war, asking what international law is, how it works, and how well it does so. We ask what makes a nation State and what powers it has. We'll explore why and how states collaborate on issues of mutual concern and resolve their differences. We will survey the human rights revolution and the international responses to globalization, including efforts to regulate international environmental issues and international trade. The course will be taught using law school teaching methods plus three experiential exercises where students will debate Palestinian Statehood, argue a case before the International Court of Justice that arises out of war-time atrocities, and discuss potential responses to ISIS. The class will give students the tools to know what international law "is" and to assess its ability to promote justice in an increasingly globalized world. Just as importantly, this course will enhance students' critical reasoning and writing skills, and their ability to create - and critique - different styles of argument.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

LAWU 1001. Law in Public Health and Health Care. 3 Credit Hours.

This course is aimed at undergraduate students interested in the intersection of law and health, including those pursuing degrees in public health, health professions, social work, political science, criminal justice and psychology. It is intended to provide students with the tools and competencies to deal with the legal issues they will encounter in their future health-related careers. The course will cover the fundamental of law as a form of regulation and health intervention, as medium of health advocacy and social change, and as a shaper of health in itself.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Legal Studies (LGLS)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

LGLS 0803. African Americans, Equality and the Law: Weapon or Tool?. 3 Credit Hours.

Learn about the experience of African Americans through the lens of the U.S. legal system. U.S. law, which first defined African Americans as less than human, eventually declared discrimination illegal, and remains both an expression and an instrument of change at the intersection of race and equality. As you study this evolution, you will reflect on relevant current events, and explore your own responses to the kind of everyday encounters that continually arise in our pluralistic society. Can race be used as a factor in hiring, in college admissions? Is race a factor for you in dating, marriage, adoption? We explore issues like these on both broad social and personal dimensions. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students who have already successfully completed LGLS 0903 or LGLS 1002 (R050) cannot earn credit for this course. Students who are under Core and take this course in fall 2008 or after will ONLY fulfill the Race requirement for Core. This course will NOT fulfill the American Culture Core requirement.

Course Attributes: GD, SF

Repeatability: This course may not be repeated for additional credits.

LGLS 0805. Sexual Orientation, Gender Identity and the Law. 3 Credit Hours.

Transgender rights. Marriage equality. LGBT+ and the military. Hate crimes. Discrimination. From the decriminalization of sodomy to the legalization of same-sex marriage to the implications of gender reassignment, sexual orientation and gender identity are some of the most rapidly changing subjects in society today. The progression (and regression) of societal attitudes toward differences based on sexual orientation and gender identity have led to legal developments that affect the lives of individuals in larger communities (LGBT+ and otherwise). This course will look at the intersections of law, psychology, sexual orientation, and gender identity to develop your understandings of the relationships between individuals and communities. It aims to teach you how to interpret human behavior and articulate your own point of view by examining the social and legal regulation of sexual orientation and gender identity. This course will look at issues involving sexual orientation, gender identity, social skills to evaluate social and legal responses to gender identity and sexual orientation. This course will address specific topics including employment discrimination, marriage equality, family formation, LGBT + youth (identity formation, bullying), military service, immigration, and cross-national comparisons. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd. Students who have already successfully completed LGLS 0905 cannot earn credit for this course.

Course Attributes: GB, SF

Repeatability: This course may not be repeated for additional credits.

LGLS 0856. Law and American Society. 3 Credit Hours.

An intruder rushes into class, hits the professor in the face with a pie, and runs out. You are asked to provide a description of the assailant--and now you realize this was a demonstration of the faultiness of human memory in making eyewitness identification. Develop your understanding of the historical, socio-political and ethical context of the U.S. legal system as you follow the misadventures of a fictional family that gets caught up in various legal problems. Current events inform every assignment; you might analyze, for example, the case against McDonalds brought on behalf of obese children, and then research legislation known as the "Cheeseburger Bill," prohibiting such lawsuits. An exciting, multimedia environment makes learning vivid. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students who have already successfully completed LGLS 0956 or LGLS 1001 (C001) cannot earn credit for this course.

Course Attributes: GU

Repeatability: This course may not be repeated for additional credits.

LGLS 0903. Honors African Americans, Equality and the Law: Weapon or Tool?. 3 Credit Hours.

Learn about the experience of African Americans through the lens of the U.S. legal system. U.S. law, which first defined African Americans as less than human, eventually declared discrimination illegal, and remains both an expression and an instrument of change at the intersection of race and equality. As you study this evolution, you will reflect on relevant current events, and explore your own responses to the kind of everyday encounters that continually arise in our pluralistic society. Can race be used as a factor in hiring, in college admissions? Is race a factor for you in dating, marriage, adoption? We explore issues like these on both broad social and personal dimensions. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students who have already successfully completed LGLS 0803 or LGLS 1002 (R050) cannot earn credit for this course. Students who are under Core and take this course in fall 2008 or after will ONLY fulfill the Race requirement for Core. This course will NOT fulfill the American Culture Core requirement.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GD, HO, SF

Repeatability: This course may not be repeated for additional credits.

LGLS 0905. Honors Sexual Orientation, Gender Identity and the Law. 3 Credit Hours.

Same-sex marriage. Gays in the military. Hate crimes. Chaz Bono and "Dancing with the Stars." From the decriminalization of sodomy to the legalization of same-sex marriage to the implications of gender reassignment, sexual orientation and gender identity are some of the most rapidly changing subjects in society today. The progression (and regression) of societal attitudes toward differences based on sexual orientation and gender identity have led to legal developments that affect the lives of individuals in larger communities (LGBT and otherwise). This course will look at the intersections of law, psychology, sexual orientation, and gender identity to develop your understandings of the relationships between individuals and communities. It aims to teach you how to interpret human behavior and articulate your own point of view by examining the social and legal regulation of sexual orientation and gender identity. This course will look at issues involving sexual orientation, gender identity, social stigma, discrimination and injustice from legal and psychological perspectives. You will develop your critical thinking skills to evaluate social and legal responses to gender identity and sexual orientation. This course will address specific topics including employment discrimination, same sex marriage, family formation, LGBT youth (identity formation, bullying), military service, immigration and cross-national comparisons. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd. Students who have already successfully completed LGLS 0805 cannot earn credit for this course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GB, HO, SF

Repeatability: This course may not be repeated for additional credits.

LGLS 0956. Honors Law and American Society. 3 Credit Hours.

An intruder rushes into class, hits the professor in the face with a pie, and runs out. You are asked to provide a description of the assailant--and now you realize this was a demonstration of the faultiness of human memory in making eyewitness identification. Develop your understanding of the historical, socio-political and ethical context of the U.S. legal system as you follow the misadventures of a fictional family that gets caught up in various legal problems. Current events inform every assignment; you might analyze, for example, the case against McDonalds brought on behalf of obese children, and then research legislation known as the "Cheeseburger Bill," prohibiting such lawsuits. An exciting, multimedia environment makes learning vivid. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and the American Culture (AC) requirement for students under Core. Students who have already successfully completed LGLS 0856, LGLS 1001 (C001) or LGLS 1996 (X091) cannot earn credit for this course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GU, HO

Repeatability: This course may not be repeated for additional credits.

LGLS 1001. Law in Society. 3 Credit Hours.

The American legal system affects each of us on a daily basis. Educated citizens, no matter what career path they may choose, should be aware of the ways in which the law can impact their lives. This survey course introduces students to the essential aspects of law: its sources, organization, and evolution. They will learn the basic elements of constitutional, contract, criminal, tort, and administrative law. The political, social, and economic forces that affect change are also discussed thereby providing guidance as to the future direction of the law. NOTE: This course can be used to satisfy the university Core Individual and Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: IN

Repeatability: This course may not be repeated for additional credits.

LGLS 1101. Legal Environment of Business. 3 Credit Hours.

The legal system affects each of us on a daily basis. Educated citizens, no matter what career path they may choose, should be aware of the ways in which the law impacts their lives in a personal and business setting. This course will introduce students to the essential aspects of law with an emphasis on the legal environment of business. Students will learn the basics of contract, tort, property, and administrative law as well as international law. The law involving business would include a discussion of public policy and compliance, as well as employer and employee relations. The political, social and economic forces that affect change are also discussed thereby providing guidance as to the future direction of the law in both the United States and around the world. NOTE: This course is required for all Fox School freshmen admitted fall 2008 or later and transfers admitted fall 2010 or later.

Repeatability: This course may not be repeated for additional credits.

LGLS 1102. Law of Contracts. 3 Credit Hours.

When you buy a car, rent an apartment, or take out insurance, you are entering into a contract. Whether as consumers or business professionals, our lives are frequently affected by our agreements with others. In this course, students will learn the basics of contract law including how contracts are negotiated and created, how they are enforced, and what happens when contractual promises are breached. Using the case method, students will also become familiar with the relevant portions of the Uniform Commercial Code that deal with the sale of goods, products, and services.

Repeatability: This course may not be repeated for additional credits.

LGLS 1112. Law for Business. 3 Credit Hours.

Whether you plan to start a business or join one, this course provides practical legal basics applicable across business sectors. You will learn about the advantages and disadvantages of different business entities from formation through duration to dissolution from legal and managerial perspectives. You will also become familiar with consumer and environmental protection initiatives, creditor and debtor rights, as well as other legal topics that affect commerce and its stakeholders. NOTE: Transfer students who come in with the equivalent of LGLS 1102 will receive credit and be waived from the LGLS 1112 course.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BA 1103, BA 1903, LGLS 1101, or LGLS 1901)

LGLS 1901. Honors Legal Environment of Business. 3 Credit Hours.

The legal system affects each of us on a daily basis. Educated citizens, no matter what career path they may choose, should be aware of the ways in which the law impacts their lives in a personal and business setting. This course will introduce students to the essential aspects of law with an emphasis on the legal environment of business. Students will learn the basics of contract, tort, property, and administrative law as well as international law. The law involving business would include a discussion of the types of legal entities, as well as employer and employee relations. The political, social and economic forces that affect change are also discussed thereby providing guidance as to the future direction of the law in both the United States and around the world.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

LGLS 3501. Introduction to Corporate Compliance. 3 Credit Hours.

Compliance refers to the relationship between a business and the governing institutions under which it operates. A business is a legal entity that is endowed with certain rights and responsibilities under the law. As such, it is required to comply with certain policies and laws as stipulated by state and federal government entities. In this course, we will examine the development of this relationship between businesses and the government, endeavoring to identify the lines between smart ethical decision making and high-risk choices that may lead to legal and financial repercussions. By the end of the course, we will understand key statutes and regulations that affect most business entities, penalties for non-compliance, major cases highlighting the risks of careless behavior, and better understand how to put into place an effective code of compliance and ethics.

Repeatability: This course may not be repeated for additional credits.

LGLS 3504. Sports and the Law. 3 Credit Hours.

The sports industry is a multi-billion dollar enterprise where athletes command millions of dollars in salaries and sports enthusiasts spend countless hours following their favorite teams. This course will explore the landmark decisions and social environment, which has transformed these games of fun into a very powerful industry enjoying special protection under the law. Topics will include sports franchise rights, league issues, antitrust laws, sports agents, injuries to athletes, intercollegiate sports, collective bargaining issues, the powers of the Commissioner and gender equity.

Repeatability: This course may not be repeated for additional credits.

LGLS 3506. Law, Technology and E-Commerce. 3 Credit Hours.

New technology has revolutionized the way we do business - from electronic banking to Internet commerce - and has raised a host of new legal issues. This course will increase students' awareness of the rights and problems that arise with the development of new products and services. Topics include trade secrets, patents, copyrights, and trademarks. Special attention will be devoted to the legal protection and unique problems faced by the computer industry in the development of new products and online services.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

LGLS 3507. Business Law for Accountants. 3 Credit Hours.

The legal environment in which businesses operate requires the accounting professional to possess a basic understanding of the law. The course is designed to provide an overview of the legal topics that Certified Public Accountants and other accounting professionals need in their practices. The course will also satisfy the requirements of the Pennsylvania CPA statute, which requires a course in business law. Topics will include the law of Contracts, Business Organizations, the Uniform Commercial Code, Government Regulations, and Debtor/Creditor relationships.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

LGLS 3509. Entertainment Law. 3 Credit Hours.

This course provides a survey of the legal, commercial and financial elements of the entertainment industry, including film, television, and music production and distribution. It highlights intellectual property, corporate, international and other law domains within this field. Students will practice critical thinking methods to analyze current, practical issues in the entertainment industry from a legal perspective.

Repeatability: This course may not be repeated for additional credits.

LGLS 3511. Environmental Law and Sustainability. 3 Credit Hours.

Water and air pollution. Hazardous waste. Loss of species. Climate change. This course begins with an historical overview of the legal response to environmental harm, looking at the transition from a common law approach to the creation, since the 1970's, of a network of federal statutes and regulations. It looks at questions like these: What are the different regulatory strategies for controlling pollution, and how do they compare? To what extent can market forces be harnessed to improve environmental outcomes? Can the law effectively provide incentives to prevent pollution from happening? What is environmental justice? What should be the response of environmental law to scientific uncertainty? You will learn about the interactions among the courts, Congress, the executive branch and industry interests as environmental law and policy have developed. You will also learn about efforts to address global climate change, and examine the role the U.S. has played in these negotiations.

Course Attributes: SE, SF, SP, SS

Repeatability: This course may not be repeated for additional credits.

LGLS 3513. Public Policy. 3 Credit Hours.

Product safety. Financial accountability. Environmental preservation. Protection from workplace discrimination. Government regulations - expressions of "public policy," are everywhere in the world of business. This course will introduce you to the way in which these laws are created. You will learn how administrative agencies, legislatures, the courts, interest groups, political parties, lobbyists, and the media all interact, shaping the policy-making process. As we explore these issues we will be addressing questions like these: Why do we need public policies? What kinds of problems are not likely to be solved in the private marketplace, and more appropriate for government intervention? How are public policy priorities decided? How can we determine whether public policies accomplish their goals? This course is designed to hone your writing, research and analytical skills.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

LGLS 3519. Tax, Estate and Trust Planning. 3 Credit Hours.

This course shows you how to properly inventory assets, tax and estate planning techniques such as how to properly plan for funding a college education, retirement, the future distribution of your assets, the requirements to establish a power of attorney, a Last Will and Testament, various Trust Instruments and an advanced Health Care Directive. This course will also cover life insurance funds, gifts and charitable donations. We will also examine the fiduciary duties of personal representatives of estates, lawyers and accountants and financial advisors.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FIN 3101, FIN 3901, 'Y' in CRFI01, or 'Y' in CRFI07)

LGLS 3521. Corporate Governance. 3 Credit Hours.

The modern corporation operates within an ever-expanding framework of federal, state and local laws and regulations. Governed by its board of directors, the corporation must ensure that it adheres to the law while it simultaneously ensures that it sets and implements strategies for short and long term success. In order to thrive in a rigorous marketplace, corporate boards, executive management, and business units must achieve a balance and alignment among external and internal controls, risk management and competitive behavior. This course will inform students' understanding of the fundamental corporate governance principles and the responsibilities of the board of directors and other corporate actors, and it will develop the skills and strategic insight needed to become a more effective leader. Students will also learn frameworks that can move boards and executives beyond simple compliance to the creation of opportunities for long-term value.

Repeatability: This course may not be repeated for additional credits.

LGLS 3522. Technology, Privacy and Intellectual Property Law. 3 Credit Hours.

Who owns your genes? Who owns your memes? Is ownership affected by the fact that you express your ideas publicly on a social network that sells your personal data, or via private emails through an online service that you get for free? If your creative collaborators are around the world, working with you through an Internet service that resides in the "cloud," what does the law say about who owns the results? Which law should apply? This course explores the different mechanisms for protecting intellectual property in the U.S.--patents, copyrights, trade secrets, and trademarks--and the policy and ethical concerns as technological progress generates tectonic shifts in the global marketplace. It traces the evolution of privacy as expressed in philosophy, common law, Constitutional law, government policy, and modern practice in the digital age. We will look specifically at cyber-security and hacking, personal health and financial information, and surveillance, as well as the implications of international law upon your privacy rights.

Repeatability: This course may not be repeated for additional credits.

LGLS 3523. Detecting Financial Crimes. 3 Credit Hours.

From cuff-links to handcuffs, business executives face potentially harsh prison sentences for conducting business that violates federal and state laws. This course investigates white-collar crimes, their perpetrators, their punishment, and their impact upon business sectors and the larger community. White-collar crime refers to financially motivated nonviolent crime committed by business and government professionals. This course explores a vast array of these types of criminal offenses while examining government and judicial regulations of financial institutions, commercial entities, and their agents and employees in relation to economic and business crimes. The course will also address constitutional issues pertaining to investigations conducted by governmental and corporate entities.

Repeatability: This course may not be repeated for additional credits.

LGLS 3524. Legal and Policy Issues in the Workplace. 3 Credit Hours.

Social media and privacy rights. Trade secrets. Pay equity. Family-work conflict. Non-Compete Agreements. This course will explore the rights and responsibilities of workers and managers alike by examining the laws, regulations, court cases, and policies that govern the employer-employee relationship. It aims to teach you the basic principles of workplace law and policy while challenging you to question existing approaches to the employment relationship. The course will use cases and questions currently in the news and in the courts to examine the U.S. approach to the workplace: Should employers control employees' access to birth control or other medical care? Can a company perform criminal background or credit checks on applicants without violating race discrimination prohibitions? How would a mandate of paid time off to care for a new child or ill family member impact a business's bottom line? What role should the government play in setting a minimum wage and how does it affect workers and their employers? This course will ask questions like these to help you understand the way in which workplace laws and policy impact society in general and to help you articulate your own view of the employer-employee relationship. Note: Students who have taken HRM 3512 should not take this course.

Repeatability: This course may not be repeated for additional credits.

LGLS 3562. Legal Aspects of Global Business. 3 Credit Hours.

Today's economy is more globally connected than at any time in history. Transportation costs are a fraction of what they were in the recent past. Communication through email, chat services, and social networks has become seamless across borders. And of course, commerce has opened doors to products and services from all corners of the Earth. Businesses large and small are taking advantage of the cost savings of "going global" by outsourcing manufacturing, importing components, and exporting finished goods. Companies that fail to go global may instead go out of business. But going global is risky. And the risks that a company faces in concluding international contracts, export agreements, or joint ventures with foreign partners are unlike most risks faced in domestic transactions. This course introduces students to the world of global commerce, covering essential topics such as international sales, import and export regulations, dispute resolution on a global scale, and the public policy aspects of international trade, including multilateral institutions such as the World Trade Organization.

Repeatability: This course may not be repeated for additional credits.

LGLS 3580. Special Topics - Law. 3 Credit Hours.

Special topics in current developments in the field of legal studies.

Repeatability: This course may be repeated for additional credit.

LGLS 3581. Pre-Law Internship and Seminar. 2 to 3 Credit Hours.

Sit in on a trial, help prepare legal documents or observe a real estate closing. The first part of this course will provide classroom instruction on the practical side of the law. This internship will then provide students with the opportunity to see the law in action by providing an opportunity of working in a law firm, governmental agency or nonprofit entity offering counseling and legal advice.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Legal Studies.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

LGLS 3582. Independent Study. 1 to 6 Credit Hour.

This course is limited to Legal Studies majors and requires the approval of the department chair with the sponsorship of a faculty member from the department. The course requires a comprehensive legal analysis of a legal topic that culminates in the writing of a substantial research paper.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Legal Studies.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

LGLS 3682. Independent Study. 1 to 6 Credit Hour.

This course is limited to Legal Studies majors and requires the approval of the department chair with the sponsorship of a faculty member from the department. The course requires a comprehensive legal analysis of a legal topic that culminates in the writing of a substantial research paper.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Legal Studies.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

LGLS 3900. Honors Special Topics. 3 Credit Hours.

This Honors course covers special topics in current developments in the field of legal studies.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

LGLS 3999. Honors Thesis I. 1.5 Credit Hour.

The first of a two-part sequence of courses in which independent research is conducted under the supervision of a thesis advisor from the Legal Studies department resulting in a substantial piece of original research, roughly 30 to 50 pages in length upon completion of Legal Studies 4999. The student must publicly present his/her findings at a Temple University Research Forum session or the equivalent during one of the two semesters during which these courses are undertaken.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

LGLS 4596. Legal Reasoning in Action. 3 Credit Hours.

A corporate employee is fired after speaking up about what she thought were accounting irregularities. A big-box store must decide how to respond to reports that its subsidiary in Mexico has been paying bribes to hasten expansion. The religious beliefs of a company's CEO are violated by a federal law requiring that company to pay for employee birth control. As we discuss, research, and critically examine business law case scenarios like these, you will have several opportunities to practice legal discourse in both written and spoken form. Building on the knowledge and skills you have gained in prior Legal Studies courses, this capstone delivers hands-on learning at a deeper level. It is "Writing Intensive;" you will complete a series of assignments of increasing complexity involving case and statutory analysis. In addition, as part of a team, you will be actively involved in mock trials.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Legal Studies.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BA 2196 or BA 2996)

LGLS 4999. Honors Thesis II. 1.5 Credit Hour.

Independent research conducted under the supervision of a thesis advisor from the Legal Studies Department resulting in a substantial piece of original research, roughly 30 to 50 pages in length. Student must publicly present his/her findings at a Temple University Research Forum session or the equivalent if this was not done in Legal Studies 3999.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Legal Studies.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in LGLS 3999.

Lesbian, Gay, Bisexual and Transgender Studies (LGBT)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

LGBT 2002. Religion and Human Sexuality. 3 Credit Hours.

The goal of this course is to examine the attitudes and practices of the major world religions regarding human sexuality. Topics to be covered will include marriage and procreation, and such controversial issues as abortion, homosexuality and sexual activity outside of marriage. Note: Religion and Human Sexuality is taught as a cross-listed course in Religion; Gender, Sexuality & Women's Studies; and LGBT Studies. Students may receive credit for only one of the following courses: REL 2002, LGBT 2002, GSWS 2202, WMST 2202.

Repeatability: This course may not be repeated for additional credits.

LGBT 2003. Gender in the Cinema. 3 Credit Hours.

This course uses feminist and queer film theories to critically explore how gender, queer and trans identities are depicted in Hollywood, independent, documentary, international, and experimental films. The course examines feminism's relationship to racial, class, sexuality, gender identity and other differences through the medium of film. NOTE: Students who earned credit for "Sexual Differences in the Cinema" will not receive additional credits for "Gender in the Cinema." Additionally, students who completed GSWS 2002 will not receive credit for LGBT 2003.

Repeatability: This course may not be repeated for additional credits.

LGBT 2007. Creative Writing: Fiction: LGBTQ Lives. 3 Credit Hours.

In this course, students will grapple with all areas essential to the craft of writing fiction, especially as they are used to tell LGBTQ-centered stories. As LGBTQ identities have not always been accepted in the mainstream, we will also examine the use of subtext to inform plot and/or character development. Through the use of class discussion, individual and group writing activities, and workshopping peer drafts, students will hone their writing tools. By class' end, students will achieve stronger reading and writing skills as well as develop a deeper appreciation and understanding of how to apply elements of fiction to LGBTQ subject matter. Last: this classroom is a brave space, in which writers - regardless of how they identify in terms of gender or sexuality - should feel welcome to work with material that speaks their truth; as such, as peers, we will listen and respond without judgment to the various work we discuss. NOTE: Students can receive credit only once for either GSWS 2007 or LGBT 2007.

Repeatability: This course may not be repeated for additional credits.

LGBT 2128. Men and Masculinities. 3 Credit Hours.

This course examines and interrogates masculinity by drawing upon the diverse voices and experiences of men and boys across age, race, ethnicity, class, sexuality, ability and religion. This course will explore the social and personal meanings of "manhood" and its impact on relationships, institutions and in our public and private lives.

Repeatability: This course may not be repeated for additional credits.

LGBT 2207. Creative Writing: Non-Fiction: Queer Lives. 3 Credit Hours.

For people who identify as members of the LGBTQIA community, queer stories carry a particular significance. In part, these stories allow members of the community to process how their sexuality has influenced their lives but also how these stories have influenced the degree to which they accept and express their sexuality. To people outside the LGBTQIA community, these stories offer a glimpse into what queer individuals have experienced. Because writing about queer lives is inherently political, these stories have often been fashioned into confining structures, such as the "coming out" story. And although this particular approach to telling these stories is important, queer lives often extend well beyond this particular moment in the development of their sexual identity - and some individuals even lack such a "moment" to serve as the core of their story. This course examines a variety of ways to approach telling these stories, for both people without and within the LGBTQIA community. NOTE: Students can receive credit only once for either LGBT 2207 or GSWS 2207.

Repeatability: This course may not be repeated for additional credits.

LGBT 2305. LGBTQ Film: The Coming of Age Genre. 3 Credit Hours.

A number of films examine how queer youth do grapple with their LGBTQIA identity in their adolescent years, thus representing the typical sociological understanding of "coming-of-age." But a number of films instead explore how members of the LGBTQIA community explore their queer identity later in life. These films focus on the more psychological understanding of "coming-of-age", a point when people, mentally, fully accept who they are, inclusive of their sexual identity. Regardless of the timing in a person's life, this life stage focuses on a shift from innocence to a more "adult" or "realistic" take on the world around us. This course explores how the queer coming of age genre renders the often-unique approach queer individuals face as they come of age. NOTE: Students can receive credit only once for either GSWS 2305 or LGBT 2305.

Repeatability: This course may not be repeated for additional credits.

LGBT 2306. LGBTQ Film: Queer Representation. 3 Credit Hours.

This course explores the way in which film has portrayed LGBTQ individuals. Drawing from a diverse slate of films, the class examines not just the various ways in which LGBTQ sexual expression has been rendered but also the political and sociological implications of this depiction over various decades. In addition, the class explores the ways in which those who have fought for LGBTQ visibility and equal rights have been framed through various films, whether they are recognizable figures in LGBTQ history or not. The class explores the ways in which these films have accomplished their goals and discusses the ways in which these films have been received. NOTE: Students can receive credit only once for either GSWS 2306 or LGBT 2306.

Repeatability: This course may not be repeated for additional credits.

LGBT 2400. Topics in LGBT Studies. 3 Credit Hours.

Specific cultural or social studies in LGBT issues with an emphasis on interdisciplinary analysis.

Repeatability: This course may be repeated for additional credit.

LGBT 2405. Queer Lives. 3 Credit Hours.

In this course we will read autobiographical accounts (memoirs, essays, diaries, and poems) in which a significant portion of the narrative focuses on same-sex erotic attraction and/or gender difference, identified in contemporary society by the label Lesbian/Gay/Bisexual/Transgender/Intersex or the generic (and contested) Queer. The works were selected both to examine how gay and lesbian lives have been defined and altered over the course of the last sixty years and to provide a perspective of national, ethnic, religious, and racial diversity. Our main focus in the classroom will be discussion of these texts and their contexts. The classroom will be augmented by a research assignment focused on a gay or lesbian life we have not examined together in class. NOTE: This course was previously titled "Gay and Lesbian Lives." Students can earn credit only once for either "Queer Lives" or "Gay and Lesbian Lives."

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

LGBT 2406. LGBTQ Social Movements. 3 Credit Hours.

Starting in the 1950s forward, using a social science lens, this class examines the collective experience of LGBTQ-identifying lives. Focusing on various LGBTQ social movements, the course explores the various perspectives, targets, strategies, and goals of these various movements. The course also examines issues impacting the various factions within the LGBTQ community and how these factions have employed various tactics to effect social change. Starting with a basic foundation in social movement theory, class readings will explore the various targets addressed by social movements - such as science (medicine), culture, courts (legal), and states (not physical states, per se). The course will also address various ideologies (such as assimilation versus liberation). Students will leave the class with a clear sense of how to define a social movement, understand how it coalesces as a movement, how it operates, how it effects change, as the lasting impact of these various changes within society. Because not every moment that happens within the LGBTQ community happens as a consequence of one prior, the various movements we explore will not be examined chronologically. NOTE: Students can receive credit only once for either GSWS 2406 or LGBT 2406.

Repeatability: This course may not be repeated for additional credits.

LGBT 2815. Love, Marriage, and Family. 3 Credit Hours.

It is easy to assume that love, marriage, and family go together, but this has not always been the case. These concepts have a history. This course is a comparative examination of love, marriage, and family and the related themes of gender and sexuality in different historical periods and geographical areas. It includes ancient, medieval, and modern texts and materials and covers both western (European and American) and non-western (Asian, African, and perhaps Middle Eastern and Latin American) case studies. NOTE: Each instructor may place a different emphasis among those topics and regions. Please be advised that students who have earned credit for GSWS 2815 will not receive duplicate credit for LGBT 2815.

Repeatability: This course may not be repeated for additional credits.

LGBT 3015. Sexuality and Disability. 3 Credit Hours.

This course explores the relationship between sexuality and disability, both visible and invisible. It focuses on gender identity, sexual orientation, wellness, pleasure, technology, inequality, and sexual and erotic agency in relation to the sexual lives of persons living with disabilities. Drawing on critical disability and critical sexuality studies, the course examines historical and modern approaches to understanding how sexuality and disability intersect to impact everyone, both disabled and able-bodied.

Repeatability: This course may not be repeated for additional credits.

LGBT 3016. Sexuality Education. 3 Credit Hours.

When, where and how do we learn about sex? How does what we know about sex shape the way we understand ourselves and our relationship with others? This course explores current and historical approaches to sexuality education and its impact on constructing individual and societal sociosexual and gendered scripts and norms. We will analyze and critique formal K-12 and adult sex education programs as well as the informal ways we learn about sexuality from family, friends and the media. Students will have the opportunity to examine a range of sexuality education curricula that are in use within and outside of the United States as well as to develop their own sexuality education curriculum.

Repeatability: This course may not be repeated for additional credits.

LGBT 3017. Social Perspectives on Digital Pornography: The Other Sex Ed. 3 Credit Hours.

In the 2003 hit Broadway musical, Avenue Q, characters excitedly sing, "The Internet is for Porn!" Over the last 20 years, despite the proliferation and increasing availability of digital pornography, or pornography accessed via the internet, little is known about its impact on sociosexual and gender scripts, gender-based violence, relationships, and sexual pleasure. Using an intersectional, feminist framework, this course explores how and what pornography teaches us about, for example, gender, sexual orientation, consent, and sexual behavior. Additionally, it examines and critiques the newly emerging fields of pornography literacy and pornography studies as well as the rapidly changing legal landscape of digital privacy and censorship and their effect on consumers, creators, and distributors. Note: This course is regularly cross-listed with GSWS 3017; please be advised students can receive credit only one time for either LGBT 3017 or GSWS 3017.

Repeatability: This course may not be repeated for additional credits.

LGBT 3124. Politics of Sexual Orientation and Gender Identity. 3 Credit Hours.

This course examines the emergence and development of the movement to secure rights for gays, lesbians and bisexuals; how gays, lesbians and bisexuals are socially constructed and the influence this has on political discourse; how political issues that are relevant to the lives of gays and lesbians reach the political agenda; and the patterns of conflict and cooperation that exist among actors in and outside of government over issues such as employment discrimination, marriage, child adoption, and military service. Note: Prior to Summer 2019, this course was offered as "Politics, Rights, and Sexual Orientation." Students who earned credit for this course number under that title will not earn additional credits under the new title "Politics of Sexual Orientation and Gender Identity." This course is cross-listed with Political Science and LGBT Studies; students may only receive credit for one of the following course numbers: POLS 3124, GSWS 3124, LGBT 3124.

Repeatability: This course may not be repeated for additional credits.

LGBT 3205. Queer Novels of the 20th Century. 3 Credit Hours.

In this course, we will investigate what LGBT-themed novels of the 20th century convey about gender identity, how individuals form this identity, how an understanding (both conscious and unconscious) of this identity impacts individuals, and how the expression of sexuality dictates behavior, particularly in the LGBTQIA community. Beginning with a foundation in queer theory and various literary devices, students will build a theoretical vocabulary and lens through which to analyze a series of novels from both the US and International. The chosen novels reflect authors or works considered part of the literary LGBT "canon." Note: Students can receive credit only once for either GSWS 3205 or LGBT 3205.

Repeatability: This course may not be repeated for additional credits.

LGBT 3206. Queer Novels of the 21st Century. 3 Credit Hours.

In this course, we will investigate what various LGBTQ-themed novels tell us about LGBTQ life in the 21st Century. Starting with a historical approach of how LGBTQ novels were shaped by attitudes about LGBTQ life in the 20th century, we will determine how the representation of LGBTQ lives have evolved in novels. Our novels will explore the lives of people from across the LGBTQ spectrum. A number of the protagonists' identities also represent important intersectional identities as well, such as nationality, religion, and race. Beginning with a foundation in LGBTQ theory and various literary devices, students will build a theoretical vocabulary and lens through which to analyze a series of contemporary LGBTQ novels. NOTE: Students can receive credit only once for either GSWS 3206 or LGBT 3206.

Repeatability: This course may not be repeated for additional credits.

LGBT 3400. Topics in LGBT Studies. 3 Credit Hours.

Specific cultural or social studies in LGBT issues with an emphasis on interdisciplinary analysis.

Repeatability: This course may be repeated for additional credit.

LGBT 3548. Intimate Partner Violence: Gender and Social Justice. 3 Credit Hours.

This course addresses gender-based violence, in particular, intimate partner violence. We will use intersectionality as a feminist tool in understanding how violence is mediated through the nexus of social power and control in which race, ability, sexuality, class, and other variables play a big part. Students will learn the impact of this gender-based violence on young girls, immigrants, women of color, elderly women, trans populations, lesbians and other marginalized groups within the U.S. NOTE: Students can receive credit only once for either LGBT 3548 or GSWS 3548.

Repeatability: This course may not be repeated for additional credits.

LGBT 4082. Independent Study. 3 Credit Hours.

For students who would like to pursue topics not offered within existing courses. Original research and projects encouraged. Students will work closely with faculty in designing and carrying out the independent study. NOTE: Students must have selected a faculty advisor and submitted a formal proposal approved by the LGBT Studies faculty advisor before registering for the course.

Repeatability: This course may be repeated for additional credit.

LGBT 4489. Field Work in LGBT Studies. 3 Credit Hours.

The opportunity to work in a public or private agency whose mission includes advocacy for the LGBT community. Available to students minoring in LGBT Studies and throughout the College of Liberal Arts. A paper or project related to the area of the field study is also required. NOTE: Placement and faculty advisors arranged prior to registration (call 215-204-6953). Requires a designated supervisor at the field placement (minimum of 7 1/2 hours per week) and a faculty advisor within the College.

Course Attributes: SI

Repeatability: This course may be repeated for additional credit.

Management Information Systems (MIS)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

MIS 0855. Data Science. 3 Credit Hours.

We are all drowning in data, and so is your future employer. Data pour in from sources as diverse as social media, customer loyalty programs, weather stations, smartphones, and credit card purchases. How can you make sense of it all? Those that can turn raw data into insight will be tomorrow's decision-makers; those that can solve problems and communicate using data will be tomorrow's leaders. This course will teach you how to harness the power of data by mastering the ways it is stored, organized, and analyzed to enable better decisions. You will get hands-on experience by solving problems using a variety of powerful, computer-based data tools virtually every organization uses. You will also learn to make more impactful and persuasive presentations by learning the key principles of presenting data visually. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd.

Course Attributes: GS

Repeatability: This course may not be repeated for additional credits.

MIS 0955. Honors Data Science. 3 Credit Hours.

We are all drowning in data, and so is your future employer. Data pour in from sources as diverse as social media, customer loyalty programs, weather stations, smartphones, and credit card purchases. How can you make sense of it all? Those that can turn raw data into insight will be tomorrow's decision-makers; those that can solve problems and communicate using data will be tomorrow's leaders. This course will teach you how to harness the power of data by mastering the ways it is stored, organized, and analyzed to enable better decisions. You will get hands-on experience by solving problems using a variety of powerful, computer-based data tools virtually every organization uses. You will also learn to make more impactful and persuasive presentations by learning the key principles of presenting data visually. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GS, HO

Repeatability: This course may not be repeated for additional credits.

MIS 2101. Digital Systems. 3 Credit Hours.

Learn the role of information systems and digital platforms in business and how digital products are conceived, designed, secured and deployed. Understand component-based software architectures and APIs. Build simple software applications.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Career and Technical Education, Digital Marketing, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Management Consulting, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

MIS 2402. Web Application Development. 3 Credit Hours.

Create web-based applications that carry out a business process and integrate web-based services. Learn loops, arrays, conditional statements, data validation, responsive web design, and making API calls.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MIS 2101, MIS 2901, 'Y' in CRMI01, or 'Y' in CRMI04) and (MIS 2502 (may be taken concurrently) or 'Y' in CRMI03)

MIS 2502. Data and Analytics. 3 Credit Hours.

Navigate and query relational and NoSQL databases to support applications. Combine multiple sources of data using extract, transform, load for data cleansing. Discover insights from data using analytics software.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Digital Marketing, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MIS 2101, MIS 2901, 'Y' in CRMI01, or 'Y' in CRMI04)

MIS 2901. Honors Digital Systems. 3 Credit Hours.

Learn the role of information systems and digital platforms in business and how digital products are conceived, designed, secured and deployed. Understand component-based software architectures and APIs. Build simple software applications.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Career and Technical Education, Digital Marketing, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

MIS 3406. Cloud Architecture. 3 Credit Hours.

Learn to design and build cloud-based network infrastructures for deploying applications securely at scale. Create and deploy a simple RESTful API for consumption with fault-tolerance.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MIS 2402 or 'Y' in CRMI02) and (MIS 2502 or 'Y' in CRMI03)

MIS 3502. Web Service Programming. 3 Credit Hours.

Create and deploy a complete, end-to-end web-based application. Design and build complex RESTful APIs. Create single-page applications that consume and integrate multiple APIs to create a seamless user experience.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MIS 3406 or 'Y' in CRMI05) and (MIS 3506 or 'Y' in CRMI07)

MIS 3504. Digital Design and Innovation. 3 Credit Hours.

Learn business process analysis including requirements analysis, feasibility, and data and process modeling. Develop the skills required to create innovative, technology enabled, corporate and consumer products and services. Apply information gathering techniques to elicit requirements. Compose business and technical requirements. Work in teams to design and recommend information systems solutions to improve or transform business processes. Lead the "make vs. buy" decisions. Justify proposed process improvements and proposed information systems solutions. Learn how to implement and negotiate changes to requirements.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Management Information Systems.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MIS 2502 or 'Y' in CRMI03)

MIS 3505. Scripting for Data Science/Analytics. 3 Credit Hours.

This course gives students the applied, hands-on experience necessary to derive patterns and insight from data. Students will learn how to utilize technology to process data, visualize (plot) data, perform data assembly, data cleansing, data munging, and how to leverage statistical methods to gain insight from data. Students will have hands-on experience with current, cutting-edge tools. NOTE: Prior to Fall 2023, this course was titled "Applied Predictive Analytics."

Repeatability: This course may not be repeated for additional credits.

MIS 3506. User Experience Design. 3 Credit Hours.

Describe, scope, and build a complete user experience. Understand the role of usability and design principles. Build innovative and pleasurable user interfaces that achieve human, social, organizational, and business model goals.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Management Information Systems.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MIS 2402 or 'Y' in CRMI02)

MIS 3507. Defending Against Cyber Crime. 3 Credit Hours.

In this course you will learn the importance of Information Security through modern case studies and pragmatic approach to evaluating security as an executive.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MIS 2101, MIS 2901, 'Y' in CRMI01, or 'Y' in CRMI04)

MIS 3534. Strategic Management of Information Technology. 3 Credit Hours.

This course prepares students to be effective exploiters and managers of information technology. The management of information technology is addressed by considering the contemporary issues faced by general managers, e.g., globalization, time compression, and technology integration. Strategic approaches for dealing with these issues are explored. An integrative class project is used to pull together operational concepts from lower level information system and business courses as they apply to the management of information technology.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

MIS 3535. Lead Global Digital Projects. 3 Credit Hours.

Learn how to lead, plan and manage global technology-enabled, process-centric information systems projects by focusing on initiating, planning, executing, controlling and closing projects in the context of topics such as integration, scope, timing, cost, quality, human resource, technology, communications, and risk and procurement. Explore the impact of the human element as it relates to the success and failure of information systems projects. Learn how to monitor project plans and communicate status reports to clients, and create and respond to request for proposals.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Management Information Systems.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MIS 2101, MIS 2901, 'Y' in CRMI01, or 'Y' in CRMI04)

MIS 3536. Information Systems Innovation. 3 Credit Hours.

This course provides the knowledge and skills to leverage emerging and innovative information technology to create business opportunities for both new entrepreneurial ventures and traditional firms. As we move into the digital world, the ways by which companies create value is fundamentally shifting from products to experiences. The rapid convergence to digital technology opens up new opportunities to offer novel products and services that did not exist before. In this course, students will be asked to think how entrepreneurs and companies produce radically new products and services in the increasingly digital world. The course focuses on how organizations can design novel and desirable products and services. Through applied projects, student teams will learn how to evaluate and apply new innovative technologies to create new digital experiences, products, and services.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MIS 2101, MIS 2901, 'Y' in CRMI01, or 'Y' in CRMI04)

MIS 3537. Internet Enabled Supply Chains. 3 Credit Hours.

This course provides an understanding of how smart companies are revolutionizing their supply chains through the use of the Internet. Topics include e-business models, network-ready businesses, information hubs, collaboration in supply chains, eMarketplaces and eAuctions, supply chain visibility and security. The course draws from a host of real-world case studies and computer simulations to reinforce learning and understanding of Internet-enabled supply chains.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MIS 2101, MIS 2901, 'Y' in CRMI01, or 'Y' in CRMI04)

MIS 3538. Social Media Innovation. 3 Credit Hours.

In this course we review concepts and principles related to new business models supported by innovative use of Web 2.0 and social media. Through a combination of readings, discussion, presentations, and hands-on projects we examine (i) the organizational use of key media technologies such as web sites, blogs, web analytics, and search engine optimization, (ii) the business models underlying successful innovative new media organizations including Wikipedia, Craigslist, YouTube, and Facebook, and (iii) the role of centralized, decentralized, and crowd-sourced information resources in online media innovation.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Digital Marketing, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

MIS 3580. Special Topics. 3 Credit Hours.

Special topics in current developments in the field of information systems.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (MIS 2101, MIS 2901, 'Y' in CRMI01, or 'Y' in CRMI04)

MIS 3581. Co-operative Experience in Management Information Systems. 3 Credit Hours.

Students undertake a research project that integrates their current work experience with their classroom experience at Temple University. The results are reported in a series of status reports, blogs and a PowerPoint presentation prepared under the supervision of a faculty member. NOTE: Arrangements are made through the Management Information Systems Department and this course is open to ALL Fox business students. A 2.7 cumulative GPA or higher is recommended. <http://ibit.temple.edu/industryexperience/>

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (MIS 2101, MIS 2901, 'Y' in CRMI01, or 'Y' in CRMI04)

MIS 3582. Independent Study. 1 to 6 Credit Hour.

Students will prepare research papers under supervision of a faculty member. NOTE: None of the required MIS courses can be taken as an independent study.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Management Information Systems.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

MIS 3682. Independent Study. 1 to 6 Credit Hour.

Students will prepare research papers under supervision of a faculty member. NOTE: None of the required MIS courses can be taken as an independent study.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Management Information Systems.

Repeatability: This course may be repeated for additional credit.

MIS 3999. Honors Thesis I. 1 to 3 Credit Hour.

The first of a two-part sequence of courses in which independent research is conducted under the supervision of a thesis advisor from the MIS department resulting in a substantial piece of original research, roughly 30 to 50 pages in length upon completion of MIS 4999. The student must publicly present his/her findings at a Temple University Research Forum session or the equivalent during one of the two semesters during which these courses are undertaken.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Management Information Systems.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

MIS 4596. Managing Enterprise Cybersecurity. 3 Credit Hours.

Learn how to secure systems and the enterprise using cryptography, authentication, and ethical hacking. In this writing-intensive course for MIS, you will also identify and communicate cybersecurity risks facing businesses through risk assessment reports that support management decisions.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Management Information Systems.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (MIS 3406 (C or higher) or 'Y' in CRMI05) and (BA 2196 or BA 2996)

MIS 4999. Honors Senior Thesis II. 1 to 3 Credit Hour.

Independent research conducted under the supervision of a thesis advisor from the MIS Department resulting in a substantial piece of original research, roughly 30 to 50 pages in length. Student must publicly present his/her findings at a Temple University Research Forum session or the equivalent if this was not done in MIS 3999.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Management Information Systems.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

Management Science/Operations Management (MSOM)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

MSOM 3101. Operations Management. 3 Credit Hours.

An examination of the activities necessary for the provision of the organization's product or service. Planning and scheduling of operations, allocation of resources, including staffing requirements and equipment decisions, inventory control and production planning, waiting line problems, and quality.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Facilities Management, Actuarial Science, Business Management, Construction Engr Tech, Construction Mgt Tech, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Industrial + Sys Engineering, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (STAT 2103, STAT 2903, STAT 2104, STAT 2102, STAT 2902, STAT 2512 (may be taken concurrently), AS 2505 (may be taken concurrently), MATH 3031, or ISE 2101)

MSOM 3682. Independent Study. 3 Credit Hours.

Readings and/or papers under supervision of a faculty member.

Repeatability: This course may be repeated for additional credit.

MSOM 3901. Honors Operations Management. 3 Credit Hours.

An examination of the activities necessary for the provision of the organization's product or service. Planning and scheduling of operations, allocation of resources, including staffing requirements and equipment decisions, inventory control and production planning, waiting line problems, and quality. Open only to business designated Honors students (or with special permission). May be used to fulfill the operations management requirement of the Fox School of Business and Management. NOTE: The Honors version of MSOM 3101 (0105).

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (STAT 2103, STAT 2903, STAT 2104, STAT 2102, STAT 2902, STAT 2512 (may be taken concurrently), AS 2505 (may be taken concurrently), MATH 3031, or ISE 2101)

Marketing (MKTG)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

MKTG 2101. Marketing Management. 3 Credit Hours.

Explains the role of marketing in the U.S. economy and within the firm, including the interaction of marketing with other business functions, as well as with society. The course introduces students to the concepts, methods, and activities that comprise modern marketing management and provides examples as well as experiences analyzing and addressing marketing issues. Marketing Management focuses on the components of marketing strategy which comprises analyzing what markets and needs the firm will serve; deciding when, where, and how the firm will meet those needs; and understanding why (i.e. a compelling business reason) the firm should implement such a strategy. Includes the study of marketing-mix development issues, such as product development and management; pricing; distribution, logistics and supply-chain management; integrated marketing communications and promotion; plus other decisions involved in this process. Note: Marketing majors must earn a grade of C or better in this course.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Business, Business Plus, Construction Engr Tech, Construction Mgt Tech, Career and Technical Education, Digital Marketing, Economics, Economics - Management Career, Economics, Entrprnrship & Innovation Mgt, Engineering Technology, Entrepreneurship, Event and Entertainment Mgmt, Finance, Financial Planning, General Business Studies, Horticulture, Human Resource Management, International Business, International Business Admin, Intrnl Bus - TUJ, Law & Business, Legal Studies, Management Information Systems, Marketing, Pre Business, Real Estate, Risk Management and Insurance, Supply Chain Management, Sport & Recreation Management, Statistical Sci + Data Analyt, Tourism and Hospitality Mgmt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, ECON 1102, or ECON 1902)

MKTG 2511. Marketing for the Sustainable Enterprise. 3 Credit Hours.

Sustainable marketing extends the boundaries of traditional marketing. This course focuses on how both for-profit and not-for-profit organizations learn to innovate, develop, produce, promote, distribute and reclaim products and services in new ways that reduce waste and pollution and benefit all stakeholders. Within the triple bottom line framework this course applies an experiential learning method to put you to task, applying these concepts to real life situations. In addition to modifications of marketing activities to reduce environmental impact, the course considers marketing's role in corporate social responsibility (including ethical considerations) and social marketing agendas (such as health and community issues). Note: Marketing Majors and Minors can take this course as an upper-level major/minor elective.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Corporate Social Responsibility, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Course Attributes: SE, SF, SS

Repeatability: This course may not be repeated for additional credits.

MKTG 2901. Honors Marketing Management. 3 Credit Hours.

Introduction to the discipline of marketing. The nature of marketing activities in contemporary society and the firm. Study of marketing mix variables and decision processes involved in corporations and public agencies. Concepts from economics, behavioral sciences, and modern systems theory are incorporated. NOTE: Open only to business designated honors students or with special permission. May be used to meet the marketing requirement of the Fox School of Business and Management. A Marketing Major or Minor must earn a C in the course.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Business, Construction Mgt Tech, Career and Technical Education, Digital Marketing, Economics, Economics - Management Career, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Horticulture, Human Resource Management, International Business, International Business Admin, Intrnl Bus - TUJ, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Sport & Recreation Management, Statistical Sci + Data Analyt, Tourism and Hospitality Mgmt, Undeclared-Business & Mngt.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101 or ECON 1901)

MKTG 3501. Integrated Marketing Communications. 3 Credit Hours.

Marketing 3501 is an intermediate level undergraduate marketing course which introduces students to the field of advertising by taking an integrated marketing communications (IMC) perspective. While advertising is the major focus of the course, IMC also plays a critical role as the course develops perspectives on the process of advertising, promotions, and media working together as a part of the overall marketing strategy. Topics include setting advertising objectives and budgets, client-agency-media relations, demand stimulation, media selection and evaluation, and the social responsibilities and regulation of advertising at the level of the firm and of the industry. NOTE: Prior to Spring 2009, this course was titled "Advertising."

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MKTG 2101 or MKTG 2901)

MKTG 3502. Data Management for Business Strategies. 3 Credit Hours.

With significant advances in technology, most organizations collect enormous amounts of data, ranging from markets to customers. Managing data on this scale and converting it into knowledge to facilitate decision making presents exciting new challenges. The underlying principles of data management are often similar, whether used in data analytics and business intelligence, enterprise resource planning (ERP), customer relationship management (CRM) or other aspects of marketing. This course aims to facilitate transformation of everyday business activities into a relational database system, from which information can be extracted in a systematic manner. In particular, students will learn how to organize and manage data with emphasis on maintaining data consistency, and minimizing data redundancy. Students will be introduced formally to conceptual modeling and data normalization in relational databases. In the second part, students will learn how to write queries in SQL and Microsoft Access to extract data that is relevant for answering marketing questions and developing marketing strategy. Finally, students will apply each of these skills in developing a database solution for a real-world business problem, using Microsoft Access. Note: Marketing Majors must earn a grade of C or better for this course to count towards the major requirements.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (MKTG 2101 (C or higher), MKTG 2901 (C or higher), 'Y' in MK01, 'Y' in CRMK01, or 'Y' in CRMK02) and (STAT 2103, STAT 2903, STAT 2104, (STAT 2101 and STAT 2102), (STAT 2901 and STAT 2902), STAT 2512, or MATH 3031)

MKTG 3504. Professional Selling and Sales Management. 3 Credit Hours.

This course provides an introduction to the behavioral aspects of personal selling and introduces frameworks for sales management. Course topics include: recruitment, selection, training, motivation, compensation, control and the strategy of matching the sales effort to the sales task. This course not only reflects a more analytical and scientific approach but also presents current and future challenges, opportunities, and proposed solutions to critical sales and sales management issues. Sales and sales management principles learned here can be applied to any industry that employs sales forces of any size. NOTE: Prior to Fall 2023, this course was titled "Sales and Sales Management".

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, International Business Admin, Intrnl Bus - TUJ, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MKTG 2101 or MKTG 2901)

MKTG 3505. Entrepreneurial Marketing. 3 Credit Hours.

This course provides aspiring entrepreneurs with an understanding of marketing for new and small enterprises. It addresses marketing strategies particularly relevant for entrepreneurial enterprises, whether in a small company, large company, or non-profit organization. This class is a combination of academic lectures and "real world" activity. Students learn entrepreneurial techniques such as opportunity assessment, proactive marketing, innovative marketing communication, resource management, and value creation with an emphasis on digital marketing techniques. During the course, teams assist these organizations to raise money, build awareness, improve social media, create marketing plans or actually volunteer with the organization.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, International Business Admin, Intrnl Bus - TUJ, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MKTG 2101 or MKTG 2901)

MKTG 3506. Retail Management. 3 Credit Hours.

The course involves a study of retailing as a marketing institution from the standpoint of management. Topics covered include the store location, layout and facilities, policy formulation in the areas of procurement and outsourcing, merchandising, warehousing, pricing, inventory planning and controlling, transportation, sales promotion, customer service, and general management problems. Retail Management covers the role of intermediaries and strategies, as well as how firms use the Internet and other digital platforms to expand markets, service customers, and increase sales. Marketing majors must earn a grade of C or better for this course to count towards the major requirements. NOTE: Prior to Fall 2023, the course title was "Value Delivery Networks in Marketing."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MKTG 2101, MKTG 2901, 'Y' in CRMK01, or 'Y' in CRMK02)

MKTG 3507. Direct Marketing. 3 Credit Hours.

This course introduces student to the scope of direct marketing including mail order, lead generation, circulation, relationship/loyalty programs, store traffic/site traffic building, fundraising, pre-selling, selling (cross-selling as well as selling-up), post-selling and research. The course addresses how direct marketing varies from other forms of marketing and where its practice is most appropriate, as well as the practical challenges firms face as they seek to develop direct marketing programs for direct sale, lead generation or traffic generation using various direct marketing media. Various approaches for stimulating action and the measureability and accountability of direct marketing and its relationship to the total marketing mix are stressed. Marketing majors must earn a grade of C or better for this course to count towards the major requirements.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MKTG 2101, MKTG 2901, 'Y' in CRMK01, or 'Y' in CRMK02)

MKTG 3508. Digital Marketing. 3 Credit Hours.

Digital technologies are an integral component of daily life for firms and consumers. Although digital marketing is an important part of business strategy, the dynamic nature of technology and consumer culture raises many strategic and societal challenges. This course examines the theories and concepts underlying the use of information and communication technology by firms and consumers, and challenges students to critique and utilize digital tools, including social media platforms, online reviews, inbound marketing and blogs, paid search, digital and programmatic advertising, search engine optimization, email marketing, mobile marketing and online promotions. The identification of critical success factors and best practices are central to the course, as are digital analytics and other methods for analyzing market effectiveness. The course examines the theory and realities of digital marketing in both business-to-consumer (B2C) and business-to-business (B2B) markets.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Digital Marketing, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, International Business Admin, Intrnl Bus - TUJ, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MKTG 2101 or MKTG 2901)

MKTG 3509. Customer Data Analytics. 3 Credit Hours.

This course teaches students how to model customer data to more profitably target the organization's marketing efforts. Includes the collection, analysis, and utilization of data for the development of marketing strategies. The course includes the study of customer lifetime value and customer relationship management. Particular attention is paid to the interpretation and modeling of quantitative data (e.g., RFM models, decision trees and logistic regression). Students build and develop skills in IBM's SPSS platform. Note: Marketing majors must earn a grade of C or better for this course to count towards the major requirement.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (MKTG 2101 (C or higher), MKTG 2901 (C or higher), 'Y' in MK01, 'Y' in CRMK01, or 'Y' in CRMK02) and (STAT 2103, STAT 2903, STAT 2104, (STAT 2101 and STAT 2102), (STAT 2901 and STAT 2902), STAT 2512, or MATH 3031)

MKTG 3511. Marketing Research. 3 Credit Hours.

This course covers methods for collecting, analyzing and interpreting data relevant to the marketing decision-making process. The course focuses on structuring marketing problems in terms of specific research questions, understanding primary and secondary sources of marketing research data (including issues in data collection), using specific techniques (including Qualtrics and SPSS) for analyzing marketing research data, and using analyses to make better marketing management decisions. Note: Marketing majors must earn a grade of C or better for this course to be eligible to take the capstone Marketing course 4501.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (MKTG 2101 (C or higher), MKTG 2901 (C or higher), 'Y' in MK01, 'Y' in CRMK01, or 'Y' in CRMK02) and (STAT 2103, STAT 2903, STAT 2104, (STAT 2101 and STAT 2102), (STAT 2901 and STAT 2902), STAT 2512, or MATH 3031)

MKTG 3512. Professional Selling. 3 Credit Hours.

Professional selling introduces and develops student understanding of and application of professional selling practices and philosophies at an introductory level. The course takes an in-depth look into the professional sales process and its application in a sales career across various industries as well as in daily life. Sales ethics, account relationship management and basic professional networking are also included. Note: A Marketing Major or Minor must earn a C in the course.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MKTG 2101, MKTG 2901, 'Y' in CRMK01, or 'Y' in CRMK02)

MKTG 3513. Service Marketing. 3 Credit Hours.

This course aims to help students understand the practical implications of the unique characteristics of services and service provision and to develop their skills to cope with the challenges of marketing and managing a service. Building upon, and expanding marketing management concepts and models, this course demonstrates how they apply to the services sector. This course focuses on the distinctive characteristics and problems of marketing in service organizations and for any organization developing and marketing services as part of its business portfolio. It helps students understand why and how services require a distinctive approach to marketing strategy - both in its development and in its execution. This course uses problem solving techniques by examining cases from commercial and not-for-profit organizations such as banking, transportation, hotels, tourism, hospitals, education and professional services such as accountancy, engineering, and management consultancy. This course is appropriate for any student seeking a follow-up course to the basic marketing course, and particularly relevant for those planning in marketing careers with service firms or organizations with a strong commitment to customer service.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MKTG 2101 or MKTG 2901)

MKTG 3514. Sustainable Consumer Centric Innovation. 3 Credit Hours.

Sustainable marketing is at the forefront of management in organizations throughout the world and extends the boundaries of traditional marketing with an increased focus on a firm's responsibilities, its impact on society and the environment. This course evaluates the role of marketing in sustainability by examining how firms create value, reduce risk, and build sustainable thinking and processes into marketing activities and strategies. Marketing plays a key role in how an organization responds to opportunities and threats that arise from social, economic and environmental change. In addition to reviewing marketing activities designed to address environmental impact, the course considers the role of marketing in addressing corporate social responsibility (including ethical considerations) and social marketing priorities (such as health and community issues).

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MKTG 2101 or MKTG 2901)

MKTG 3553. International Marketing. 3 Credit Hours.

This course identifies and addresses the challenges of marketing and analysis of the internal marketing system of countries with various types of political-economic structures. The strategic impact of economic, cultural, political, and legal differences on marketing are emphasized while issues of international product, price, promotion, and distribution issues are also considered. NOTE: Marketing Majors must earn a grade of C or better in this course to be eligible to take the capstone Marketing course 4501.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MKTG 2101, MKTG 2901, 'Y' in MK01, 'Y' in CRMK01, or 'Y' in CRMK02)

MKTG 3580. Special Topics - Marketing. 3 Credit Hours.

Special topics in current developments in the field of marketing.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (MKTG 2101 or MKTG 2901)

MKTG 3581. Marketing Internship/Co-Operative Experience. 3 Credit Hours.

This course - not offered every semester and only offered at the discretion of the department - is designed for students who have a Marketing Internship or Co-Op Experience which has been reviewed and approved by the department. Note: Arrangements must be made through the Marketing Department; this course is for Marketing majors only. Students must have completed the Marketing Core (MKTG 3511 and MKTG 3596) prior to this course. Students must earn a grade of C or better for this course to count towards the major requirements.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Marketing.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (MKTG 3596 or 'Y' in CRMK06) and (MKTG 3511 (may be taken concurrently) or 'Y' in CRMK04)

MKTG 3582. Independent Study. 1 to 6 Credit Hour.

Readings and/or papers under supervision of a faculty member. NOTE: Arrangements must be made through the Marketing Department; this course is for Marketing majors only. Students must have completed the Marketing Core (MKTG 3511, 3596) prior to this course. Students must earn a grade of C or better for this course to count towards the major requirements.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (MKTG 2101, MKTG 2901, 'Y' in MK01, 'Y' in CRMK01, or 'Y' in CRMK02), (MKTG 3511 or 'Y' in CRMK04), and (MKTG 3596 or 'Y' in CRMK06)

MKTG 3596. Consumer and Buyer Behavior. 3 Credit Hours.

This course provides a survey and integration of concepts, theories, and frameworks that help explain the behavior of consumers. Topics include: perception, product knowledge and involvement, decision making, learning, conditioning, and social influences such as culture, micro-culture, and social class. The course emphasizes the use of these concepts in developing marketing strategies. NOTE: Marketing Majors must earn a grade of C or better in this course to be eligible to take the capstone Marketing course 4501. Students must earn a grade of C in this course if they are using it to fill the writing intensive course requirement for their degree.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (MKTG 2101, MKTG 2901, 'Y' in MK01, 'Y' in CRMK01, or 'Y' in CRMK02) and (BA 2196 (C- or higher; may be taken concurrently) or BA 2996 (C- or higher; may be taken concurrently))

MKTG 3682. Independent Study. 1 to 6 Credit Hour.

Readings and/or papers under supervision of a faculty member. NOTE: Arrangements must be made through the Marketing Department; this course is for Marketing majors only. Students must have completed the Marketing Core (MKTG 3511, 3596) prior to this course. Students must earn a grade of C or better for this course to count towards the major requirements.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (MKTG 2101, MKTG 2901, 'Y' in MK01, 'Y' in CRMK01, or 'Y' in CRMK02)

MKTG 3999. Honors Thesis I. 1 to 3 Credit Hour.

The first of a two-part sequence of courses in which independent research is conducted under the supervision of a thesis advisor from the Marketing department resulting in a substantial piece of original research, roughly 30 to 50 pages in length upon completion of Marketing 4999. The student must publicly present his/her findings at a Temple University Research Forum session or the equivalent during one of the two semesters during which these courses are undertaken.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Marketing.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

MKTG 4501. Marketing Strategy. 3 Credit Hours.

This course provides an opportunity for students to integrate and apply material introduced and reinforced in Marketing and other business courses. This course explores how firms develop and implement marketing strategies to ensure long-term survival and growth. This is an applications course and active student participation is required to demonstrate ability to understand and solve complex marketing problems. NOTE: This is the capstone course for Marketing majors. It is strongly recommended for students in their senior year. As suggested by the curriculum path, students should take MKTG 4501 in their final semester; ideally after (or with) BA 4101 as it makes heavy use of core management strategy theories and tools. This course MAY NOT be taken in the same semester as any Marketing CORE (3509, 3511, 3553, 3596) course.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Marketing.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MKTG 3596 or 'Y' in CRMK06), (MKTG 3509 or 'Y' in CRMK03), and (MKTG 3511 or 'Y' in CRMK04)

MKTG 4999. Honors Senior Thesis II. 1 to 3 Credit Hour.

Independent research conducted under the supervision of a thesis advisor from the Marketing Department resulting in a substantial piece of original research, roughly 30 to 50 pages in length. Student must publicly present his/her findings at a Temple University Research Forum session or the equivalent if this was not done in Marketing 3999.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Marketing.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in MKTG 3999.

Math Education (Elementary) (MAEE)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

MAEE 3141. Teaching of Mathematics N-6. 3 Credit Hours.

The purpose of this course is to prepare prospective teachers to teach reform-based mathematics in elementary and middle school settings as suggested in the Principles and Standards for School Mathematics (NCTM, 2000). The objectives of the course include integration of mathematics concepts and methods in order to focus on misconceptions in mathematics among preservice teachers as well as learning theories and standards-based instruction. The intent of the course is to enable students to enhance their mathematical skills and develop pedagogical knowledge. Furthermore, issues of equity and social justice will be discussed. Throughout the term, we will explore classroom materials, models, and technologies appropriate for teaching mathematics to all children, including those with learning disabilities.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: ELED 3387, SCEE 3151.

Repeatability: This course may not be repeated for additional credits.

Math Education (Secondary) (MAES)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

MAES 2189. Classroom Interactions. 3 Credit Hours.

This course continues the process of preparing students to teach mathematics and science in upper elementary and secondary settings. The specific objectives of this course are to: 1) demonstrate to students how learning theories (from the "Knowing and Learning" course) manifest themselves in instructional settings (usually classrooms), allow students to design and implement instructional activities from their own understanding of knowing and learning mathematics and science, and evaluate the outcomes of those activities based on evidence from student artifacts, and 2) provide students with frameworks for thinking about equity issues in the classroom and larger school setting and their effects on learning and provide students with strategies for teaching diverse students equitably. The culminating activities of the course are the opportunities for students to teach in a high school and to learn whether they enjoy and are good at it. While in "Knowing and Learning" students study the meaning behind understanding a particular content area from an individual perspective, in "Classroom Interactions" the perspective shifts to studying how classroom events might promote or discourage learning mathematics and science and student equity. A major component of the "Classroom Interactions" course is the opportunity for students to reflect on and evaluate their own work as teachers.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in EDUC 2179 (may be taken concurrently) and (SCTC 1289 or SCTC 1389)

MAES 3145. Teaching and Learning Mathematics in the Middle Grades. 3 Credit Hours.

This course examines methods of teaching and assessing mathematics in the middle grades. Special attention is paid to understanding the conceptual difficulties students have in moving from whole numbers to rational numbers, additive thinking to multiplicative thinking, and arithmetic to algebra. Problem-solving, connections, and concrete models are emphasized.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: EDUC 4389.

Repeatability: This course may not be repeated for additional credits.

MAES 3146. Methods and Materials in Secondary Mathematics. 3 Credit Hours.

This course will explore problems in algebra, trigonometry, analytic geometry, calculus, Euclidean geometry, probability, statistics, and discrete mathematics. This course is intended as a capstone study for prospective secondary mathematics teachers. The objectives of this course are as follows: (1) connect ideas within and between mathematical concepts, (2) develop mathematical thinking and reasoning, and (3) develop problem solving skills. Technology will be a vital part of this course. Technology will be used to demonstrate and encourage conjecturing and problem solving with an emphasis on applications. The goals of this course are to help you as prospective or beginning secondary mathematics teachers to: (1) develop a deep understanding of the mathematics you will be teaching by connecting mathematical concepts to instruction and (2) acquire the skills, knowledge, and reflective practice necessary for successful teaching.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may not be repeated for additional credits.

MAES 3147. Geometry and its Classroom Implications. 3 Credit Hours.

The class stresses the topics found in a standard high school geometry course from an advanced point of view. In addition, important plane geometry theorems such as Ceva's Theorem, and Menelaus' Theorem are examined. Special attention is paid to the concept of proof, and different kinds of proofs are examined. Non-Euclidean geometry is investigated, as are the constructions of college geometry.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: TUteach.

Repeatability: This course may not be repeated for additional credits.

MAES 3278. Professional Subject Matter: Statistics. 1 to 3 Credit Hour.

This course addresses the statistics curriculum found in most high school advanced placement courses. In addition, students will test hypotheses using appropriate sampling strategies, and interpret the results in terms of confidence intervals and significance. The course will also examine interpreting the results of statistical tests, (including z-test, t-test, paired t-test, matched t-test). In addition, special consideration will be given to developing strategies for modeling data, making predictions from these models, and considering issues relating to population, random samples, and proportions.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: TUteach.

Repeatability: This course may not be repeated for additional credits.

MAES 4146. Teaching and Learning Mathematics in High School. 3 Credit Hours.

This course will explore problems in algebra, trigonometry, analytic geometry, calculus, Euclidean geometry, probability, statistics, and discrete mathematics. This course is intended as a capstone study for prospective secondary mathematics teachers. The objectives of this course are as follows: (1) connect ideas within and between mathematical concepts, (2) develop mathematical thinking and reasoning, and (3) develop problem solving skills. Technology will be a vital part of this course. Technology will be used to demonstrate and encourage conjecturing and problem solving with an emphasis on applications. The goals of this course are to help you as prospective or beginning secondary mathematics teachers to: (1) develop a deep understanding of the mathematics you will be teaching by connecting mathematical concepts to instruction and (2) acquire the skills, knowledge, and reflective practice necessary for successful teaching.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: EDUC 4389.

Repeatability: This course may not be repeated for additional credits.

MAES 4189. Project-Based Instruction. 3 Credit Hours.

"Project-Based Instruction" (PBI) is the capstone course in the sequence of required education courses and is required before TUteach students take Education 4688: "Student Teaching in Secondary Education." PBI is the course in which the major themes of the TUteach program - integrated content of mathematics and science learning, infusion of technology in representation, analysis, modeling, assessment and contextualization of the content, field-based experiences, and equity - converge into an exciting and intellectually challenging culminating experience. When students complete PBI, they are fully prepared for Student Teaching. Whereas in "Classroom Interactions," students gain experience designing a sequence of several lessons that they teach to a high school class, in PBI, students design full units of connected lessons - a skill that is required in Student Teaching. PBI also provides students with the experience of managing lessons and students outside a classroom, in a field setting. Despite its name, PBI emphasizes choosing from a variety of appropriate teaching styles, depending on the type of material and the learning objective, with project-based instruction being just one possible alternative. In addition, PBI requires students to incorporate various technologies into the units they plan.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: TUteach.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (MAES 2189 and '100' in PRAX) and minimum GPA of 3 in: courses numbered 0700 to 4999.

MAES 4366. The Teaching of Problem Solving. 3 Credit Hours.

This course is designed for the in-service as well as the pre-service teacher. Topics to be discussed will be the role of problem solving and reasoning in the mathematics curriculum, developing techniques for improving problem solving and reasoning abilities of students on mathematics. Emphasis will be on how to teach problem solving as opposed to merely solving problems.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: MAES 2189.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MAES 2189 (may be taken concurrently)

MAES 4371. History of Mathematics. 3 Credit Hours.

The course will consider the mathematical ideas of particular significance in elementary and secondary school curricula: the development and introduction of Hindu-Arabic numerals, early computing devices, Euclidean and non-Euclidean geometries, etc. Ways in which the history of mathematics may be used to enhance the learning of mathematical concepts by students in the schools will also be examined.

Repeatability: This course may not be repeated for additional credits.

Mathematics (MATH)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

MATH 0701. Basic Mathematics for Today's World. 4 Credit Hours.

This course is typically offered in Fall, Spring, Summer I and Summer II.

This course surveys a variety of mathematical topics. Topics include numeracy with an emphasis on estimation and fluency with large numbers, evaluating expressions and formulas, rates, ratios, proportions, and percentages, solving equations, linear models, data interpretations including graphs and tables, verbal, algebraic and graphical representations of functions, exponential models. The course will help students develop conceptual understanding and acquire multiple strategies for solving problems. It will prepare students for success in future quantitative courses and will help them develop skills for the workplace and for everyday life. Please note that Math 0701 is no longer a prerequisite for MATH 1021, College Algebra, or STAT 1001, Quantitative Methods for Business I. Students whose program of studies requires one of these two courses must complete MATH 0702, Intermediate Algebra, instead.

Repeatability: This course may not be repeated for additional credits.

MATH 0702. Intermediate Algebra. 4 Credit Hours.

This course is typically offered in Fall, Spring, Summer I, and Summer II.

This course is designed as an intermediate algebra course that prepares students for the topics covered in Math 1021. This course covers the real number system, basic properties of real numbers, operations with fractional expressions, simplifying complex fractions, powers and roots, operations with radicals, graphing linear equations and inequalities, and factoring of polynomials.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 0701 to 1021, 'Y' in MC2, 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, STAT 1001 (may be taken concurrently), 'Y' in STT2, STAT 1102 (may be taken concurrently), STAT 1902 (may be taken concurrently), 'Y' in MC2A, 'Y' in MC3A, 'Y' in MC6A, 'Y' in MC3S, 'Y' in MC2D, 'Y' in MC2T, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

MATH 0823. Math for a Digital World. 4 Credit Hours.

This course is not offered every year.

This course is about becoming an "informed user" of quantitative information. Do numbers make us more or less rational? What does "free" really mean? What's the difference between "correlation" and "cause"? How can we be misled by numbers? How can we make better decisions and have more effective discussions by understanding mathematics? Does it make sense to play the lottery? What are your chances of drawing the card you need in a poker game? How long will it take you to save a million dollars assuming interest is earned but you keep spending? How does math play into the digital world that surrounds us, whether it is email, online tools or the creation of passwords, IDs or serial numbers? These and many other questions will be explored and answered throughout the course. NOTE: (1) This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. (2) Duplicate Course: Students cannot receive credit for CIS 0823/0923 if they have successfully completed MATH 0823/0923.

Course Attributes: GQ

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 0701 to 0702, any MATH course numbered 0800 to 0822 (may be taken concurrently), any MATH course numbered 0824 to 0922 (may be taken concurrently), any MATH course numbered 0924 to 1041 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, STAT 1001 (may be taken concurrently), 'Y' in STT2, STAT 1102 (may be taken concurrently), STAT 1902 (may be taken concurrently), 'Y' in MC3A, 'Y' in MC6A, 'Y' in MATW, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

MATH 0824. Mathematical Patterns. 4 Credit Hours.

This course is typically offered in Fall, Spring, Summer I and Summer II.

This course will convey the essence of mathematics and its current breadth. It sets out to describe mathematics as a rich and living part of human culture, and is intended for the general student with minimal mathematical knowledge. Exposure to this subject matter will contribute to students' educational breadth and intellectual development by sharpening their problem-solving skills, enhancing their understanding of logical reasoning and analysis, and strengthening their ability to use language and symbolic expression in a disciplined manner. The course will consist of a series of vignettes. Topics may include problem solving, voting theory, graph theory, finance, mathematical models, cryptography, statistics and probability. NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for MATH 0824 if they have successfully completed MATH 0924.

Course Attributes: GQ

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 0701 to 0702, any MATH course numbered 0800 to 0823 (may be taken concurrently), any MATH course numbered 0825 to 0923 (may be taken concurrently), any MATH course numbered 0925 to 1041 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, STAT 1001 (may be taken concurrently), 'Y' in STT2, STAT 1102 (may be taken concurrently), STAT 1902 (may be taken concurrently), 'Y' in MC3A, 'Y' in MC6A, 'Y' in MATW, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

MATH 0828. Critical Reasoning and Problem Solving. 4 Credit Hours.

This course is typically offered in Fall, Spring, Summer I, and Summer II.

The course teaches students how to deal with and solve complex problems by confronting them with critical analysis. We look at these problems both from an historical perspective and the practical view of how and when these types of problems affect the students' everyday lives. The course takes students through several key mathematical disciplines, including probability and statistics, including the hallmark of probability - reasoning under uncertainty - as well as set theory and counting techniques and graphing, especially with Venn diagrams, a skill they will find beneficial as the world turns to technology and graphics. For example, when we introduce probability, we cover the first dramatic application of the discipline, Mendel's discovery of the centuries-old problem of explaining the scientific laws of heredity as he gives birth to genetics. We also cover Mendel's use of statistics. This leads us to study modern uses of the same concepts in areas such as medicine - how to evaluate statistical studies and how to analyze topics such as false positives - as well as the application of DNA in areas such as how it has significantly changed our justice system.

Course Attributes: GQ

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 0701 to 0702, any MATH course numbered 0800 to 0827 (may be taken concurrently), any MATH course numbered 0829 to 0927 (may be taken concurrently), any MATH course numbered 0929 to 1041 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, STAT 1001 (may be taken concurrently), 'Y' in STT2, STAT 1102 (may be taken concurrently), STAT 1902 (may be taken concurrently), 'Y' in MC3A, 'Y' in MC6A, 'Y' in MATW, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

MATH 0923. Honors Math for a Digital World. 4 Credit Hours.

This course is not offered every year. This course is about becoming an "informed user" of quantitative information. Do numbers make us more or less rational? What does "free" really mean? What's the difference between "correlation" and "cause"? How can we be misled by numbers? How can we make better decisions and have more effective discussions by understanding mathematics? Does it make sense to play the lottery? What are your chances of drawing the card you need in a poker game? How long will it take you to save a million dollars assuming interest is earned but you keep spending? How does math play into the digital world that surrounds us, whether it is email, online tools or the creation of passwords, IDs or serial numbers? These and many other questions will be explored and answered throughout the course. NOTE: (1) This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. (2) Duplicate Course: Students cannot receive credit for CIS 0823/0923 if they have successfully completed MATH 0823/0923.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GQ, HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 0701 to 0702, any MATH course numbered 0800 to 0822 (may be taken concurrently), any MATH course numbered 0824 to 0922 (may be taken concurrently), any MATH course numbered 0924 to 1041 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC3A, 'Y' in MC6A, STAT 1001 (may be taken concurrently), 'Y' in STT2, STAT 1102 (may be taken concurrently), STAT 1902 (may be taken concurrently), 'Y' in MATW, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

MATH 0924. Honors Mathematical Patterns. 4 Credit Hours.

This course is typically offered in Fall and Spring.

This course will convey the essence of mathematics and its current breadth. It sets out to describe mathematics as a rich and living part of human culture, and is intended for the general student with minimal mathematical knowledge. Exposure to this subject matter will contribute to students' educational breadth and intellectual development by sharpening their problem-solving skills, enhancing their understanding of logical reasoning and analysis, and strengthening their ability to use language and symbolic expression in a disciplined manner. The course will consist of a series of vignettes. Topics may include problem solving, voting theory, graph theory, finance, mathematical models, cryptography, statistics and probability. (This is an Honors course.) NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for MATH 0924 if they have successfully completed MATH 0824.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GQ, HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 0701 to 0702, any MATH course numbered 0800 to 0823 (may be taken concurrently), any MATH course numbered 0825 to 0923 (may be taken concurrently), any MATH course numbered 0925 to 1041 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC3A, 'Y' in MC6A, STAT 1001 (may be taken concurrently), 'Y' in STT2, STAT 1102 (may be taken concurrently), STAT 1902 (may be taken concurrently), 'Y' in MATW, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

MATH 0928. Honors Critical Reasoning and Problem Solving. 4 Credit Hours.

The course teaches students how to deal with and solve complex problems by confronting them with critical analysis. We look at these problems both from an historical perspective and the practical view of how and when these types of problems affect the students' everyday lives. The course takes students through several key mathematical disciplines, including probability and statistics, including the hallmark of probability - reasoning under uncertainty - as well as set theory and counting techniques and graphing, especially with Venn diagrams, a skill they will find beneficial as the world turns to technology and graphics. For example, when we introduce probability, we cover the first dramatic application of the discipline, Mendel's discovery of the centuries-old problem of explaining the scientific laws of heredity as he gives birth to genetics. We also cover Mendel's use of statistics. This leads us to study modern uses of the same concepts in areas such as medicine - how to evaluate statistical studies and how to analyze topics such as false positives - as well as the application of DNA in areas such as how it has significantly changed our justice system.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GQ, HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 0701 to 0702, any MATH course numbered 0800 to 0827 (may be taken concurrently), any MATH course numbered 0829 to 0927 (may be taken concurrently), any MATH course numbered 0929 to 1041 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, STAT 1001 (may be taken concurrently), 'Y' in STT2, STAT 1102 (may be taken concurrently), STAT 1902 (may be taken concurrently), 'Y' in MC3A, 'Y' in MC6A, 'Y' in MATW, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

MATH 1013. Elements of Statistics. 3 Credit Hours.

This course is typically offered in Fall, Spring, and Summer II.

This course provides a firm foundation for the study of statistics in other fields. Although no one field is emphasized to the exclusion of others, applications are drawn from psychology, political science, exercise science, and other areas. NOTE: This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: QB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (any MATH course numbered 0701 to 0702 (C or higher), any MATH course numbered 0800 to 1012 (may be taken concurrently), any MATH course numbered 1014 to 1021 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC3A, 'Y' in MC6A, 'Y' in MA01, STAT 1001 (may be taken concurrently), 'Y' in STT2, STAT 1102 (may be taken concurrently), STAT 1902 (may be taken concurrently), 'Y' in MC3S, 'Y' in CRMA18, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

MATH 1015. Introduction to Numbers & Figures. 4 Credit Hours.

This course is typically offered in Fall, Spring, and Summer I.

This is a course intended for students wishing to familiarize themselves with basic arithmetic and geometric concepts. Subjects include the real numbers, the decimal system, and fractions, elementary number theory (primes, gcd, lcm, rational and irrational numbers), and geometry (angles, triangles, polygons, polyhedra, circles, spheres, symmetry, congruence, and similarity).

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 0701 to 0702, MATH 1021 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC3A, 'Y' in MC6A, STAT 1001 (may be taken concurrently), 'Y' in STT2, STAT 1102 (may be taken concurrently), STAT 1902 (may be taken concurrently), 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

MATH 1018. Mathematics for Business. 3 Credit Hours.

This course is not offered every year.

Fundamentals of finite mathematics necessary for a business student to pursue statistics and other quantitatively oriented business courses. Topics and illustrations are specifically directed to applications in business and economics. Topics include algebraic concepts; linear, quadratic, polynomial and rational functions; logarithm and exponential functions; elementary matrix manipulations. Fitting of curves, interest rate calculations, present and future values of annuities are some of the specific applications. Use of a graphing calculator. NOTE: (1) Duplicate Course: Students cannot receive credit for Math 1018 if they have successfully completed Statistics 1001. (2) This course can be used to satisfy the university Core Quantitative Reasoning A (QA) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: QA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (any MATH course numbered 0701 to 0702 (C or higher), any MATH course numbered 1021 to 1022 (D or higher; may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC3A, 'Y' in MC6A, 'Y' in MA01, STAT 1001 (may be taken concurrently), 'Y' in STT2, STAT 1102 (may be taken concurrently), STAT 1902 (may be taken concurrently), 'Y' in MC3S, 'Y' in CRMA18, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

MATH 1019. Lab for College Algebra. 2 Credit Hours.

This 2-credit course is intended as a supplement to MATH 1021 College Algebra for students with a Math GQ/1015 ALEKS math placement. The course will cover the particular intermediate algebra concepts that are necessary background for success in College Algebra.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 0702, 'Y' in MC3, or 'Y' in MC4)

MATH 1021. College Algebra. 4 Credit Hours.

This course is typically offered in Fall, Spring, Summer I and Summer II.

This course covers polynomial, rational and algebraic expressions, equations and inequalities. It also includes some topics in graphing, an introduction to the concept of a function, and a brief introduction to the exponential and logarithmic functions. NOTE: This course can be used to satisfy the university Core Quantitative Reasoning A (QA) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: QA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (MATH 0702 (C or higher), MATH 1015 (C or higher), MATH 1022 (D or higher), 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC6A, 'Y' in MA01, 'Y' in MA02, STAT 1001 (may be taken concurrently), 'Y' in STT2, STAT 1102 (may be taken concurrently), STAT 1902 (may be taken concurrently), (MATH 0702 and MATH 1019 (CR or higher; may be taken concurrently)), ('Y' in MC3 and MATH 1019 (CR or higher; may be taken concurrently)), 'Y' in CRMA01, 'Y' in CRMA03, or 'Y' in MC6T)

MATH 1022. Precalculus. 4 Credit Hours.

This course is typically offered in Fall, Spring, Summer I and Summer II.

This course is designed to prepare students for the calculus courses. Topics include functions and function operations, one-to-one and inverse functions, exponential and logarithmic functions, trigonometric functions, inverse trigonometric functions, basic trigonometric identities, polar coordinates, and an introduction to vectors. The course also contains a brief review of basic algebra. NOTE: This course can be used to satisfy the university Core Quantitative Reasoning A (QA) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: QA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D (except where noted) in (MATH 1021 (C or higher), (MATH 1021 (C- or higher) and MATH 1023 (CR or higher; may be taken concurrently)), MATH 1041, MATH 1038, 'Y' in MC5, 'Y' in MC6, 'Y' in MA03, 'Y' in MC6A, 'Y' in MATW, 'Y' in CRMA04, or 'Y' in MC6T)

MATH 1023. Lab for Precalculus. 1 Credit Hour.

This is a 1-credit course to be taken as a supplement to Math 1022: Precalculus for students with a C- in the prerequisite Math 1021: College Algebra. The course supplements Precalculus by giving an in-depth review of the College Algebra concepts, in the context of Precalculus, that are necessary background for success in Precalculus.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MATH 1021.

MATH 1031. Differential and Integral Calculus. 4 Credit Hours.

This course is typically offered in Fall and Spring.

This is a calculus course in the reform style that will introduce students to the basic concepts of differential and integral calculus. The emphasis of the course will be on understanding the concepts (intuitively rather than rigorously). However, the course will also cover the basic techniques of differentiation and some techniques of integration. NOTE: (1) This is the course appropriate for those students who are taking calculus in order to fulfill the quantitative core requirements. (2) This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement or the GenEd Quantitative Literacy (GQ) requirement.

Course Attributes: QB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MATH 1021, 'Y' in MC5, 'Y' in MC6, 'Y' in MA03, 'Y' in MC6A, 'Y' in CRMA04, or 'Y' in MC6T)

MATH 1033. Computing in MATLAB. 1.5 Credit Hour.

This course is designed as an introduction to MATLAB and as preparation for computing in undergraduate applied mathematics courses. Topics include computer arithmetic, vectors and matrices, graphics, loops, functions, and conditional operators. No prior programming or MATLAB skills are required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MATH 1022, MATH 1039 (may be taken concurrently), 'Y' in MC6, 'Y' in MA04, 'Y' in MC6A, 'Y' in CRMA05, 'Y' in CRMA07, or 'Y' in MC6T)

MATH 1034. Applications in MATLAB. 1.5 Credit Hour.

This course is designed as a supplement to MATH 1033 Computing in MATLAB and will introduce students to some particular applications using MATLAB. Topics covered will require students to reinforce their programming skills while exposing them to a variety of problems where computation is useful and necessary. After completing the course, students will be better prepared for the use of computing in more advanced undergraduate courses, research projects, and future internships/employment.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (MATH 1022, MATH 1039 (may be taken concurrently), 'Y' in MC6, 'Y' in MA04, 'Y' in MC6A, 'Y' in CRMA05, 'Y' in CRMA07, or 'Y' in MC6T) and MATH 1033 (C- or higher)

MATH 1039. Lab for Calculus I. 1 Credit Hour.

This course is typically offered in Fall and Spring.

This is the lab component of MATH 1041, a first semester calculus course that involves both theory and applications. MATH 1039 is required for students who earned a grade of C- in MATH 1022 Precalculus. Students with no previous calculus experience or those needing extra review of algebra and precalculus topics are strongly encouraged to register for MATH 1039. Topics include algebra and precalculus in the context of the topics covered in MATH 1041.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D (except where noted) in (MATH 1022 (C- or higher), MATH 1041, MATH 1042, MATH 1044, MATH 1941, MATH 1942, MATH 1951, 'Y' in MC6, 'Y' in MA04, 'Y' in MC6A, 'Y' in MATW, or 'Y' in MC6T)

MATH 1041. Calculus I. 4 Credit Hours.

This is a first semester calculus course primarily for students with some calculus background or strong precalculus skills. It involves both theory and applications. Students who earned a grade of C- in MATH 1022 must register for MATH 1039 simultaneously with MATH 1041. Students with no previous calculus experience or those needing extra review of precalculus topics are strongly encouraged to register for MATH 1039. Topics include functions, limits and continuity, differentiation of algebraic, trigonometric, exponential and logarithmic functions, curve sketching, optimization and L'Hospital's rule. NOTE: (1) Students may not get credit for more than one of MATH 1041 and MATH 1941. (2) This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement or the GenEd Quantitative Literacy (GQ) requirement. However, this course is not appropriate for students whose sole purpose is to fulfill the quantitative core requirements. They should take MATH 1031 instead.

Course Attributes: QB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D (except where noted) in (MATH 1022 (C or higher), (MATH 1022 (C- or higher) and MATH 1039 (C or higher; may be taken concurrently)), MATH 1042, MATH 1044, MATH 1942, MATH 1951, 'Y' in MC6, 'Y' in MA04, 'Y' in MC6A, 'Y' in MATW, 'Y' in CRMA05, or 'Y' in MC6T)

MATH 1042. Calculus II. 4 Credit Hours.

This course is typically offered in Fall, Spring, Summer I and Summer II.

This is a second semester calculus course that involves both theory and applications. Topics include the definite integral and the Fundamental Theorem of Calculus, applications of the definite integral, techniques of integration, improper integrals and sequences and series, including power and Taylor series.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (MATH 1041, MATH 1941, MATH 1038, MATH 2043 (D or higher), 'Y' in MA06, 'Y' in MATW, 'Y' in CRMA08, or 'Y' in CRMA21)

MATH 1044. Introduction to Probability and Statistics for the Life Sciences. 4 Credit Hours.

A one-semester course at the freshman level to follow Calculus I for majors in Biology and Earth and Environmental Sciences (EES). Probabilistic and statistical methods needed for empirical modeling and associated data analysis, with examples primarily taken from the life sciences. This course does not serve as a prerequisite to Calculus III. Primarily for majors in Biology and EES.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1041, MATH 1038, MATH 1941, MATH 1951, any MATH course numbered 2043 to 3080 (may be taken concurrently), 'Y' in MA06, or 'Y' in MATW)

MATH 1941. Honors Calculus I. 4 Credit Hours.

This course is typically offered in Fall and Spring.

This is a first semester calculus course that involves both theory and applications. Topics include functions, limits and continuity, differentiation of algebraic, trigonometric, exponential and logarithmic functions, curve sketching, optimization and L'Hospital's Rule. NOTE: This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement or the GenEd Quantitative Literacy (GQ) requirement. However, this course is not appropriate for students whose sole purpose is to fulfill the quantitative core requirements. They should take Math 1031 instead.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, QB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D (except where noted) in (MATH 1022 (C or higher), MATH 1042, MATH 1044, MATH 1942, MATH 1951, 'Y' in MC6, 'Y' in MA04, 'Y' in MC6A, 'Y' in MATW, 'Y' in CRMA05, or 'Y' in MC6T)

MATH 1942. Honors Calculus II. 4 Credit Hours.

This course is typically offered in Fall and Spring.

This is a second semester calculus course that involves both theory and applications. Topics include the definite integral and the Fundamental Theorem of Calculus, applications of the definite integral, techniques of integration, improper integrals and sequences and series, including power and Taylor series.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (MATH 1041, MATH 1941, MATH 1038, MATH 2043 (D or higher), 'Y' in MA06, 'Y' in MATW, 'Y' in CRMA08, or 'Y' in CRMA21)

MATH 1951. Honors Accelerated Calculus I & II. 4 Credit Hours.

This course is typically offered in Fall.

This is a course for students who have had a year of calculus in high school. Its purpose is two-fold: to present a more theoretical treatment of calculus than is usually seen in an American high school and to prepare students for Math 2043, Calculus III. Topics covered will include some or all of the following: limits and continuity, derivatives and rules of differentiation, the Mean Value Theorem, L'Hospital's rule, optimization, graphing, the definite integral and the Fundamental Theorem of Calculus, u-substitution and integration by parts, limits of sequences, infinite series, convergence tests, power series, and Taylor series. NOTE: Prior to summer 2010, the course title was "Honors Differential & Integral Calculus."

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MATH 1041, MATH 1941, MATH 1038, 'Y' in MA06, 'Y' in MATW, 'Y' in CRMA08, or 'Y' in CRMA21) and (MATH 1042, MATH 1942, 'Y' in MA07, 'Y' in MATW, 'Y' in CRMA09, or 'Y' in CRMA11)

MATH 2021. Functions and Modeling. 3 Credit Hours.

This course is typically offered in Spring.

In this course, required for TUTEACH Mathematics with Teaching majors, students will give presentations and work in small groups to engage in explorations and lab activities designed to strengthen and expand their knowledge of the topics found in secondary mathematics; illuminate the connections between secondary and college mathematics and between various areas of mathematics; and illustrate productive uses of technology in teaching. Students will engage in non-routine problem solving, problem-based learning, and applications of mathematics. The course consists of four units: 1) Functions, 2) Modeling, 3) Overlooked Topics and Explorations, and 4) Geometry of Complex Numbers. Specific topics of investigation include function properties and patterns, complex numbers, parametric equations, polar equations, vectors, and exponential growth and decay. Explorations involve the use of multiple representations, transformations, data analysis techniques (such as curve fitting) and interconnections among topics in algebra, analytic geometry, statistics, trigonometry, and calculus. The lab investigations include use of various technologies including computers, calculators, and computer graphing software.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1042, MATH 1951, or 'Y' in MATW) and (SCTC 1189, SCTC 1289, SCTC 1389, or MGRE 3111)

MATH 2031. Probability and Statistics. 3 Credit Hours.

This course is typically offered in Fall and Spring.

This course presents basic principles of statistical reasoning and the concepts from probability theory that give the student an understanding of the logic behind statistical techniques. Topics covered include rules of probability, discrete probability distributions, normal distribution, sampling distributions, the central limit theorem, point estimation, interval estimation, tests concerning means, tests based on count data, correlation and regression, and nonparametric statistics. NOTE: This course cannot be credited towards graduation if taken after Math 3031.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1031, MATH 1041, MATH 1042, MATH 1044, MATH 1942, any MATH course numbered 2043 to 3080 (may be taken concurrently), STAT 1102, STAT 1902, or 'Y' in MATW)

MATH 2041. Differential Equations I. 3 Credit Hours.

This is a course in ordinary differential equations. Topics include first order ordinary differential equations, linear second order ordinary differential equations, systems of differential equations, numerical methods and the Laplace transform.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MATH 1042, MATH 1942, 'Y' in MATW, 'Y' in MA07, 'Y' in CRMA09, or 'Y' in CRMA11)

MATH 2043. Calculus III. 4 Credit Hours.

This course is typically offered in Fall, Spring, Summer I and Summer II.

This is a third semester calculus course that involves both theory and applications. Topics include vectors in two or three dimensions, lines and planes in space, parametric equations, vector functions and their derivatives, functions of several variables, partial derivatives, multiple integrals, line integrals, and Green's, Divergence and Stokes' theorems.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MATH 1042, MATH 1942, MATH 1951, 'Y' in MA07, 'Y' in MATW, 'Y' in CRMA09, or 'Y' in CRMA11)

MATH 2045. Differential Equations with Linear Algebra. 4 Credit Hours.

This course is typically offered in Fall.

This is a course in ordinary differential equations that emphasizes the use of linear algebra. It has two objectives: 1) to teach students how to solve linear differential equations and systems of linear differential equations, and 2) to introduce students to the linear algebra concepts such as vector spaces, dimension, basis, matrices, eigenvalues and eigenvectors, that play a key role in the theory of linear differential equations.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MATH 2043 (may be taken concurrently), MATH 2943 (may be taken concurrently), 'Y' in MA08, 'Y' in CRMA12, or 'Y' in CRMA15)

MATH 2061. Euclidean Geometry. 3 Credit Hours.

This course is typically offered in Spring.

Students will be introduced to mathematical proofs and reasoning in the context of Euclidean geometry. The course will provide a foundation for more advanced courses in geometry and other proof-based mathematics courses.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (MATH 1042, MATH 1942, MATH 1951, MATH 2043 (may be taken concurrently), any MATH course numbered 2100 to 3080 (C- or higher; may be taken concurrently), 'Y' in MA07, 'Y' in MATW, 'Y' in CRMA09, 'Y' in CRMA11, or 'Y' in CRMA12)

MATH 2082. Sophomore Directed Study. 1 to 4 Credit Hour.

This course is typically offered in Fall, Spring, Summer I, and Summer II.

Intensive study in a specific area. This course does not count for a mathematics related major elective credit. Prerequisites are MATH 1042 and a GPA of 3.5 or higher.

Repeatability: This course may not be repeated for additional credits.

MATH 2101. Linear Algebra. 3 Credit Hours.

This course is typically offered in Fall, Spring, Summer I and Summer II.

This course covers vectors and vector spaces, matrices, determinants, systems of linear equations, linear transformations, inner products and orthogonality, and eigenvectors and eigenvalues. NOTE: Only one course, Math 2101 or Math 2103, can be credited towards graduation.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MATH 1042, MATH 1942, MATH 1951, 'Y' in MA07, 'Y' in MATW, 'Y' in CRMA09, or 'Y' in CRMA11)

MATH 2103. Linear Algebra with Computer Lab. 4 Credit Hours.

This course is typically offered in Fall.

Topics in this course include: systems of linear equations; matrix algebra; determinants; fundamental subspaces; linear transformations; eigenvalues and eigenvectors; inner products; orthogonality; and spectral theory. Included is a computational lab component that uses activities and applications designed to promote understanding of the basic concepts from algebraic, symbolic, and geometric viewpoints. NOTE: Only one course, Math 2101 or Math 2103, can be credited towards graduation.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MATH 1042, MATH 1942, MATH 1951, 'Y' in MA07, 'Y' in MATW, 'Y' in CRMA09, or 'Y' in CRMA11) and MATH 1033.

MATH 2111. Basic Concepts of Math. 3 Credit Hours.

This course is typically offered in Fall, Spring, and Summer I.

This is a course designed to introduce students to mathematical abstraction and the language of mathematical proof. Topics include logic, sets, relations, integers, induction and modular arithmetic, functions, and cardinality. This course is highly recommended for students who have not been exposed to mathematical proof and intend to take advanced math courses.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (MATH 1042, MATH 1942, MATH 1951, any MATH course numbered 2043 to 2110 (C- or higher; may be taken concurrently), any MATH course numbered 2112 to 3080 (C- or higher; may be taken concurrently), 'Y' in MA07, 'Y' in MATW, 'Y' in CRMA09, or 'Y' in CRMA11)

MATH 2121. Mathematical Modeling and Simulation. 3 Credit Hours.

This course exposes students to first-principles models of real-world processes, simulations on computers, and the proper interpretation of simulation results and data. The course focuses on applications in which first-principles modeling and simulation are not yet standard toolsets, such as: bacterial motion, disease spread, traffic flow, animal swarming/flocking/herding, crowd dynamics, ecology, economic markets, and social networks. However, the fundamental concepts and techniques apply equally to fields in which simulation is more commonplace, such as computational physics and engineering. In the course, students are provided with suitable software and high-level programming environments that enable them to engage right away in devising, modifying, and simulating models of interacting agents that describe real-world phenomena. In addition to homework problems that involve mathematical modeling and programming, the course also involves course projects, including final project reports and presentations.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MATH 1034, CIS 1051, CIS 1057, CIS 1068, CIS 1951, CIS 1968, 'Y' in CRCI01, 'Y' in CRCI04, 'Y' in CRCI05, or 'Y' in CRCI06) and (MATH 1042, MATH 1942, 'Y' in MATW, 'Y' in MA07, 'Y' in CRMA09, or 'Y' in CRMA11)

MATH 2941. Honors Differential Equations I. 3 Credit Hours.

This course is typically offered in Fall and Spring.

This is a course in ordinary differential equations. Topics include first order ordinary differential equations, linear second order ordinary differential equations, systems of differential equations, numerical methods and the Laplace transform. Additional topics may include series solutions to differential equations, the matrix exponential, and various applications.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MATH 1042, MATH 1942, 'Y' in MATW, 'Y' in MA07, 'Y' in CRMA09, or 'Y' in CRMA11)

MATH 2943. Honors Calculus III. 4 Credit Hours.

This course is typically offered in Fall and Spring.

This is a third semester calculus course that involves both theory and applications. Topics include vectors in two or three dimensions, lines and planes in space, parametric equations, vector functions and their derivatives, functions of several variables, partial derivatives, multiple integrals, line integrals, and Green's, Divergence and Stokes' theorems.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MATH 1042, MATH 1942, MATH 1951, 'Y' in MA07, 'Y' in MATW, 'Y' in CRMA09, or 'Y' in CRMA11)

MATH 3003. Theory of Numbers. 3 Credit Hours.

This course is typically offered in Fall and Spring.

Divisibility properties of integers, prime factorization, distribution of primes, linear and quadratic congruences, primitive roots, quadratic residues, quadratic reciprocity, simple Diophantine equations, cryptography.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MATH 2111.

MATH 3031. Probability Theory I. 3 Credit Hours.

This course is typically offered in Fall and Spring.

Counting techniques, axiomatic definition of probability, conditional probability, independence of events, Bayes Theorem, random variables, discrete and continuous probability distributions, expected values, moments and moment generating functions, joint probability distributions, functions of random variables, covariance and correlation. NOTE: Prior to summer 2010, the course title was "Introduction to Probability Theory."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (MATH 1042, MATH 1942, MATH 1951, MATH 2043 (C- or higher; may be taken concurrently), 'Y' in MA07, 'Y' in MATW, 'Y' in CRMA09, or 'Y' in CRMA11)

MATH 3032. Mathematical Statistics. 3 Credit Hours.

This course is typically offered in Spring.

Random sampling, sampling distributions, Student's t, chi-squared and F distributions, unbiasedness, minimum variance unbiased estimators, confidence intervals, tests of hypothesis, Neyman-Pearson Lemma, and uniformly most powerful tests. NOTE: Prior to summer 2010, the course title was "Introduction to Mathematical Statistics."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 3031 or AS 2101)

MATH 3041. Differential Equations I. 3 Credit Hours.

This course is typically offered in Fall, Spring, Summer I and Summer II.

This is a course in ordinary differential equations. Topics include first order ordinary differential equations, linear second order ordinary differential equations, systems of differential equations, numerical methods and the Laplace transform.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MATH 2043 (may be taken concurrently)

MATH 3042. Differential Equations II. 4 Credit Hours.

This course is not offered every year.

This is a second course in differential equations. Topics include orthogonal polynomials, including Legendre and Chebyshev polynomials, Fourier series, partial differential equations, the boundary value problems and other topics of the instructor's choice. NOTE: This course is offered only in odd-numbered years.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 3041 or MATH 3045)

MATH 3043. Numerical Analysis I. 4 Credit Hours.

This course is typically offered in Fall.

Computer arithmetic, pitfalls of computation, iterative methods for the solution of a single nonlinear equation, interpolation, least squares, numerical differentiation, numerical integration, and solutions of linear systems by direct and iterative methods.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MATH 2043, (MATH 2101, MATH 2103, or MATH 2045), and (CIS 1053, CIS 1057, CIS 1068, or PHYS 2501)

MATH 3044. Numerical Analysis II. 3 Credit Hours.

This course is typically offered in Spring.

Solution of systems of nonlinear equations, solution of initial value problems, matrix norms and the analysis of iterative solutions, numerical solution of boundary value problems and partial differential equations, and introduction to the finite element method. NOTE: Offered in even-numbered years only.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MATH 3043.

MATH 3045. Differential Equations with Linear Algebra. 4 Credit Hours.

This course is typically offered in Fall.

This is a course in ordinary differential equations that emphasizes the use of linear algebra. It has two objectives: 1) to teach students how to solve linear differential equations and systems of linear differential equations, and 2) to introduce students to the linear algebra concepts such as vector spaces, dimension, basis, matrices, eigenvalues and eigenvectors, that play a key role in the theory of linear differential equations.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MATH 2043 (may be taken concurrently), 'Y' in MA08, or 'Y' in CRMA12)

MATH 3046. Differential Equations with Computer Lab. 4 Credit Hours.

This course is typically offered in Spring.

This course combines traditional material with a modern systems approach. It presents a thorough introduction to differential equations, tempering a classic "pure math" approach with more practical applied aspects. The course covers key topics such as first order equations, matrix algebra, systems, and phase plane portraits. The focus is on interpreting and solving problems through the use of software support and technology projects. Using software tools graphics will be used to display the ideas in ODEs; modeling and applications; and projects. An objective is to provide students with the opportunity to bring together much of what they have learned, including analytical, computational, and interpretative skills.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MATH 2043 (may be taken concurrently), 'Y' in MA08, or 'Y' in CRMA12) and MATH 1033.

MATH 3051. Theoretical Linear Algebra. 4 Credit Hours.

This course is typically offered in Spring.

This is a course in linear algebra with a higher degree of abstraction than a traditional undergraduate linear algebra course. Topics include vector spaces, linear transformations, determinants, eigenvalues and eigenvectors, canonical forms, inner product spaces, and bilinear forms.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (MATH 2111 (C or higher) or 'Y' in CRMA14) and (MATH 3045, MATH 2045, MATH 2101, or MATH 2103)

MATH 3061. Modern Geometry I. 3 Credit Hours.

This course is typically offered in Fall.

An introduction to Euclidean and Noneuclidean geometries with a particular emphasis on theory and proofs.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 2061 or MATH 2111) and (MATH 2045, MATH 2101, MATH 2103, or MATH 3051)

MATH 3082. Junior Individual Study. 1 to 4 Credit Hour.

This course is typically offered in Fall, Spring, Summer I and Summer II.

Intensive study in a specific area. NOTE: May be taken in either semester.

Repeatability: This course may be repeated for additional credit.

MATH 3083. Junior Directed Reading. 1 to 4 Credit Hour.

This course is typically offered in Fall, Spring, Summer I and Summer II. Intensive study in a specific area. NOTE: May be taken in either semester.

Repeatability: This course may be repeated for additional credit.

MATH 3096. Introduction to Modern Algebra. 3 Credit Hours.

This course is typically offered in Fall and Spring.

This is a one-semester course in modern algebra that covers topics from group, ring, and field theory. Topics include groups and their basic properties, subgroups, normal subgroups and quotient groups, group homomorphisms, rings, rings of integers and polynomial rings, congruences in the rings of integers and polynomial rings, ideals and quotient rings, ring homomorphism, fields and field extensions, Galois theory.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MATH 2111.

MATH 3098. Modern Algebra. 3 Credit Hours.

This course is typically offered in Fall.

This is the first semester in a year-long modern algebra sequence Math 3098 - Math 3101. It is a thorough introduction to the theory of groups and rings. NOTE: Students who have had limited exposure to proofs should consider taking Math 2111 first.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (MATH 2111 or 'Y' in CRMA14) and (MATH 2101, MATH 2103, MATH 2045, MATH 3045 (C- or higher), 'Y' in MA09, 'Y' in MA10, or 'Y' in CRMA13)

MATH 3101. Topics in Modern Algebra. 3 Credit Hours.

This course is typically offered in Spring.

This is the second semester of a year-long modern algebra course. Topics come from theory of rings, fields and modules and from Galois theory.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MATH 3098.

MATH 3137. Real & Complex Analysis I. 3 Credit Hours.

This course is typically offered in Fall.

Real and complex number systems, completeness. Sequences and series and their limits. Continuity of real and complex functions. Derivative. Analytic functions. Power series.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (MATH 2043, 'Y' in MA08, or 'Y' in CRMA12) and MATH 2111 (C- or higher)

MATH 3138. Real & Complex Analysis II. 3 Credit Hours.

This course is typically offered in Spring.

The Riemann-Stieltjes integral. Cauchy integral theorem. Cauchy integral formula and its consequences. The calculus of residues.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 3137 or MATH 3141)

MATH 3141. Advanced Calculus I. 3 Credit Hours.

This course is typically offered in Fall.

This is a first semester course in real analysis. Topics include the real number system and the completeness property, sequences and their limits, limits of real-valued functions and continuity and point-set topology of Euclidean spaces. NOTE: Students who have had limited exposure to proofs should consider taking Math 2111 first.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MATH 2043, 'Y' in CRMA12, or 'Y' in MA08), (MATH 2111, 'Y' in MA11, or 'Y' in CRMA14), and (MATH 2101, MATH 2103, MATH 2045, MATH 3045, 'Y' in MA09, 'Y' in MA10, or 'Y' in CRMA13)

MATH 3142. Advanced Calculus II. 3 Credit Hours.

This course is typically offered in Spring.

This is a second semester course in real analysis. Topics include the derivative and differentiable functions, the Riemann integral, infinite series and convergence tests, power and Taylor series and operations with them, and topics from calculus of several variables.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MATH 3141.

MATH 3500. Topics in Contemporary Mathematics. 3 Credit Hours.

This course provides an in depth exposure to selected topics in advanced mathematics.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C (except where noted) in (MATH 1042, MATH 1942, MATH 2043 (C- or higher; may be taken concurrently), MATH 2943 (C- or higher; may be taken concurrently), 'Y' in MATW, 'Y' in CRMA09, or 'Y' in CRMA11)

MATH 3941. Honors Differential Equations I. 3 Credit Hours.

This course is typically offered in Fall and Spring.

This is a course in ordinary differential equations. Topics include first order ordinary differential equations, linear second order ordinary differential equations, systems of differential equations, numerical methods and the Laplace transform. Additional topics may include series solutions to differential equations, the matrix exponential, and various applications.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 2043 (may be taken concurrently) or MATH 2943 (may be taken concurrently))

MATH 4001. History of Mathematics. 3 Credit Hours.

This course is not offered every year.

The development of the major mathematical concepts from ancient times to the present, emphasizing topics in the standard undergraduate curriculum. Special attention will be paid to the history of mathematics and mathematics education in the United States. NOTE: Offered in even-numbered years only.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (any MATH course numbered 3001 to 4999 or 'Y' in CRMA20)

MATH 4003. Combinatorics. 3 Credit Hours.

This course is not offered every year.

Basic theorems and applications of combinatorial analysis, including generating functions, difference equations, Polya's theory of counting, graph theory, matching, and block diagrams. NOTE: Offered in odd-numbered years only.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 2111, MATH 2196, or MATH 3003)

MATH 4033. Probability Theory II. 3 Credit Hours.

This course is typically offered in Fall.

Markov chains, exponential distribution, Poisson process, continuous time Markov chains, Brownian motion, stationary processes. NOTE: Prior to summer 2010, the course title was "Introduction to Probability Theory."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 3031 or AS 2101) and (MATH 2101, MATH 3045, or MATH 2045)

MATH 4041. Partial Differential Equations. 3 Credit Hours.

This course is typically offered in Spring.

The solution and properties of first and second order equations; heat and wave equation. Elliptic boundary value problems and Green's functions. Hyperbolic problems and the theory of characteristics. Finite difference methods. The equations of mathematical physics.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 2101, MATH 2103, or MATH 3051) and (MATH 2041, MATH 2045, MATH 3041, or MATH 3045)

MATH 4043. Applied Mathematics. 3 Credit Hours.

This course is typically offered in Fall.

The construction and study of mathematical models for physical, economic, and social processes. NOTE: Offered in odd-numbered years only.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 2045, MATH 3045, or Completed the following: (MATH 2101, MATH 2103, or MATH 3051) and (MATH 2041, MATH 3041, or MATH 3046))

MATH 4051. Complex Analysis. 3 Credit Hours.

This course is typically offered in Fall.

Complex numbers, analytic functions, harmonic functions, power and Laurent series, Cauchy's theorem, calculus of residues, and conformal mappings.

NOTE: Prior to summer 2010, the course title was "Introduction to Functions of a Complex Variable."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (MATH 3138, MATH 3142 (C- or higher), 'Y' in MA12, or 'Y' in CRMA17)

MATH 4061. Differential Geometry. 3 Credit Hours.

This course is typically offered in Spring of even years.

This course is an introduction to differential geometry starting with concepts learned in Calculus III. A particular emphasis will be placed on the study of curves and surfaces in 3-space and their generalizations. The course will revolve around Riemannian geometry, but, time permitting, it will also include a brief introduction to one or more of the following: symplectic geometry and its relation to classical mechanics, general connections and their relation with field theory and pseudoriemannian manifolds, and general relativity.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (MATH 2043 (C or higher), 'Y' in MA08, or 'Y' in CRMA12) and (MATH 2045, MATH 2101, MATH 2103, or MATH 3051)

MATH 4063. Topology I. 3 Credit Hours.

This course is typically offered in Spring of odd years.

Topological and metric spaces. Continuity, compactness, connectedness, convergence. Introduction to algebraic and combinatorial topology.

Classification of compact surfaces, fundamental groups and covering spaces.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 3137 or MATH 3141) and (MATH 3096 or MATH 3098)

MATH 4082. Senior Individual Study. 1 to 4 Credit Hour.

This course is typically offered in Fall, Spring, Summer I and Summer II.

Intensive individual study at a senior or graduate level. Arranged each semester. Please consult with the instructor. NOTE: Can be taken in either semester.

Repeatability: This course may be repeated for additional credit.

MATH 4083. Senior Directed Reading. 1 to 4 Credit Hour.

This course is typically offered in Fall, Spring, Summer I and Summer II.

Intensive individual study at a senior or graduate level. Arranged each semester. Please consult with the instructor. NOTE: Can be taken in either semester.

Repeatability: This course may be repeated for additional credit.

MATH 4096. Senior Problem Solving. 3 Credit Hours.

This course is typically offered in Fall and Spring.

This is a course in mathematical discovery through problem solving. Students will be expected to develop two or three areas of mathematics by solving problems, assigned by the instructor. Problems will be solved both individually and in groups. (Capstone writing course.)

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 3138 (may be taken concurrently), MATH 3142 (may be taken concurrently), or MATH 3044 (may be taken concurrently)) and (MATH 3051, MATH 3096, or MATH 3098)

Mechanical Engineering (MEE)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

MEE 0843. Technology Transformations. 3 Credit Hours.

Learn about science and technology through the history of discovery, inventions, and innovations. The course expands your knowledge of innovations in science and technology, and their inherent disruptive quality in altering society, economy, and politics. You will learn of key ingredients within a socio-political-economic milieu that is the sine qua non for innovation to germinate and flourish. The goal is to prepare you for a lifelong journey as innovators in your chosen field. The course dissects "case studies" centered around innovators and original thinkers who metamorphized scientific phenomena from a mere curiosity into key technologies (electricity, automobiles, airplanes, telephones, bridges, highways, electronics, computers, and information technology), and in the process, transformed the world around us. At the end of the course, students will become discerning citizens able to judge the pros and cons of modern technologies and surf new waves of technologies without anxiety. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core.

Course Attributes: GS

Repeatability: This course may not be repeated for additional credits.

MEE 1001. Introduction to Mechanical Engineering. 2 Credit Hours.

Provides an understanding of the study and practice associated with mechanical engineering and technology disciplines. Understand the importance of good communications and teamwork skills in a successful engineering and technology career. Understand the basics of problem solving and design. Discipline-specific labs.

Repeatability: This course may not be repeated for additional credits.

MEE 1019. Automotive Design I. 1 Credit Hour.

Design of automotive chassis, suspension, and drive train for participation in Society of Automotive Engineers competitions. Grade based on participation (50%) and/or design report (50%).

Repeatability: This course may not be repeated for additional credits.

MEE 1029. Automotive Design II. 1 Credit Hour.

Continuation of MEE 1019 (0180). Grade based on participation (50%) and/or design report (50%).

Repeatability: This course may not be repeated for additional credits.

MEE 1039. Automotive Design III. 1 Credit Hour.

Continuation of MEE 1029 (0181). Grade based on participation (50%) and/or design report (50%).

Repeatability: This course may not be repeated for additional credits.

MEE 1117. Fundamentals of Mechanical Engineering Design. 2 Credit Hours.

An introduction to the art of communicating design ideas in two and three dimensions with a combination of hand sketching and computer modelling. Specific topics include: isometric, orthographic and perspective hand sketching; computer-aided design (CAD) modeling - part model, assembly and mechanism synthesis; CAD drawings - orthographic, auxiliary and sectional views, dimensioning and annotations. A culminating team project will facilitate introduction of rapid prototyping techniques necessary to convert a design intent into a functional product.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering.

Repeatability: This course may not be repeated for additional credits.

MEE 1305. Machine Shop Laboratory. 1 Credit Hour.

This machine-shop lab experience provides practical, hands-on training on the machine-shop tools that BS ME students will use in their subsequent course work. Students will fabricate specific parts using the principal machine tools and using 3D Printing. Particular emphasis will be placed on safety procedures, on precise manufacture of parts, on using the right machine tool for a particular application, and for the judicious, least wasteful use of stock material.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MEE 1117 or ENGR 1117)

MEE 2011. Linear Systems. 3 Credit Hours.

This course introduces junior-level engineering students to linear-systems analysis and numerical methods in engineering. Numerical-analysis procedures typically encountered in the upper-level mechanical-engineering curriculum are considered and include: linear matrix equations and their solutions, eigenvalue problems, numerical interpolation, differentiation and integration, and the numerical solution of differential equations.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Bioengineering, Civil Engineering, Mechanical Engineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1042, MATH 1942, 'Y' in MATW, or 'Y' in METW), (MATH 2043 (may be taken concurrently), MATH 2943 (may be taken concurrently), or 'Y' in METW), and (MATH 3041, MATH 3941, MATH 2041, MATH 2941, or 'Y' in METW)

MEE 2305. Instrumentation and Data Acquisition Lab. 1 Credit Hour.

Students will learn the instrumentation of basic static and dynamic mechanical systems. Students will use data-acquisition hardware and software. Students will carry out statistical analysis of results, evaluate error propagation, and provide written lab reports.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ENGR 2332 (may be taken concurrently) or ENGT 3323 (may be taken concurrently)), ECE 2112 (may be taken concurrently), ECE 2113 (may be taken concurrently), and ENGR 1102.

MEE 3011. Analysis and Computation of Linear Systems in Mechanical Engineering. 3 Credit Hours.

Many types of mechanical-engineering situations are modeled as systems of coupled linear equations, or as systems of coupled linear differential equations. Modern computing techniques offer very powerful functionality for calculating linear-equation systems and will be used extensively in this course. Upon completion of this course students will attain: proficiency in coding, a conceptual foundation for core linear algebra and eigenfunction analysis, and insight for both numerical and exact solution strategies applicable to a wide range of problems encountered in mechanical engineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ENGR 2332 or BIOE 3312), (MATH 2043, MATH 2943, or 'Y' in METW), and (MATH 3041, MATH 3941, MATH 2041, MATH 2941, or 'Y' in METW)

MEE 3117. Computer-Aided Mechanical Design. 3 Credit Hours.

An introduction to the mathematical and computational fundamentals of finite element method and the use of an industry standard Computer Aided Design (CAD) package to analyze failure. It is expected that before taking this course, students have a fundamental understanding of concepts from statics, dynamics, solid mechanics and design of machine elements. A culminating design project will help students understand the design and assembly of complex machines by analysis of individual components and the interaction between them, from the prime mover to the load.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bach of Science in Mech Eng.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in MEE 3011 (may be taken concurrently) and MEE 3301.

MEE 3185. Mechanical Engineering Summer Work Experience. 3 Credit Hours.

This course is for an approved, full-time, full-summer (ten weeks or more) work experience in industry or a government agency. The full-time work experience must be carried out during the summer between a full, regular spring semester and full, regular fall semester. The summer employment must entail rigorous engineering analysis at a level comparable to an approved technical elective course in the BS ME program.

Repeatability: This course may not be repeated for additional credits.

MEE 3301. Machine Theory and Design. 3 Credit Hours.

The course includes design process and consideration of materials, reliability, stress and deflection, failure criteria from static and dynamic loadings. Topics also include analysis of mechanical components including rotating shafts, screws, welded parts, bearings, gears, and belts. There will be individual and team design projects with written reports and presentations.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bach of Science in Mech Eng.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ENGR 1117 or MEE 1117), ENGR 2332, (ENGR 2333 or ENGR 2933), and MEE 3305 (may be taken concurrently)

MEE 3302. Kinematics of Mechanisms. 3 Credit Hours.

This course builds on the concepts of kinematics first presented in sophomore level Dynamics and explores its application to mechanical design. Starting with an introduction to links, joints and kinematic chains, students will learn the analysis and design of spatial mechanisms with an emphasis on position, velocity and acceleration of linkages. In addition to graphical and numerical analysis, computer aided mechanism design will be performed using SolidWorks Motion.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ENGR 2332.

MEE 3304. Mechanical Design and Fabrication. 3 Credit Hours.

This course builds on the theoretical foundation of MEE 3301 Machine Theory and Design and MEE 3117 Computer-Aided Mechanical Design. Students will learn to incorporate design constraints associated with the practical fabrication and assembly of a mechanism. In this machine-shop-intensive course, student teams will be trained in precision machining and assembly techniques. A significant portion of the grade will rely on the quality of workmanship and accuracy of output.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- (except where noted) in MEE 2305 (C- or higher), (ENGR 3117 (may be taken concurrently) or MEE 3117 (may be taken concurrently)), and MEE 3301.

MEE 3305. Materials Laboratory. 1 Credit Hour.

Laboratory experiments related to the nature and properties of materials, including: stress, strain, fractures, microstructure, metallography, and nondestructive testing.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ENGR 2333, ENGR 2933, or ENGT 2322) and MEE 2305.

MEE 3421. Dynamic Systems. 3 Credit Hours.

A study of the dynamic response of physical systems, concentrating on mechanical systems in translation, rotation, and combined motion. Mathematical models are developed using interacting elements, inter-connecting laws, and physical laws. Both the state variable and input-output analysis are considered. Solutions for the model response include using the following techniques: analytical, Laplace Transform, transfer function, matrix methods, and numerical analysis. Design project.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MEE 3011.

MEE 3422. Modeling and Control of Electromechanical Systems. 3 Credit Hours.

Control systems are integral parts of our modern life. This course introduces the control of electromechanical systems with an emphasis on linear systems. Analyzing systems using transfer functions and Laplace transforms is studied, and the stability of control systems and their transient response is covered. In addition, frequency-domain techniques and the design of feedback-control systems will be discussed.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MEE 3011.

MEE 3506. Fluid Mechanics Laboratory. 1 Credit Hour.

This laboratory aims to familiarize the students with different data acquisition techniques and devices to measure and control the behavior of various fluid systems. Experiments will include pressure and velocity measurements as well as modern transducers and pressure/flow regulators.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (ENGR 3553 (may be taken concurrently) or ENGT 2521 (D- or higher; may be taken concurrently))

MEE 4040. Special Topics. 1 to 4 Credit Hour.

A course designed to present new and emerging areas of engineering. The course may also be used to present areas not normally taught in the College. Course requirements vary with the topic and instructor. Offered as needed or as appropriate.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

MEE 4172. High-Speed Imaging and Analysis for Engineering Applications. 3 Credit Hours.

This course will introduce students to high-speed imaging and analysis techniques widely used in academia, industry, and government to solve complex engineering problems. Students will first learn key digital imaging concepts, followed by the fundamentals of optics, lensing and lighting. Then, they will learn how to process images to track and quantify the motion of points. This will naturally evolve into discussions on techniques including 3D point tracking, Digital Image Correlation (DIC), and Particle Image Velocity (PIV). Students will also be introduced to non-invasive imaging techniques for characterizing transparent flows, namely shadowgraphy and schlieren imaging. Finally, students will utilize software packages to perform digital processing steps such as filtering, pyrometry, correlations, tracking and more.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MEE 3011.

MEE 4173. Data Acquisition and Analysis for Engineers. 3 Credit Hours.

Course content includes the use of microcomputers for automated data acquisition, process control, and data analysis. The principles and applications of sensors, transducers, recording instruments, signal conditioning, and control instrumentation, and sampling theory. Data analysis using Fourier transform and least squares method. Computer software development for interfacing and graphics. Hands-on lab and design project required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MEE 3011, MEE 2305, and (ECE 2112, ECE 2332, or ECE 2312)

MEE 4177. Design and Realization of a Mechanical System. 2 Credit Hours.

In this project-based course, student teams will design, fabricate, and test a mechanical assemblage that achieves a specific performance goal. Each student team will consider the same design problem, which may be either thermal-fluid or mechanical in nature depending on the course-section instructor. A significant portion of the grade will rely on the quality of workmanship and the team's success in achieving the design objectives.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in MEE 1305 (may be taken concurrently), MEE 2305, ENGR 3001 (D- or higher), ENGR 3571, (ENGR 3553 or ENGR 3953), MEE 3301 (D- or higher), and MEE 3117 (D- or higher; may be taken concurrently)

MEE 4191. Independent Research in Mechanical Engineering. 2 to 5 Credit Hours.

Arranged each semester, please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

MEE 4212. Tribology and Surface Engineering. 3 Credit Hours.

Tribology encompasses the interdisciplinary science and engineering of interacting surfaces in relative motion. Tribology is in every aspect of our lives and has a tremendous impact on manufacturing, energy production and use, transportation vehicles, health care, mining safety and reliability, and space exploration. This course introduces the nature of engineering surfaces, methods of surface characterization, modes of friction and wear, theories of contacts, and lubrication.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in ENGR 3201.

MEE 4311. Mechanics of Composite Materials. 3 Credit Hours.

Introduction to the behavior of composite materials and their use in engineering structures: behavior and properties of the constituent fibers and matrices, micromechanical predictions of composite properties, anisotropic elasticity, behavior of composite laminae, classical lamination theory; fracture mechanisms, failure theories; behavior of composite plates and beams.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (ENGR 2333 or ENGR 2933), ENGR 3201 (D- or higher), and MEE 3011.

MEE 4314. Impact and Crashworthiness. 3 Credit Hours.

This course is an advanced course on impact mechanics, impact biomechanics, as well as vehicle crashworthiness standards and accident data analysis. Students will learn about FMVSS and NCAP crash tests, FARS and NASS real world accident databases, and methods to analyze crash and accident data.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ENGR 2332 and (ENGR 2333 or ENGR 2933)

MEE 4382. Independent Study in Mechanical Engineering. 1 to 6 Credit Hour.

Arranged each semester, please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

MEE 4405. Vibrations Laboratory. 1 Credit Hour.

This course covers instrumentation and data acquisition of single degree of freedom, multi-degree of freedom, and continuous vibratory systems. It also covers data analysis software in time domain and frequency domain, simulation of basic vibratory systems, and statistical analysis of results.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- (except where noted) in MEE 4422 (may be taken concurrently) and MEE 2305 (C- or higher)

MEE 4411. Introduction to Mobile Robotics. 3 Credit Hours.

Introduction to Mobile Robotics will teach you, through the use of project-based learning, fundamental concepts in mapping, planning, control, and dynamics that are used in mobile robotics. By the end of this course you will be able to program both a ground and aerial robot to autonomously and safely navigate through an obstacle-filled environment. You will work with both simulated and real robots and use both off-the-shelf software and write code from scratch using ROS.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in (MEE 4412 or MEE 5412)

MEE 4412. Modern Dynamics for Robotics. 3 Credit Hours.

This course focuses on the algebraic and differential equations governing the static and dynamic 3D motion of rigid bodies, including vectors, vector differentiation, and dyads. The equations of motion for multibody systems will be derived using Newton-Euler, Lagrange, and Kane's methods. Computational tools for 3D force and motion analysis will be used to simulate physical systems.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MEE 3011 or Complete the following: ENGR 2332, MEE 2011, and (MATH 3041, MATH 3941, MATH 2041, MATH 2941, or 'Y' in METW))

MEE 4413. Robotic Manipulation. 3 Credit Hours.

This course is an introduction to the design, modeling and control of robot manipulators, using modern dynamic formulations for multi-degree of freedom, 3D rigid body systems. This course covers 3D spatial transformations, forward and inverse kinematics, Jacobians, joint space and operational space control, and force control. This course also introduces ROS for communication and control of 2 6 axis robotic arms.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in (MEE 4412 or MEE 5412)

MEE 4414. Optimization and Control of Mechanical Systems. 3 Credit Hours.

From the everyday commute to flight control, optimization and optimal control play an important role. This course covers topics related to optimization and designing optimal controllers for mechanical systems. Topics include optimization, introduction to calculus of variations, finding optimal paths and route planning for autonomous vehicles, dynamic programming, linear optimal control, and model predictive control. Applications of the course concepts in robotics and modern mechanical systems will be discussed through several examples.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MEE 3422 or ECE 3412)

MEE 4422. Mechanical Vibrations. 3 Credit Hours.

The study of single degree, two degrees, and multi-degrees of freedom systems, harmonic and non-harmonic excitation, damped and undamped response, free, forced, transient, and random vibrations, resonance beating, force transmission, isolation, base, and self excitation. Term design project. Computer numerical methods.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MEE 3011.

MEE 4506. Energy Conversion Laboratory. 1 Credit Hour.

This laboratory will emphasize advanced measurement techniques in energy systems. Computer based data acquisition and statistics are integral parts of the course. Experiments will include: gas and liquid measurements, heat and mass transfer, and engine measurements.

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (ENGR 3553 or ENGR 3953), ENGR 3571, MEE 2305, MEE 3506, MEE 4571 (D- or higher; may be taken concurrently), and MEE 4572 (D- or higher; may be taken concurrently)

MEE 4512. Compressible Fluid Dynamics. 3 Credit Hours.

This course will introduce students to the subject of high speed gas dynamics. Compressible flows exhibit fundamentally different behavior from that observed in low speed, constant density fluids. Such flows are found in aerodynamics, combustors, turbines, jets, gas pipelines, and wind tunnel test facilities. Students will study phenomena associated with supersonic flows, including normal and oblique shocks, expansion fans, and compressible flows with friction and/or heat transfer. An introduction to high temperature and rarefied gas dynamics will also be included.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ENGR 3553 or ENGR 3953) and ENGR 3571.

MEE 4513. Aerodynamics. 3 Credit Hours.

The forces and moments exerted by moving fluids on solid bodies are of concern in numerous applications. While the performance of flight vehicles is of particular interest, aerodynamics is also a subject of importance in passenger and race car design, wind turbines, structures, sea vessels, etc. Students will study various topics in low speed aerodynamics, including thin airfoil theory and airfoil nomenclature, finite wing theory, high lift and drag reduction devices, separated and vortical flows, and rotating blades. An introduction to transonic flows and computational aerodynamics will also be included.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Civil Engineering, Mechanical Engineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ENGR 3553 or ENGR 3953)

MEE 4571. Advanced Thermodynamics and Combustion. 3 Credit Hours.

Review of basic concepts, first and second laws, entropy (statistical and classical), power and refrigeration cycles, thermodynamic relationships, mixtures, chemical reactions and equilibrium, introduction to combustion process. Term design project.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ENGR 3571.

MEE 4572. Heat and Mass Transfer. 3 Credit Hours.

Principles and applications of heat transfer by conduction, convection, and radiation processes. Combined modes of heat transfer. Graphic and numerical solutions. Steady and unsteady as well as multi-dimensional conduction heat transfer. Forced and free convection. Heat exchanger theory. Introduction to radiation. Term design project. Computer Numerical methods.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 3041, MATH 3941, MATH 2041, MATH 2941, or 'Y' in METW), ENGR 3571, and (ENGR 3553 or ENGR 3953)

MEE 4573. Internal Combustion Engines. 1 Credit Hour.

Types of engines, design considerations, combustion, friction, emission.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in MEE 4571 (may be taken concurrently)

MEE 4574. Heating, Ventilating, and Air Conditioning. 3 Credit Hours.

Course content includes human comfort criteria, heating and cooling loads, HVAC system types, room air distribution, terminal unit selection, fans and ducts, pumps and piping, computer-aided design; term design project.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ENGR 3571 and (ENGR 3553 or ENGR 3953)

MEE 4575. Renewable and Alternative Energy. 3 Credit Hours.

This survey course considers current technologies for renewable and alternative energy, including: different scenarios of producing energy, mechanical heat engines, ocean thermal energy converters, thermoelectricity, solar radiation, biomass, photovoltaic converters, wind energy, and ocean engines. The course will also consider the design of hydrogen-powered systems and of polymer electrolyte-membrane fuel cells.

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ENGR 3571 and (ENGR 3553 or ENGR 3953)

MEE 4577. Power Generation and Storage Technologies. 3 Credit Hours.

This course will give an overview of electric power generation technologies including coal, gas, and nuclear power plants, as well as some emerging technologies such as photovoltaic. This course will also discuss technologies used in power transmission and distribution such as overhead power line conductors. Power storage technologies will also be introduced, including compressed air, flywheel, hydrogen, and batteries.

Course Attributes: SE, SF

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ENGR 3571, ENGR 3201 (may be taken concurrently), and (ENGR 3553 or ENGR 3953)

MEE 4578. Fundamentals of Combustion. 3 Credit Hours.

This course is focused on concepts and applications of chemically reacting systems. Topics include heat of reaction, chemical equilibrium, chemical kinetics, chemical mechanisms, coupling chemical and thermal analyses of reacting systems, laminar premixed and diffusion flames, turbulent flames and pollutant emissions.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in ENGR 3571, (ENGR 3553 or ENGR 3953), and MEE 4572 (D- or higher; may be taken concurrently)

MEE 4643. Manufacturing Engineering. 3 Credit Hours.

This course will provide an overview of existing and emerging manufacturing technologies in the modern society. Topics include state-of-the-art processing methods for metals and alloys, ceramics and powder metallurgy, polymers and composites, additive manufacturing of a wide range of solid materials, as well as micro- and nano- fabrications.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Mechanical Engineering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MEE 3301 and ENGR 3201.

MEE 4731. Cardiovascular Fluid Dynamics. 3 Credit Hours.

Mechanics of blood circulation, fluid mechanics of the heart, blood flow in arteries, unsteady flow in veins, current concepts in circulatory assist devices, biofluidics, and other selected topics.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ENGR 3553 or ENGR 3953)

Mechanical Engineering Technology (MET)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

MET 4671. Computer Integrated Manufacturing Systems. 3 Credit Hours.

CAD/CAM in practice: flexible systems, operations, and performance. The course also considers communication and the integration of robots and computerized machines. Laboratory and demonstrations.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of D- in (ENGT 3651 and ENGT 3652)

Media Studies & Production (MSP)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

MSP 0821. The Future of Your TV. 3 Credit Hours.

What is the future of your TV and what kinds of programming will you see in the next two years? Television is not going away but how, where and when we interact with TV changes constantly. What roles do blogs, podcasts, YouTube, Netflix and new digital technologies have in furthering television into a medium where consumers drive content? In large lecture you will learn about these changes; in small groups, you will take the driver's seat as a critic and creator of content. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core.

Course Attributes: GA

Repeatability: This course may not be repeated for additional credits.

MSP 0823. Latin American Media. 3 Credit Hours.

From the music of Shakira and Pitbull to Bart Simpson's bad Spanish (no problemo!) and the cross-over appeal of Modern Family's Sofia Vergara, Latin American influences are increasingly evident in U.S. media and culture. The influence goes both ways: U.S. media and culture have had great impact in Latin America. This class focuses on Latin American media as key institutions within the region and also as they interact with the United States. Media systems are so intertwined with society that understanding them requires understanding where they come from, so we will look at Latin America itself first - Where is it? What are its characteristics? The class will then examine Latin American media and the ways that Latin American people have reacted to U.S. influence. We will also explore the growing presence of Latino media in the U.S. and in Philadelphia. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

MSP 1001. Video Production for Non-Majors. 3 Credit Hours.

In the contemporary, multi-mediated world, video production skills constitute a core 21st Century communication competency. This entry-level course offers non-majors an introduction to basic video and audio production that will equip students from across campus with the ability to produce meaningful and aesthetically sound video content. The goal of the course is for individual students to develop their ability to conceptualize video projects, capture quality images and sound, and edit those elements together in coherent and communicative ways.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Media Studies and Production.

Repeatability: This course may not be repeated for additional credits.

MSP 1011. Introduction to Media Theory. 3 Credit Hours.

This class provides a broad survey of key theoretical approaches to the understanding of human communicative behavior with an emphasis on those theoretical frameworks associated with mediated communication. The course helps students develop an appreciation for the role theory plays in our society, including the relationship of theory to research and the application of theoretical models to contemporary phenomena. NOTE: For MSP majors and Communication Studies majors; must be taken during first 45 credit hours in degree program.

Repeatability: This course may not be repeated for additional credits.

MSP 1021. Introduction to Media Analysis. 3 Credit Hours.

Media analysis is the project of turning critical scholarly attention to the people, processes, and institutions that shape media texts and the ways media audiences interact with these texts. This class presents students with an introductory sampler of the ways media influence cultural, social, and political spheres. The course places these topics in a historical frame and introduces the foundations for different approaches to media analysis. Students will develop critical skills as they engage in their own analyses of media.

Repeatability: This course may not be repeated for additional credits.

MSP 1251. The Children's Media Industry. 3 Credit Hours.

This course will introduce students to the business and entrepreneurship aspects of the children's media industry. Combining case studies, current news reports, analysis of industry trends, and audience research, students will deepen their understanding of the business decisions and revenue focus that drives the industry. Topics to be addressed include the massive migration of kids from television to streaming and YouTube; why diversity of voices and characters makes good business sense; and the ups and downs of government regulations. The course will explore the unique concerns of leading a media company in which the target audience is children; young, impressionable, and endlessly fickle.

Repeatability: This course may not be repeated for additional credits.

MSP 1655. Introduction to Media Business. 3 Credit Hours.

This course is an introduction to the business decisions, challenges, creative approaches and ethical responsibilities dealt with by media institutions and media creators in the digital age. The course places these topics in a historical time frame to provide context for industry growth over time. Topics include an analysis of media organizations and institutions, roles and responsibilities of media managers, history of media industries, financial decision-making, the differing missions of for-profit and non-profit media, the influence of government regulations, and media as a global industry. Course topics are set within four broad areas influencing the industry: institutional structures, monetization strategies (revenue models), content and audience development, trends and global perspective. The course focuses on electronic and digital media industries, including radio, television, cable, satellite, online and mobile.

Repeatability: This course may not be repeated for additional credits.

MSP 1701. Introduction to Media Production. 3 Credit Hours.

An introduction to visual aesthetics, communication design and other concepts relevant to the world of digital media. Students are introduced to various multimedia applications and learn how to construct effective media projects including web sites, graphics, and audio and video work.

Repeatability: This course may not be repeated for additional credits.

MSP 2011. Introduction to Media Theory. 3 Credit Hours.

This class provides a broad survey of key theoretical approaches to the understanding of human communicative behavior with an emphasis on those theoretical frameworks associated with mediated communication. The course helps students develop an appreciation for the role theory plays in our society, including the relationship of theory to research and the application of theoretical models to contemporary phenomena.

Repeatability: This course may not be repeated for additional credits.

MSP 2141. Media Research. 3 Credit Hours.

This class is an introduction to research, focusing on media communication. Topics include the research process itself - identifying a research question, selecting a research method, defining terms, sampling, data collection, presentation of results - and research settings - institutional, academic, journalistic. The focus is on media research, including preproduction research, ratings and other types of audience measurement.

Repeatability: This course may not be repeated for additional credits.

MSP 2421. Media Popular Culture. 3 Credit Hours.

This course critically examines the relationship of the media to a cultural form that has been both dismissed as trivial and condemned as debasing: popular culture. Of particular interest is the media's role in the production and consumption of this cultural form. This course introduces students to some of the most important critiques of popular culture from the 20th and early 21st centuries in an effort to understand the aesthetics, politics, and economics of popular culture texts, including movies, television shows, songs, novels, magazines, comics, web pages, online videos and social media. Through these critiques, the class will trace the historical development of this cultural form in America and Europe, its relationship to high culture and folk culture, its globalization during the 20th century, and the influences on it from non-European cultural formations such as anime from Japan, Bollywood films from India, and Latin pop music from Central and South America.

Repeatability: This course may not be repeated for additional credits.

MSP 2451. The Influence of Media on Children. 3 Credit Hours.

How are children affected by the media they consume? This course will explore the key areas in which media affect children, including consumerism, violence, sexuality, representation of body image, gender, race, ethnicity, etc. The course will analyze the research on how media affects children and will include basic child development. This course will incorporate a production assignment to introduce students to production for children as an audience.

Repeatability: This course may not be repeated for additional credits.

MSP 2663. The Recording Industry and Music Business. 3 Credit Hours.

This course provides an examination of the business and legal structures of the Recording Industry in the context of the wider Music Business. The economic underpinnings and organizational configuration of the industry will be examined, along with the functioning of the various roles and job positions involved in the industry. Significant time is spent analyzing copyright law, the publishing process, and consumer trends in music consumption and purchase.

Repeatability: This course may not be repeated for additional credits.

MSP 2701. Intermediate Video Production. 4 Credit Hours.

This is an intermediate level production course in which students study the various techniques and practices involved with creating and understanding media production. Students become familiar with all of the basic aspects of television production in its three stages: pre-production, production and post-production. Student will be required to work both individually and in groups to complete various studio and field projects throughout the semester. Students will also gain an understanding of the ethical issues faced in creating such media.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MSP 1701.

MSP 2721. Voice-Over Techniques for Media. 4 Credit Hours.

This is an intermediate course that focuses on vocal development and performance in a variety of styles. Students will work to identify their own regional accents and accents and vocal issues in others. Students will also work to create accents and characters for various projects. Students will experiment with a variety of voice-over areas such as DJ work, commercials, PSA's, podcasts for public service, anime, children's programming, and narration of books on tape.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MSP 1701.

MSP 2741. Introduction to Internet Studies and Web Authoring. 3 Credit Hours.

The purpose of this course is to develop a deeper understanding of online media and the social, legal and cultural issues of the Internet. This is an introductory course to web design and digital media that explores the practical applications and the theoretical implications of the Internet and how it compares to "traditional" media. It examines several Internet developments and topics such as media convergence and web 2.0 applications, and explores their economic, social, and cultural implications. Students design their own web sites using web authoring software.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MSP 1701.

MSP 2751. Audio for Media. 4 Credit Hours.

An introduction to sound design principles and recording techniques for multitrack audio production in all media production settings. As students examine design theory and technical practices, they learn the basic functioning and operation of microphones, mixing consoles, loudspeakers, digital audio workstations, and field recording devices, as well as rudimentary acoustical physics. Considerable time is also spent on critical listening skills and design aesthetics.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MSP 1701.

MSP 2889. Field Experience in Youth Media and Media Literacy. 3 Credit Hours.

This course provides students with a community learning experience helping children and teens build their communication, media production and critical thinking skills. Students spend time each week in a school or after school setting, providing assistance to teachers and students. They reflect on the role of media and technology in the lives of youth and gain experience through direct engagement with teaching, learning and exploring the creativity and skills inherent in the practice of media literacy education.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in MSP 1701.

MSP 2900. Honors MSP Special Topics. 3 Credit Hours.

Topics vary.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

MSP 3153. Media Criticism. 3 Credit Hours.

This upper level course examines the multiple ways in which media have been analyzed and critiqued by the social sciences, the humanities, and media theorists. Students are exposed to different theories about media's intellectual, cultural, and socio-economic functions in society. Students are challenged to expand their understanding of how mass media shape the way we understand our world and ourselves. The course explores issues of media's role in a democratic society, media and representation (aesthetics and "voice" as well as issues of race, ethnicity, gender, sexuality), media and violence, media and science, media and ecology, and media and consumer culture.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((MSP 1021, MSP 1655, and MSP 1701) or CMST 2111)

MSP 3196. Writing Workshop. 3 Credit Hours.

An intensive course that stresses writing fundamentals while encouraging students to express themselves in many forms of writing from blogs, to essays, to scripts and more, with a special emphasis on writing for broadcast and other forms of production. Students read their work in class, work in groups, and meet with the instructor for personal critiques.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

MSP 3225. Educational Multimedia Production. 3 Credit Hours.

Examination of the educational media industry. Students create multimedia productions for education clients. Each semester, students may produce videos, websites, or online games that support the practice of teaching and learning.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MSP 1011 and MSP 1701)

MSP 3296. Travel Writing. 3 Credit Hours.

This course explores international communication, intercultural competence, and the nature of travel (why and how we travel, and what we can learn from it) through a travel writing curriculum.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

MSP 3297. History of Electronic Media. 3 Credit Hours.

Examines the origins, development and current status of electronic, mass and interpersonal media. From the invention of the telephone and the advent of radio and television to the creation of advanced digital devices and wireless systems, the course explores the media technology that changed the world and our lives. This class focuses on the social, economic, organizational, regulatory, creative and ethical issues that have challenged media practitioners, and the consumers they serve, in historical and political contexts. Students learn about the innovative figures whose manifold contributions have shaped the current media environment. The creation of content for these platforms is also covered, as well as a topical and critical look at events and issues in media history as they happen. The very notion of mass media is being redefined on a daily basis. This class is designed to help you develop the tools required for you to formulate your personal and professional vision for the future of media.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((MSP 1021, MSP 1655, and MSP 1701) or CMST 2111)

MSP 3324. The Video Game Industry and Game Culture. 3 Credit Hours.

With sales reaching in the billions, an ever-expanding market, and player demographics that span age, race, and gender, it is increasingly important to examine the intersection of communication and culture within the video game industry. This course pursues this task by introducing students to the field of Video Game Studies, exploring video games and the video game industry from its origins as a marginal entertainment medium - the pre-occupation of young males mostly - to its status today as a popular-culture phenomenon. We will discuss the theories developed in recent years to understand the impact of this new media on society, the cultures that have arisen around its consumption and production, and a critical analysis of content. During this course you will also be asked to play a game of your choosing, join/observe the online communities associated with that game, and write a term paper based on your readings and experience.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((MSP 1021, MSP 1655, and MSP 1701) or CMST 2111)

MSP 3421. Technology and Culture. 3 Credit Hours.

This course critically examines the nature, role, and significance of new communication technologies in contemporary U.S. culture. It considers how these technologies impact our ideas on work, leisure, art, knowledge, identity, and environment and thus provides a foundation for understanding the nature, role, and significance of new communication technologies as a dynamic factor in society. We will examine socio-cultural imperatives that shape the development of new information/ communication technologies in addition to the socio-cultural influences of those technologies. We will explore the nature of technology in general to understand what it is and how it is linked closely with cultural change. The course also addresses the social history of technology in terms of the philosophies, politics, and economics surrounding the creation of new technologies.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((MSP 1021, MSP 1655, and MSP 1701) or CMST 2111)

MSP 3445. Media Images and Analysis. 3 Credit Hours.

This upper division course focuses on the critical analysis of media images in society, from television programs to advertising to films to social media. Students are exposed to multiple ways of analyzing the production and consumption of media images and how these images shape our understanding of gender, identity, ethnicity, production, consumption, technology, ideology, ecology, sports, body image, and many other topics. Students are challenged to examine the role of media images in shaping the organization of society and culture, including the very nature of what we think is true, real, and desirable.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((MSP 1021, MSP 1655, and MSP 1701) or CMST 2111)

MSP 3471. Media and Cultural Differences. 3 Credit Hours.

This course critically examines the way media construct difference in a variety of ways. It introduces students to the many ways forms of difference have been analyzed in media and cultural studies. It addresses how diverse cultural groups incorporate media into their negotiation of everyday life and formation of identities. In the course, particular attention is given to the social and political implications of mainstream media representations of nationality, race, ethnicity, religion, gender, sexuality, physical ability, and class. This course also examines the ways different groups employ media technologies to construct alternative representations to those found in the mainstream commercial media.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((MSP 1021, MSP 1655, and MSP 1701) or CMST 2111)

MSP 3473. Media and the Environment. 3 Credit Hours.

This course provides students with an understanding of how people's relationship with the environment is shaped by media messages. By addressing questions of media ownership, content and global flow, the course examines how ideas and issues regarding the environment are bound and circulated through communication channels and networks in a variety of interrelated narrative and imaginistic forms. At the heart of this examination are the interplay between corporate agendas, national policies, commodity hunger, the materialism of class conflict, issues of waste management and environmental risk, and community activism. Of central interest is how historically media's representation of environmental issues have influenced public perceptions of natural resource exploitation and sustainability, and framed modern lifestyles.

Course Attributes: SF, SS

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((MSP 1021, MSP 1655, and MSP 1701) or CMST 2111)

MSP 3572. Communication and Development. 3 Credit Hours.

The purpose of this course is to develop an understanding of the relationship between communication and development in different political, social, and cultural settings. We will read about historical trends, economic structures, culture, and communication development models and theories in different parts of the world - Asia, Africa and Latin America, as well as in our hometown of Philadelphia.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((MSP 1021, MSP 1655, and MSP 1701) or CMST 2111)

MSP 3590. Intermediate Topics in Media. 3 or 4 Credit Hours.

Specific topic varies each semester. Please view course subtitle or consult with instructor for details.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (MSP 1011, MSP 1021, and MSP 1701)

MSP 3611. Media Advertising. 3 Credit Hours.

This course is intended to provide an overview of the principles and practices of advertising in broadcast media, including psychological and creative factors, media research, rate structure, and campaign strategy. It examines advertising from the perspectives of marketing and social role of advertising, audience and consumer behavior, creative and management concepts, strategy, planning, advertising media, and effectiveness evaluation.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MSP 1011.

MSP 3631. Media Sales. 3 Credit Hours.

This course introduces students to the advanced strategies of media sales and related theories. Students will learn fundamental concepts related to media buying, planning, planning tools, advertising, and problem solving research skills, measurement techniques, and audience factors.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MSP 1655.

MSP 3663. Marketing Music and Media. 3 Credit Hours.

An examination of general marketing principles focusing on practices, techniques, and theories specific to media with an emphasis on music product. The use of multiple media in the music marketing process will be discussed in the context of developing and guiding an entertainment project to success, highlighting the opportunities and challenges of doing so in the digital age. Topics include publicity, promotion, the roles of radio, grass-roots efforts, social networking and other "new media" in the process of bringing entertainment products to market. Students, working in groups, will apply this theoretical knowledge in a semester-long project in which they will design a full marketing plan for a music or media product.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MSP 2663.

MSP 3701. Genres of Media Production. 4 Credit Hours.

This intermediate level production course will build on the fundamental theories and practices learned in MSP 2701. Sections will be dedicated to specific genres, and the genres covered will vary from semester to semester. Students are advised to consult the section subtitles prior to registering. NOTES: Prior to registration, students should consult the course schedule for the term in question to learn which genres are offered that term. Students may only repeat this course for credit if the genre is different from their previous enrollment and if they submit an MSP Petition Form to ensure that the credits are counted and applied correctly toward the proper major/degree requirements. The Petition Form and further details are available in the "Forms and Links" section of the Klein tab on the TUPortal.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in MSP 2701.

MSP 3705. Sound for Visual Media. 4 Credit Hours.

Students will engage in the advanced methods and systems used for optimizing the quality of audio content for distribution in visual media formats. This course focuses on the process and techniques involved in producing and finalizing the audio content of television programs, video, film or video games. Time code, synchronization, ADR, field recording and mixing are covered. Digital formats are examined in the context of audio-for-video post-production. The student will bring together all elements of sound for a final production. Once all the sound is collected and edited the student will mix down to the final format. The final project's format can be surround sound, or stereo. The final project will be presented in a professional industry standard format.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MSP 2701 or MSP 2751)

MSP 3709. Advanced Editing. 4 Credit Hours.

This course concentrates on the principles and skills of digital editing for image and sound and provides students with the critical, technical and aesthetic framework needed to create and critique polished, edited work.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MSP 2701.

MSP 3711. Lighting For Media. 4 Credit Hours.

This intermediate-level production course will focus on media lighting techniques for a range of media including still photography, videography, and television production. From small market, low-budget production to high-end TV studio production, lighting directs attention, creates depth, and sets the mood for all visual media. The goal of this course is to strengthen students' abilities to visually enhance their media production work.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MSP 2701.

MSP 3721. Media Performance. 4 Credit Hours.

Students will learn advanced on-camera performance techniques and get practical experience in various television performance specialties. Students will use studio, field, and computer technologies. Students will increase competencies in on-camera performance, producing, and writing for television. Students will study techniques for effective on-camera presentation and will critically evaluate themselves, their classmates, and media professionals.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MSP 1701.

MSP 3751. Studio Music Recording Techniques. 4 Credit Hours.

This course is an in-depth examination of recording and editing techniques in a larger format Digital Audio Workstation. Emphasis is placed on running actual sessions in a variety of settings during the recording and overdubbing phases of production. Students engage in a variety of miking, editing and processing techniques for a variety of acoustic and electronic musical instruments and other sound sources. Much attention is also paid to developing best practices regarding file management, session organization and planning strategies, and developing skill in navigating the complex interpersonal interactions that are required for successful management of a creative project.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MSP 2751 or MUST 4713)

MSP 3755. Live Sound Production. 4 Credit Hours.

Students will design, set up, and operate sound reinforcement systems for a variety of event settings, including small "coffeehouse" style rooms, nightclubs, and larger halls. Concepts and skills from earlier courses such as signal flow, acoustics, signal processing, microphone selection and placement, console operation, amplification, loudspeaker systems, and so on will be applied in the context of live events, planned to take place during class meeting periods.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MSP 2751 or MUST 4713)

MSP 3771. Podcast and Radio Production. 4 Credit Hours.

In all media, stories are primarily told in the sound; and large audiences will continue to desire information and entertainment content with which to engage when their eyes are otherwise occupied... we stream music while surfing the web, we listen to podcasts while cooking dinner, and listen to the radio when driving. In this course, students will apply sound design and technical skills gained in Audio for Media to the creation of podcast episodes, documentaries, news reports, and ad spots for use in radio programs and streaming services. Note: Prior to fall 2017, the course title was "Radio."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MSP 2751.

MSP 3890. Intermediate Topics in Media Production. 2 to 4 Credit Hours.

Specific topic varies each semester. Please view course subtitle or consult with instructor for details.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in MSP 1701.

MSP 4039. Senior Seminar. 3 Credit Hours.

Professional development seminar designed to prepare students to enter the media workforce. Discussions of media occupations, resume writing, organizing a job search, networking, interviewing, and job preparedness. Guest lectures.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Broadcasting/Telecom/Mass Medi, Media Studies and Production.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

MSP 4182. Independent Study. 1 to 4 Credit Hour.

Available for students who wish to take on the study of a special topic that goes beyond those available through the regular curriculum of the major.

NOTE: Topic must be proposed to a MSP faculty member who will supervise the study and approved by that faculty member and the department chair.

Proposal forms are obtained through the MSP department office. May be taken once or repeatedly for up to 8 s.h.

Repeatability: This course may be repeated for additional credit.

MSP 4221. Information Technology Policy. 3 Credit Hours.

As business and everyday practices become increasingly mediated by communication and information technologies it is important that we critically examine technologies and policies that work in tandem to regulate human behavior. Policy and law form part of the social infrastructure that enables information and communication technologies to work in certain ways and prevents them from working in other. The course explores key policy and legal issues surrounding information and communication technology. These issues include privacy, digital copyright, and internet governance.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

MSP 4226. Public Media. 3 Credit Hours.

In a media-saturated world filled with hundreds of cable channels, satellite radio, broadband networks and user-generated content, what is the role of public media? What role should public media play in providing educational content, if any? Should public media concern itself with entertainment and competition with commercial media-outlets? Should it be responsible for creating the "public square" of diverse voices so important for a democratic society? This course will explore the evolution of public media, from the Habermas' notion of a "public sphere," to the start of public broadcasting in the late-1960's, to its contemporary term, public media. The course will consider the original purpose of public broadcasting (as stated in the Carnegie Commission report) and debate the best purpose for its future.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

MSP 4252. Law and Ethics of Digital Media. 3 Credit Hours.

This course is intended to introduce students to American law and regulation as it pertains to digital media (Internet, mobile, multimedia, satellite, digital communication). Because legal issues permeate society, it is important for potential communication professionals to understand the principles of media law, both as observers of the judicial process and as potential participants in legal matters stemming from professional activities. As the new communication technologies become more integrated into our media landscape, new legal and ethical issues are being debated and new law is made every day. Historical perspectives will be discussed, but the primary focus of the class is on the current status of communicators' legal rights and the theoretical underpinnings on which they're based. This course will help you both as citizens and as prospective media professionals.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

MSP 4259. Capstone in Children's Media. 1 Credit Hour.

This course serves as the capstone for the Children's Media Certificate. The student's capstone project must reflect the learning objectives and core themes of the children's media certificate. The capstone should be a project or research that will position the student positively in their career search.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MSP 1251, (MSP 2451 or ADV 2451), and ADV 3006.

MSP 4275. #ourmedia: Community, Activist, Citizens' and Radical Media. 3 Credit Hours.

All over the world, people are taking media technologies out of the hands of corporations and using them in their own unique ways: neighbors in Germantown, Philadelphia run their own radio station; the Maori of New Zealand write, direct, and produce films and TV series that reflect their realities and dreams; young women and men in Egypt and Tunisia use social media to mobilize against authoritarian regimes; and indigenous people in rural Mexico developed their own cell phone network. This course will take you on a journey around the world, exploring indigenous media in Mexico, New Zealand and Canada; radical media in Egypt and Tunisia; citizens' media in Colombia, Chile, Brazil, and Argentina; and immigrant media in Europe and the U.S. We will consider what it means for communities to create new narratives about and for themselves, outside of dominant corporate media structures. Along the way, the course will introduce issues of production, funding, regulation, technology, and design relevant to community/alternative/citizens' media.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

MSP 4390. Advanced Topics in Institution Study. 1 to 4 Credit Hour.

Specific topic; varies each semester. Please view course subtitle or consult with instructor for details.

Repeatability: This course may be repeated for additional credit.

MSP 4425. Lesbian, Gay, Bisexual and Transgender Representation in Popular Media. 3 Credit Hours.

This class investigates the history of LGBT representation in a range of popular media since the 1960s—in news, film, television, marketing, comics, video games, and on the Internet. How have LGBT people been represented in popular media? What negative—and positive—stereotypes have characterized them? How have these images changed over time in different media? How can we account for these changes? This course introduces students to some of the major debates about LGBT representation in the United States, including how gender, race, class, and economic factors shape how we understand sexuality and its representation. We will look at both mainstream and alternative media to consider the role of LGBT producers and audiences in shaping queer images. We will consider on-going debates about visibility, stereotypes, camp, and the value and limits of "positive images." The class includes a strong emphasis on independent research: students will learn how to develop and carry out an original qualitative research project throughout the semester. NOTE: To request this course to count toward the Analysis concentration or the Critical Topics in Media content area, you must submit an MSP Petition Form. The Petition Form and further details are available in the "Forms and Links" section of the Klein tab on the TUPortal.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

MSP 4446. Psychological Processing of Media. 3 Credit Hours.

This is an advanced media analysis course in which students learn about research and theory concerning the contemporary psychological significance of media and mediated experience. Topics include attention, memory, comprehension, emotional response, arousal, picture perception, unconscious processing, and person perception as they relate to traditional media (e.g., print, radio, TV, film) as well as emerging media (e.g., telepresence, teleconferencing, virtual reality, virtual worlds).

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

MSP 4453. Information Society. 3 Credit Hours.

This course examines tensions, policies, issues, and theories relating to the global information society, also referred to as the knowledge society, the post-industrial society, or the post-modern society. The term "information society" points to the increasing influence of the role of information and communication technology (ICT) in our society. Students will explore the historical development of the information society, and develop a critical understanding of the contemporary debates surrounding the global information society tied to economics, ownership and regulation.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

MSP 4454. Public Information Media Campaigns. 3 Credit Hours.

This is an advanced course about the use of theory and research in the design, implementation and evaluation of public information campaigns conducted via mass and other media. Students learn about key theories and research techniques regarding campaigns to affect knowledge, attitudes and behaviors on issues related to the individual and social good such as smoking, drug abuse, safe sex, recycling, animal welfare, disaster relief and many others. They then apply this knowledge by creating, conducting and evaluating a complete campaign conducted on campus.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

MSP 4455. New Media Literacies. 3 Credit Hours.

Examines intersection of education and participatory culture, literacy and technology change, the knowledge gap, informal learning and knowledge communities, emerging social skills and cultural competencies.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

MSP 4487. TUTV Practicum. 3 Credit Hours.

This course exposes students to a wide range of skills and protocols required to manage, sustain and grow a public, educational, commercial, broadcast or cable television station. It examines scheduling, promotion, marketing, sales, content development, rights and clearances, standards and practices, partnership management, talent management and collective bargaining agreements. Students enrolled play a key role in the operation of Temple University Television (TUTV), and will work with the course instructor, engineering staffers and others to schedule the station, produce original content (variety, sports, reality, talk, & mini-doc's, etc.), re-version existing, historically relevant programs, create station promotion, develop marketing plans, as well as interact with guests from respected local, regional and national media organizations. The class will also concentrate on managing the collateral, new media platforms that operate in association with the television service. NOTE: This course requires instructor permission to register. Students should contact the instructor directly via email, and then, if approved to register, forward that approval to msp@temple.edu at which point the MSP department will register you and send you a confirmation.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MSP 2701.

MSP 4496. Global Media. 3 Credit Hours.

This course explores questions of media ownership, content, flow, cultural values, political power and technological impact in relation to one of today's most used but least understood terms: globalization. Lectures, discussions, class activities, videos/films and course readings focus on how history (colonialism, imperialism, international relations), industrialization (industrial vs. "developing"), political systems (communism vs. democracy), economics (public vs. private) and culture (religion, language & world view) have shaped communication systems in Africa, Asia, Canada, Europe and Latin America. To do so, the course surveys media systems in industrialized, newly industrialized and developing countries and examines the interrelationship between "global culture" & local culture as related to mass media.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

MSP 4497. Media and Children. 3 Credit Hours.

This is an advanced, writing intensive analysis course in which students learn about the history, economics, structure and regulation of media industries catering to a young audience and the evolving role of media in children's and families' lives. The possible effects of television, video games, comics and the Internet on children and youth are examined, including issues of gender, racial identity, violence, social learning, and consumerism.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

MSP 4533. Media, Ecology and Technology. 3 Credit Hours.

Offered through Klein Global Opportunities (Klein GO!), this course is a living model for the merger of ecology, technology and the principles of sustainable design for cities. This course provides students with an understanding of the complex relations between media, ecology and technology, concentrating on the ecological impact of technology and consumer society, and how media shape our visions of nature, ecology, wilderness and technological civilization.

Course Attributes: SF

Repeatability: This course may not be repeated for additional credits.

MSP 4540. Advanced Topics in Media Studies and Production. 3 Credit Hours.

Topic varies.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

MSP 4541. Mobile Media. 3 Credit Hours.

Mobile technology is an increasingly important tool for modern communication. This course will take a critical exploration of the role of mobile communication in public life, in part by having students design their own mobile media. Throughout the course, we will explore the societal impact of mobile communication so that students can gain a deeper intellectual understanding of mobile communication in public life and its impact on issues such as social interaction, identity, privacy, sense of place, and surveillance. During the class examples of mobile media applications and services will be introduced. The course consists of conceptual and theoretical teachings, but also includes many practical and hands-on elements in the form of demonstrations of real-life mobile applications, conducted studies and projects. To teach preliminary practical mobile media production skills there will be exercises in mobile application concept design and in mobile application research.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

MSP 4571. International Studies in Media and Communication. 1 to 6 Credit Hour.

Offered through Klein Global Opportunities (Klein GO) and taught outside of the U.S. This course is an immersive study of media and communication institutions, practices, norms, societal, governmental, and legal structures in a culture outside of the U.S. that is conducted during a Klein GO! program. Klein faculty lead students, while living abroad, in media consumption, in comparative analysis and evaluation of media and non-mediated communication, in interaction with local media and communication leaders in the program location. The specific aspects of media and communication to be covered will vary from city to city, and semester to semester, depending on the events of the day. NOTE: Available only to student participating in a Klein GO! Program. For more information and an application: students should visit the Klein GO! web site at <https://temple-smcsa.terradotta.com>.

Repeatability: This course may be repeated for additional credit.

MSP 4572. British Media and Telecommunication. 3 to 6 Credit Hours.

Offered through Klein Global Opportunities (Klein GO) and taught on site in London. Students study British Mass Media and Culture while living in a city founded in 43 A.D. NOTE: Offered only through Klein GO. For more information and an application, students should visit the Klein GO web site at <https://klein.temple.edu/study-away/apply>.

Repeatability: This course may be repeated for additional credit.

MSP 4596. TV News Production Practicum - Temple Update. 4 Credit Hours.

This practicum exposes students to the skills and protocols required to conceptualize, produce and deliver television news. It is an intensive, hands-on production course simulating a newsroom operation in which students will learn to research and propose story ideas, conduct interviews, write, report and edit news stories and fill control room and studio positions including producer, director, audio, computer graphics, floor manager, studio camera operator and web producer. Students produce a weekly broadcast news show, Temple Update, created in cooperation with student volunteers. Note: Digital video editing is a skill students should know prior to taking this course. They should also be familiar with digital video cameras, tripods, and microphones for field production. Prior volunteer experience with Temple Update is strongly recommended. In addition, this course requires instructor permission to register. Students should contact the instructor directly via email, and then, if approved to register, forward that approval to msp@temple.edu at which point the MSP department will register you and send you a confirmation.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MSP 2701.

MSP 4597. Sports Production Practicum. 4 Credit Hours.

This OwlSports Update capstone class is a specialized course for students interested in a career in the writing, producing, and directing of sports programming. The class will be structured in a similar fashion to Temple Update or Comcast SportsNet's Sportsnite. Students will create a weekly 30-minute sportscast aimed at informing viewers of important sports news, with an emphasis on the local professional and college teams, including Temple athletics. This is an intensive hands-on production course where students will experience the real-world feel of a real sports programming environment that includes researching, writing and reporting, shooting, editing, producing and directing. Students will learn, firsthand, the realities of enterprising their own stories, working a locker room, handling deadline pressure and writing in a clear and unique style specifically required to communicate effectively in the sports world. NOTE: This course requires instructor permission to register. Students should contact the instructor directly via email, and then, if approved to register, forward that approval to msp@temple.edu at which point the MSP department will register you and send you a confirmation.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MSP 2701.

MSP 4614. Creating a Media Business. 3 Credit Hours.

This is an advanced level course that focuses on understanding the risks and rewards of starting a media-related small business. The course explores the general business strategies and tactics that are employed by successful small businesses, along with the particular requirements for creative media entrepreneurship.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

MSP 4641. Programming for Multiplatform Media. 3 Credit Hours.

This course will explain the principles of programming and explore the fundamentals of scheduling content for distribution on broadcasting and cable television, video on demand, web pages, and emerging digital video platforms. We will investigate the protocols and cost of content acquisition, program placement, strategic promotions, and audience development. We will assess the influence of new audience measurement technology and qualitative research in structuring a schedule.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MSP 1701.

MSP 4657. Current Issues in Media Management. 3 Credit Hours.

Changes in the media business, including technology, distribution, content platforms, business models, even in styles of managing people and teams require a new perspective and approach. This course combines lecture, vibrant class discussion, student presentations, personal reflection and guest speakers to explore and clarify these media business areas. The course will focus on three core questions: 1) What are the skills and behaviors reflected in successful media managers today with respect to technology, entrepreneurship, innovation, communication and content development? 2) What are your own managerial preferences & skills and how can you build upon them? 3) What is the relationship between media business trends and the changing role of the media manager?

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

MSP 4663. Art and Business of Recording. 3 Credit Hours.

An examination of the creative, business, and legal issues involved in the process of a music recording project from the perspective of the Record Producer. Students develop skills related to the understanding of music industry contracts, project budgeting and financing, copyright and publishing. Significant time is also spent analyzing current industry trends, developing leadership skills, and individual growth of a unique production style within an historical perspective.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MSP 1701.

MSP 4682. Independent Projects. 1 to 4 Credit Hour.

Available for students who wish to create a special project that goes beyond those available through the regular curriculum of the major. Topic must be proposed to and approved by an MSP faculty member who will supervise the study. Proposal forms are obtained through the MSP department office. NOTE: Topic must be proposed to an MSP faculty member who will supervise the study and approved by that faculty member and the department chair. Proposal forms are obtained through the MSP department office. May be taken once or repeatedly for up to 8 s.h.

Repeatability: This course may be repeated for additional credit.

MSP 4687. Recording Industry Practicum. 4 Credit Hours.

An intensive, practical course that involves students in the day-to-day operation of a functioning, commercial record label. Students, working in teams by department, will be responsible for all facets of label operation: talent scouting and development, production, marketing and management of a growing catalogue. Students will be responsible for identifying musical acts for the label to feature, producing an album or EP release, and developing and delivering marketing plans, press releases, and other marketing and promotional materials as needed for both current projects and back catalogue. To serve those efforts, students will also produce a podcast series, a live music television program, and periodic live events.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MSP 3663, MSP 3751, or STHM 3425)

MSP 4690. Advanced Topics in Organizational Management. 2 to 8 Credit Hours.

Specific topic; varies each semester. Please view course subtitle or consult with instructor for details.

Repeatability: This course may be repeated for additional credit.

MSP 4696. Communication in Media Organizations. 3 Credit Hours.

Whether managing the department of a television station or network, a broadband content site, a radio station or other media company, understanding how to work and lead within media organizations means understanding how to be an effective communicator for this unique field. This course is designed to blend the scholarship and foundational research on communication to explore communication skills within today's media organizations. It focuses on communication from leader to worker(s), from worker to leader(s), from peer to peer, within teams, inside the structures and outside. It also covers differences in communication styles and their effectiveness in large organizations, moderate and small businesses, team settings, cyber teams and when working independently. Topics include conflict resolution, managing cross-cultural workplaces, the impact of technology, online communication, emotions in the workplace, and current global trends. As an online class, work will consist of independent readings, weekly postings to a course online discussion board, online live chats, writing video commentaries, content review exams and a final project on a related topic.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

MSP 4701. Producing and Directing. 4 Credit Hours.

Capstone Course in theory and practice of television producing and directing techniques. Students will pitch original project ideas and work in small groups as a production company, focusing on longform works of TV/video production and will produce a quality television program from inception to completion. Students will also engage in writing for TV, casting, and editing in order to develop a professional and creative portfolio piece.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MSP 3701.

MSP 4703. Multimedia Production for Corporations and Non-Profits. 4 Credit Hours.

This is an advanced level production course in which students study the various techniques and practices involved in the production media for corporations and non-profit organizations. Students work through the three phases of production: pre-production, production and post-production. Students will be required to work both individually and in groups to complete video, audio, mixed media and web projects. Students may have the opportunity to produce projects for clients within the University or the community.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MSP 2701 and MSP 2741)

MSP 4741. Emergent Media Production. 4 Credit Hours.

MSP 4741 is a hands-on production studio/theory course in which students use new and emerging software and technologies to create web-based and mobile productions. The course involves lecture, discussion, demos, weekly blogs and project critiques. Mode: Hybrid (half online).

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MSP 2701, MSP 2741, or MSP 2751)

MSP 4751. Audio Mixing. 4 Credit Hours.

An intensive, hands-on examination of advanced music mixing and signal processing techniques, including mix automation and preparation of files for export to various media formats. Students will create both small-format, manual analog and large-format, fully automated digital mixes of music from various genres for both stereo and multichannel surround formats.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MSP 2751 or MUST 4713)

MSP 4753. Audio Mastering. 4 Credit Hours.

Students will engage in the advanced methods and systems used for optimizing the quality of audio content for distribution in various media formats. They will study gain structure, compression, equalization and other techniques as applied to the audio mastering process. Students will gain a functional understanding of preparation of audio files that are compliant with contemporary delivery standards, optimum working levels for the various delivery methods of audio, and methods to navigate the various problems that are addressed in the mastering process. Processes of editing music, or "editing on the beat" will also be discussed.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MSP 2751 or MUST 4713)

MSP 4785. Internship. 3 or 4 Credit Hours.

Students undertake paid or unpaid internships at compatible media organizations which provide experience in an industry or business setting, increase awareness of business principles and practices and provide insight into the professional arena. Supervised by MSP Internship Directors. Goals/objectives statement, two papers, and an evaluation of the supervisor by student plus two evaluations of the intern by the site supervisor are required. NOTE: To be registered for this internship, you must apply using the MSP Verification Form. In addition, you must be an MSP major of at least junior or senior standing; have completed (with a minimum grade of C-) MSP 1021, MSP 1655, and MSP 1701; and have at least a cumulative GPA of 3.00. For further details and registration request instructions/forms, review the "MSP Internship" documents in the "Forms and Links" section of the Klein tab on the TUPortal.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Media Studies and Production.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (Complete 3 of the following: (MSP 1021 or JRN 1111), MSP 1655, and MSP 1701 or CMST 2111)

MSP 4786. Internship. 1 to 3 Credit Hour.

As an elective, students undertake paid or unpaid internships at compatible media organizations which provide experience in an industry or business setting, increase awareness of business principles and practices, and provide insight into the professional arena. Goals/objectives statement, two papers, and evaluation of the supervisor by student plus two evaluations of the intern by site supervisor are required. NOTE: To be registered for this internship, you must apply using the MSP Verification Form. In addition, you must be an MSP major of at least junior or senior standing, have completed (with a minimum grade of C-) MSP 4785, and have at least a cumulative GPA average of 3.00. For further details and registration request instructions/forms, review the "MSP Internship" documents in the "Forms and Links" section of the Klein tab on the TUPortal.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Media Studies and Production.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in MSP 4785.

MSP 4787. Television Production Workshop Practicum. 3 Credit Hours.

Students develop and produce programs ranging from weekly long-form programs that are primarily shot in the field to studio-based productions. The focus is on the production team: students pitch story ideas and the class functions as a management team, making decisions on which programs will be produced during the term. NOTE: This course requires instructor permission to register. Students should contact the instructor directly via email, and then, if approved to register, forward that approval to msp@temple.edu at which point the MSP department will register you and send you a confirmation.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MSP 2701.

MSP 4796. Creative Scriptwriting. 3 Credit Hours.

This course is designed to introduce students to the fundamentals of developing and writing original scripts for television and media. The course emphasizes proper scriptwriting formats, exploration of themes, the development of story, plot, dialogue, and character development, as well as theories, methods, and practices in writing and developing original scripts.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MSP 3196.

MSP 4887. Radio Production Practicum. 3 Credit Hours.

Provides hands-on experience in various aspects of radio operations; takes place at the WRFT Internet Radio, located at Temple's Ambler campus. Serves as a training ground for future radio journalists, producers, programmers, managers, and on-air talent. Students will work individually and in teams on various assignments. These assignments will be based in part on individual backgrounds and skill sets.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in MSP 3771.

MSP 4890. Advanced Topics in Media. 2 to 8 Credit Hours.

Specific topic; varies each semester. Please view course subtitle or consult with instructor for details.

Repeatability: This course may be repeated for additional credit.

MSP 4990. Honors Special Topics. 4 Credit Hours.

Networking and individual career guidance for honors students. Variable topics. For information on this course, contact the MSP office.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

Medicine Undergraduate Courses (MEDU)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

MEDU 1001. Major Breakthroughs in Biomedicine and Biotechnology. 3 Credit Hours.

Science and medicine are advancing at an ever faster rate. Fortunately, it turns out that one can keep up with this dizzying pace by following a few journals--the American general science journal *Science*, its British counterpart *Nature*, and the *New England Journal of Medicine*--along with reports of major breakthroughs from other journals as covered in the media. These discoveries have important implications not only for science and medicine, but also society, business and even culture in general. In this class first by lectures, but then by listening to podcasts, reading news stories, then commentaries and summaries of the papers, students will learn to identify and appreciate major medical and scientific advances. This is a crucial skill to have whatever field of endeavor one chooses to pursue in life.

Repeatability: This course may not be repeated for additional credits.

Middle Grades & Secondary Education (MGSE)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

MGSE 2111. Applications of Teaching and Learning Theories to Classroom Practice (grades 4-12). 3 Credit Hours.

This course will introduce students to the structure and philosophy of middle level schools, curriculum, and instruction by examining their relationship to aspects of young adolescent development and theories of learning. Emphasis will be placed on current understandings of how early adolescents learn and how these understandings inform instructional practices. The class will explore issues of motivating, engaging, and managing diverse, early adolescent students. NOTE: Background clearances are required.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Co-requisites: EDUC 2296.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in EDUC 2109 (may be taken concurrently)

MGSE 2189. Classroom Interactions. 3 Credit Hours.

This course continues the process of preparing students to teach mathematics and science in upper elementary and secondary settings. The specific objectives of this course are to: 1) demonstrate to students how learning theories (from the "Knowing and Learning" course) manifest themselves in instructional settings (usually classrooms), allow students to design and implement instructional activities from their own understanding of knowing and learning mathematics and science, and evaluate the outcomes of those activities based on evidence from student artifacts, and 2) provide students with frameworks for thinking about equity issues in the classroom and larger school setting and their effects on learning and provide students with strategies for teaching diverse students equitably. The culminating activities of the course are the opportunities for students to teach in a high school and to learn whether they enjoy and are good at it. While in "Knowing and Learning" students study the meaning behind understanding a particular content area from an individual perspective, in "Classroom Interactions" the perspective shifts to studying how classroom events might promote or discourage learning mathematics and science and student equity. A major component of the "Classroom Interactions" course is the opportunity for students to reflect on and evaluate their own work as teachers.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in EDUC 2179 (may be taken concurrently) and (SCTC 1289 or SCTC 1389)

MGSE 3196. Teaching and Learning Literacy in the Middle Grades. 3 Credit Hours.

The purpose of this writing intensive course is to prepare pre-service students to teach reading and English/language arts in the upper elementary and middle level settings. Students will be introduced to theories and current views of practice in the literacy field. The areas of language, listening, reading and writing are presented throughout this course as interrelated and integrated processes. Emphasis will be on providing pre-service teachers with the competencies to implement engaging literacy instructional practices while providing ongoing assessment for a diverse middle grades population.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: SPED 3187.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

MGSE 3404. Teaching and Learning Math in the Middle Grades. 3 Credit Hours.

This course examines methods of teaching and assessing mathematics in the middle grades. Special attention is paid to understanding the conceptual difficulties students have in moving from whole numbers to rational numbers, additive thinking to multiplicative thinking, and arithmetic to algebra. Problem-solving, connections, and concrete models are emphasized.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may not be repeated for additional credits.

MGSE 3405. Teaching and Learning Science in the Middle Grades. 3 Credit Hours.

The purpose of this course is to prepare pre-service teachers to teach science in the upper elementary and middle-level settings. The course will be based on the "Big Ideas" in the field of science and science education and will focus heavily on scientific inquiry as a pedagogical approach and a learning goal. The Big Ideas in Biology, Chemistry, Physics and Earth/Space Sciences will be integrated into the various classes along with themes, such as motivating students, assessing and moving student's ideas toward science conceptions through inquiry, using questioning and flexible teaching methods (based on how children learn), and integrating science with other disciplines. Students will apply, evaluate, and reflect upon science teaching methods through class and lab activities, case studies, field experience assignments, and instructional technology (e.g., science web sites and videos). Assignments for the course will use the foundation fostered in the course to examine (a) science content, (b) student conceptions, (c) the meeting of theory and practice, (d) instructional resources (e.g., websites), and (e) lesson planning.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: SPED 3187.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in EDUC 2296 and MGRE 2111.

MGSE 3466. Methods and Materials in Secondary Social Studies. 3 Credit Hours.

This course focuses on applied social studies methods; the course objectives are (1) that pre-service social studies teachers will learn about the rich resources found at museums, archives, and historic sites and (2) that they will have an opportunity to apply what they have learned in the program to developing curricular materials. There is a required field experience for which students are placed at Philadelphia area cultural institutions. Students will be developing collections and curriculum materials for schools and teachers in general and for National History Day. Class time will be devoted to strengthening and supporting the field experience.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may not be repeated for additional credits.

MGSE 3796. Differentiated Literacy Instruction in the Disciplines (grades 7-12). 3 Credit Hours.

This course examines ways in which secondary teachers can support students' struggles with reading and writing in the disciplines, including Mathematics, History (Social Studies), the Sciences, Foreign Language, and English. How can we teach all students the concepts, facts, and skills that they need to do well in our discipline? What kinds of reading and writing issues can inhibit students' progress? How do we identify the kinds of difficulties that different text organizations may pose for students? What must a high school student learn to do to read and write appropriately in English, History, Science, and so on? How can we address these issues without taking time away from teaching our discipline? What kinds of reading and writing tasks can we use as resources for helping students to learn in our discipline? How do the current state and national emphases on standards and teacher accountability affect our responsibilities in the classroom? The answers to these questions have deep implications for the instructional activities that we will develop to enable all children to use reading and writing as tools for learning in our fields. This is also the Capstone Writing-Intensive Course in the Major. The course immerses you in the kinds of literate activities practiced in our profession. It examines the ways that reading and writing vary across the disciplines included in this course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

MGSE 4189. Project-Based Instruction. 3 Credit Hours.

Project-Based Instruction (PBI) engages learners in exploring authentic, important, and meaningful questions of real concern to students. Through a dynamic process of investigation and collaboration and using the same processes and technologies that scientists, mathematicians, and engineers use, students work in teams to formulate questions, make predictions, design investigations, collect and analyze data, make products and share ideas. Students learn fundamental science and mathematical concepts and principles that they apply to their daily lives. PBI promotes equitable and diverse participation and engages students in learning. The PBI course supports your continued development as a teacher, building on your previous courses. PBI provides opportunities for you to observe and teach in the secondary science or mathematics classroom. This course will also provide opportunities for you to generate artifacts for a professional portfolio to meet requirements for certification. This course aims to help close the research-practice gap by developing your capacity to identify and evaluate best teaching practices as presented in research literature.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: TUteach.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: minimum GPA of 3 in: courses numbered 0700 to 4999 and '100' in PRAX.

MGSE 4296. Cultures, Communities, and Families. 3 Credit Hours.

This writing intensive course seeks to help students answer the following questions: What is social studies and why do we study it? What is my place within history and/or social studies and how does this impact my instruction? How do we facilitate the study of history? When investigating these questions, students will examine how the practices of families, cultures, and communities impact teaching and learning. That is, students will discuss the influence of people, places, events, and ideas, and more specifically, look at race relations, gender, class, citizenship and democratic values, and global interdependence. From there, students will take these issues and develop units of study using the Teaching for Understanding framework.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in EDUC 2296 and MGSE 2111.

MGSE 4427. Curriculum and Methods of Foreign Language Education. 3 Credit Hours.

This course is focused on methods of teaching foreign languages to young learners. The course is also focused on the American Council of Foreign Language Teachers (ACTFL) proficiency guidelines and content standards. There will be a theoretical component to the course, investigating issues related to child and adolescent language learning, and how it differs from post-adolescent language learning. There will also be a very practical component to the course, in which students will have numerous opportunities to apply their learning by creating foreign language lesson units, lesson plans, and assessments for in K-8 grade language learners. There will also be a very strong assessment component to the course, focusing on how teachers can integrate authentic, formative assessments to help guide instructional planning. The overall goals of the course are to deepen students' understanding of how foreign language instruction affects child and adolescent language learning.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may not be repeated for additional credits.

MGSE 4428. Innovations in Foreign Language Education. 3 Credit Hours.

This course seeks to allow foreign language teachers in training to examine methods and techniques of teaching language for communicative competence, and acquire practical knowledge of teaching. Featured are lesson and unit planning, teaching tasks, teaching strategies, materials development, teaching observations, and assessment based upon standards and learner performance guidelines. The course is also focused on the American Council of Foreign Language Teachers proficiency guidelines and Pennsylvania Department of Education World Languages content standards. The Intermediate Performance Assessment is also a focus of the course, and thus the 6 Temple University Teacher Education Program Performance Standards will be examined and applied extensively to foreign language teaching. Finally, a review of second language acquisition in relation to FL pedagogy is given. The goal of the course is to allow students to apply their pedagogical and content knowledge to a middle or high school foreign language teaching context.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may not be repeated for additional credits.

MGSE 4465. Teaching for Understanding in Secondary Social Studies. 3 Credit Hours.

The purpose of this course is to develop an understanding of teaching the four major content areas of the social studies (history, geography, economics, and civics and government). The goal is to help prepare candidates to teach these areas in terms of designing curriculum and assessment; adapting strategies from the field; and considering innovative ways to teach by drawing on available resources. The course will cover the important theories of social education and the developmental course of learning history, economics, civics, geography, psychology, sociology, and anthropology.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may not be repeated for additional credits.

MGSE 4641. Teaching Literature and Reading: 7-12. 3 Credit Hours.

An investigation of what texts ought to be taught in secondary schools, of how to teach them most effectively, and of the extent to which different student populations require different approaches. NOTE: As part of the course, students spend 2-3 hours each week assisting in a language arts classroom. Background Clearances are required.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may not be repeated for additional credits.

MGSE 4642. Teaching Written Composition: 7-12. 3 Credit Hours.

An examination of the knowledge that writers employ when they compose different kinds of texts, of the instructional contexts that are most effective in helping secondary students develop that knowledge, and of the extent to which different student populations require different approaches. NOTE: As part of the course, students spend 2-3 hours each week assisting in a language arts classroom. Background clearances are required.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may not be repeated for additional credits.

MGSE 4801. Senior Seminar and Performance Assessment in Grades 4-12 Education. 3 Credit Hours.

Students will be involved in experiences that prepare them for making the transition from college to the practice setting, and engage in activities that foster professionalism in school and community settings. The senior performance assessment, a requirement for teacher certification students, is also a part of the course. NOTE: This is a required course for all teacher certification candidates, which is taken during the student teaching semester.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: MGSE 4888.

Repeatability: This course may not be repeated for additional credits.

MGSE 4888. Student Teaching in Grades 4-12. 9 Credit Hours.

The student teaching experience is the last course taken before completion of a teacher preparation program and graduation. Students are provided with an opportunity to be in a classroom for an extended period of time and to put into practice what they have learned in their Middle Grades / Secondary Education Program. Over the course of the semester, students will experience, in depth, the full role and meaning of teaching in a middle or secondary grades classroom. Experiences include planning and organizing for instruction, developing classroom teaching competencies and skills, evaluating pupil progress, participating in extra-class activities, working with special school personnel, and utilizing school and community resources in the instructional program. NOTE: Background clearances required. All coursework must be completed before taking this course.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: MGSE 4801.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: minimum GPA of 3 in: courses numbered 0700 to 4999.

Middle Grades Education (MGRE)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

MGRE 3109. Cognitive Development in the Content Areas. 3 Credit Hours.

The primary goal of this course is to present contemporary theories and research on cognitive development that has relevance for educators of students in the middle grades. Foci include (a) theories of learning, development, motivation, expertise, and intelligence, (b) development of concepts and skills within the domains of math, science, social studies, reading, writing, (c) individual, gender, and ethnic differences in achievement; and (d) using cognitive developmental theories and research to understand learning challenges faced by special education and ELL students. By learning this information, students will gain the knowledge they need to make good instructional decisions in the middle-level classroom. NOTE: Background clearances required.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Co-requisites: MGRE 3111.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in EDUC 2109 (may be taken concurrently)

MGRE 3111. Applications of Learning Theory to Middle Grades Education. 3 Credit Hours.

This course will introduce students to the structure and philosophy of middle level schools, curriculum, and instruction by examining their relationship to aspects of young adolescent development and theories of learning. Emphasis will be placed on current understandings of how early adolescents learn and how these understandings inform instructional practices. Issues of motivating, engaging, and managing diverse, young adolescent students will be explored. NOTE: Background clearances required.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Co-requisites: MGRE 3109.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in EDUC 2109 (may be taken concurrently)

MGRE 3145. Teaching and Learning Math in the Middle Grades. 3 Credit Hours.

This course examines methods of teaching and assessing mathematics in the middle grades. Special attention is paid to understanding the conceptual difficulties students have in moving from whole numbers to rational numbers, additive thinking to multiplicative thinking, and arithmetic to algebra. Problem-solving, connections, and concrete models are emphasized.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may not be repeated for additional credits.

MGRE 3196. Teaching and Learning Literacy in the Middle Grades. 3 Credit Hours.

The purpose of this writing intensive course is to prepare pre-service students to teach reading and English/language arts in the upper elementary and middle level settings. Students will be introduced to theories and current views of practice in the literacy field. The areas of language, listening, reading and writing are presented throughout this course as interrelated and integrated processes. Emphasis will be on providing pre-service teachers with the competencies to implement engaging literacy instructional practices while providing ongoing assessment for a diverse middle grades population.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: MGRE 3296, SPED 3187.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MGRE 3109 and MGRE 3111)

MGRE 3296. Cultures, Communities, and Families. 3 Credit Hours.

This course examines the ways practices of cultures, communities and families impact teaching and learning. Using the social studies disciplines and pedagogical frames, special attention is paid to the areas of multicultural and citizenship education as well as other compelling topics that influence the "public or common good" in a diverse society such as race relations, gender socialization, immigration, religious freedom, equality of economic and social opportunities as well as global interdependence.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: MGRE 3196, SPED 3187.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MGRE 3109 and MGRE 3111)

MGRE 4108. Teaching and Learning Science in the Middle Grades. 3 Credit Hours.

The purpose of this course is to prepare pre-service teachers to teach science in the upper elementary and middle level settings. The course will be based on the "Big Ideas" in the field of science and science education and will focus heavily on scientific inquiry as a pedagogical approach and a learning goal. The Big Ideas in Biology, Chemistry, Physics and Earth/Space Sciences will be integrated into the various classes along with themes, such as motivating students, assessing & moving student's ideas toward science conceptions through inquiry, using questioning and flexible teaching methods (based on how children learn), and integrating science with other disciplines. Students will apply, evaluate, and reflect upon science teaching methods through class and lab activities, case studies, field experience assignments, and instructional technology (e.g., science web sites and videos). Assignments for the course will use the foundation fostered in the course to examine (a) science content, (b) student conceptions, (c) the meeting of theory and practice, (d) instructional resources (e.g., websites), and (e) lesson planning.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: SPED 4109.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MGRE 3109 and MGRE 3111)

MGRE 4801. Senior Seminar and Performance Assessment in Middle Grades Education. 3 Credit Hours.

Students will be involved in experiences that prepare them for making the transition from college to the practice setting, and engage in activities that foster professionalism in school and community settings. The senior performance assessment, a requirement for teacher certification students, is also a part of the course. NOTE: This is a required course for all teacher certification candidates, which is taken during the student teaching semester.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: MGRE 4888.

Repeatability: This course may not be repeated for additional credits.

MGRE 4888. Student Teaching in the Middle Grades. 9 Credit Hours.

The student teaching experience is the last course taken before completion of a teacher preparation program and graduation. Students are provided with an opportunity to be in a classroom for an extended period of time and to put into practice what they have learned in their Middle Grades Program. Over the course of the semester, students will experience, in depth, the full role and meaning of teaching in a middle grades classroom. Experiences include planning and organizing for instruction, developing classroom teaching competencies and skills, evaluating pupil progress, participating in extra-class activities, working with special school personnel, and utilizing school and community resources in the instructional program. NOTE: Background clearances required. All coursework must be completed before taking this course.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: MGRE 4801.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: minimum GPA of 3 in: courses numbered 0700 to 4999.

Military Science - Army ROTC (MLSC)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

MLSC 1001. Introduction to Military Science I. 1 Credit Hour.

This course introduces the roles and mission of the Army, Army customs and traditions, and the personal challenges and competencies that are critical for effective leadership. You will learn how the personal development of life skills such as goal setting, time management, physical fitness and stress management relate to leadership, officership and the Army profession. The focus is on developing basic knowledge and comprehension of Army leadership dimensions while gaining a big picture understanding of the ROTC program, its purpose in the Army, and its advantages for the student. While this class is available for open enrollment, students that have formally contracted into the ROTC program must maintain a minimum aggregate GPA of 2.0. Contracted Cadets failing to maintain a minimum aggregate GPA of 2.0 in all Military Science courses are subject to adverse action or dismissal from the program. Contracted Cadets who do not earn at least a C grade in a Military Science course must gain approval from the instructor to register for additional Military Science courses. Students registering for courses for which they have previously received academic credit are advised that repeat courses will not result in additional academic credit. NOTE: Students must participate in one weekend exercise. Leadership lab (MLSC 4003) is required for Army ROTC students.

Repeatability: This course may not be repeated for additional credits.

MLSC 1002. Introduction to Military Science II. 1 Credit Hour.

This course introduces cadets to the Army tactical concepts such as map reading, land navigation, marksmanship, small unit tactics and general operations. It also focuses on the Army Leadership model and explores these dimensions in more detail. Cadets will focus on basic knowledge and skills needed for personal leadership competence in the Army. While this class is available for open enrollment, students that have formally contracted into the ROTC program must maintain a minimum aggregate GPA of 2.0. Contracted Cadets failing to maintain a minimum aggregate GPA of 2.0 in all Military Science courses are subject to adverse action or dismissal from the program. Contracted Cadets who do not earn at least a C grade in a Military Science course must gain approval from the instructor to register for additional Military Science courses. Students registering for courses for which they have previously received academic credit are advised that repeat courses will not result in additional academic credit. NOTE: Students must participate in one weekend exercise. Leadership lab (MLSC 4003) is required for Army ROTC students.

Repeatability: This course may not be repeated for additional credits.

MLSC 2001. Small Unit Operations and Leadership I. 1 Credit Hour.

This course examines leadership fundamentals and the application of leadership principles in both theory and practice. Historical examples of military leadership are used as case studies. Emphasis is on the formulation of military values, principles and leadership styles. It explores the dimensions of creative and innovative tactical leadership strategies and styles by examining team dynamics and two historical leadership theories that form the basis of the Army leadership framework. The focus continues to build on developing knowledge of the leadership values and attributes through understanding Army rank, structure and duties as well as broadening knowledge of land navigation and squad tactics. While this class is available for open enrollment, students that have formally contracted into the ROTC program must maintain a minimum aggregate GPA of 2.0. Contracted Cadets failing to maintain a minimum aggregate GPA of 2.0 in all Military Science courses are subject to adverse action or dismissal from the program. Contracted Cadets who do not earn at least a C grade in a Military Science course must gain approval from the instructor to register for additional Military Science courses. Students registering for courses for which they have previously received academic credit are advised that repeat courses will not result in additional academic credit. NOTE: Students participate in one weekend field exercise. Leadership lab (MLSC 4003) is required for Army ROTC students.

Repeatability: This course may not be repeated for additional credits.

MLSC 2002. Small Unit Operations and Leadership II. 1 Credit Hour.

This course focuses on how to build teams, how to influence, how to communicate, how and when to make decisions, how to engage in problem solving, and how to plan and organize. This instruction will be conducted simultaneously with the leadership development instruction and will consist of physical fitness and training, giving military briefings, map reading and land navigation, duty positions, squad formations, battle drills, troop leading procedures, and operations orders. While this class is available for open enrollment, students that have formally contracted into the ROTC program must maintain a minimum aggregate GPA of 2.0. Contracted Cadets failing to maintain a minimum aggregate GPA of 2.0 in all Military Science courses are subject to adverse action or dismissal from the program. Contracted Cadets who do not earn at least a C grade in a Military Science course must gain approval from the instructor to register for additional Military Science courses. Students registering for courses for which they have previously received academic credit are advised that repeat courses will not result in additional academic credit. NOTE: Students participate in one weekend field exercise. Leadership lab (MLSC 4003) is required for Army ROTC students.

Repeatability: This course may not be repeated for additional credits.

MLSC 3001. Applied Leadership and Management I. 2 Credit Hours.

You are challenged to study, practice and evaluate adaptive team leadership skills as you are presented with the demands of the ROTC Leader Development and Assessment Course (LDAC). Challenging scenarios related to small unit tactical operations are used to develop self-awareness and critical thinking skills. Classroom discussion will focus on land navigation, military orders, troop leading procedures and advanced small unit tactics. Classroom discussion is then applied during military leadership laboratories, which the cadets plan and conduct. Cadets will have their leadership potential assessed while they rotate through platoon leadership positions. The first course in our Advanced Course, this is also one of four semesters of coursework essential to earning a commission as an Army Officer. While this class is available for open enrollment, students that have formally contracted into the ROTC program must maintain a minimum aggregate GPA of 2.0. Contracted Cadets failing to maintain a minimum aggregate GPA of 2.0 in all Military Science courses are subject to adverse action or dismissal from the program. Contracted Cadets who do not earn at least a C grade in a Military Science course must gain approval from the instructor to register for additional Military Science courses. Students registering for courses for which they have previously received academic credit are advised that repeat courses will not result in additional academic credit. NOTE: Students participate in one weekend field exercise. Leadership lab (MLSC 4003) is required for Army ROTC students. Credits will count toward GenEd or General Electives.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in MLSC 2002 (may be taken concurrently)

MLSC 3002. Applied Leadership and Management II. 2 Credit Hours.

MLSC 3002 uses increasingly intense situational leadership challenges to build cadet awareness and skills in leading small units. Skills in decision-making, persuading and motivating team members when "under fire" are explored, evaluated, and developed. Aspects of military operations are reviewed as a means of preparing for the ROTC Leader Development and Assessment Course (LDAC). Cadets are expected to apply basic principles of the Law of Land Warfare, Army training, and motivation to troop leading procedures. Emphasis is also placed on conducting military briefings and developing proficiency in Garrison operation orders. MLSC 3002 Cadets are evaluated on what they know and do as leaders. At the completion of this course Cadets have completed half of the minimum coursework needed for a commission and are prepared for their 30 day attendance at the Leadership Development and Assessment Camp (LDAC) during the summer of their junior year. While this class is available for open enrollment, students that have formally contracted into the ROTC program must maintain a minimum aggregate GPA of 2.0. Contracted Cadets failing to maintain a minimum aggregate GPA of 2.0 in all Military Science courses are subject to adverse action or dismissal from the program. Contracted Cadets who do not earn at least a C grade in a Military Science course must gain approval from the instructor to register for additional Military Science courses. Students registering for courses for which they have previously received academic credit are advised that repeat courses will not result in additional academic credit. NOTE: Students participate in one weekend field exercise. Leadership lab (MLSC 4003) is required for Army ROTC students. Credits will count toward GenEd or General Electives.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MLSC 3001 (may be taken concurrently) or 'Y' in CRML02)

MLSC 4001. Advanced Leadership and Management I. 2 Credit Hours.

MLSC 4001 develops student proficiency in planning, executing, and assessing complex operations, functioning as a member of a staff, and providing performance feedback to subordinates. You are given situational opportunities to assess risk, make ethical decisions, and lead fellow ROTC Cadets. Lessons on military justice and personnel processes prepare you to make the transition to becoming an Army officer. During your Military Science Level IV year you will lead Cadets at lower levels. Both your classroom and battalion leadership experiences are designed to prepare you for your first unit of assignment. You will identify responsibilities of key staff, coordinate staff roles, and use battalion operations situations to teach, train, and develop subordinates. While this class is available for open enrollment, students that have formally contracted into the ROTC program must maintain a minimum aggregate GPA of 2.0. Contracted Cadets failing to maintain a minimum aggregate GPA of 2.0 in all Military Science courses are subject to adverse action or dismissal from the program. Contracted Cadets who do not earn at least a C grade in a Military Science course must gain approval from the instructor to register for additional Military Science courses. Students registering for courses for which they have previously received academic credit are advised that repeat courses will not result in additional academic credit. NOTE: Students participate in one weekend field exercise. Leadership lab (MLSC 4003) is required for Army ROTC students. Credits will count towards GenEd or General Electives.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MLSC 3002 (may be taken concurrently) or 'Y' in CRML01)

MLSC 4002. Advanced Leadership and Management II. 2 Credit Hours.

MLSC 4002 explores the dynamics of leading in the complex situations of current military operations in the contemporary operating environment (COE). Cadets examine differences in customs and courtesies, military law, principles of war, and rules of engagement in the face of international terrorism. They also explore aspects of interacting with non-government organizations, civilians on the battlefield, and host nation support. The course places significant emphasis on preparing Cadets for their first unit of assignment. It uses case studies, scenarios, and "What Now, Lieutenant?" exercises to prepare Cadets to face the complex ethical and practical demands of leading as commissioned officers in the United States Army. This course is designed in coordination with MLSC 4001 to complete your Cadet pre-commissioning training and education as required in the Army's Basic Officer Leadership Course Phase I (BOLC I) in order to ensure your success at BOLC Phases II and III. Cadets enrolled in this course will gain practical leadership experience in positions of responsibility as they plan, coordinate, execute and evaluate Army ROTC activities. While this class is available for open enrollment, students that have formally contracted into the ROTC program must maintain a minimum aggregate GPA of 2.0. Contracted Cadets failing to maintain a minimum aggregate GPA of 2.0 in all Military Science courses are subject to adverse action or dismissal from the program. Contracted Cadets who do not earn at least a C grade in a Military Science course must gain approval from the instructor to register for additional Military Science courses. Students registering for courses for which they have previously received academic credit are advised that repeat courses will not result in additional academic credit. NOTE: Students participate in one weekend field exercise. Leadership lab (MLSC 4003) is required for Army ROTC students. Credits will count toward GenEd or General Electives.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in MLSC 4001 (may be taken concurrently)

MLSC 4003. Leadership Lab. 0 Credit Hours.

Leadership lab is required for Army ROTC students. Students perform hands on training in drill and ceremonies, field craft, individual movement techniques, squad tactics, map reading and land navigation, first aid, and other basic military activities.

Repeatability: This course may be repeated for additional credit.

Music (MUSC)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

MUSC 1000. Recital/Concert Credit. 0 Credit Hours.

College recital and concert attendance requirement. Of the eight required recitals attended, one must be an official Boyer College World Music Recital or Multicultural Music Lecture-Performance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUSC 1201. Voice Concentration. 2 Credit Hours.

Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 1202. Voice Concentration. 2 Credit Hours.

Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 1201.

MUSC 1203. Voice Major. 3 Credit Hours.

Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 1204. Voice Major. 3 Credit Hours.

Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 1203.

MUSC 1211. Voice Class. 1 Credit Hour.

Voice class for music majors as specified for curriculum. NOTE: Class meets two hours per week.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 1212. Voice Class. 1 Credit Hour.

Voice class for music majors as specified for curriculum. NOTE: Class meets two hours per week.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 1211.

MUSC 1223. Class Voice for Non-Majors I. 1 Credit Hour.

Voice class for non-music majors. NOTE: Class meets two hours per week.

Repeatability: This course may be repeated for additional credit.

MUSC 1224. Class Voice for Non-Majors II. 1 Credit Hour.

Voice class for non-music majors. NOTE: Class meets two hours per week.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in MUSC 1223.

MUSC 1225. English Diction. 1 Credit Hour.

Diction for singing in the English language. Introduction to the International Phonetic Alphabet. NOTE: Singing is required.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 1226. German Diction. 1 Credit Hour.

Diction for singing in the German language. Introduction to the International Phonetic Alphabet. NOTE: Singing is required.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 1227. Italian Diction. 1 Credit Hour.

Diction for singing in the Italian language. Introduction to the International Phonetic Alphabet. NOTE: Singing is required.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 1228. French Diction. 1 Credit Hour.

Diction for singing in the French language. NOTE: Singing is required.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 1256. Private Voice for Non-Music Majors. 1 Credit Hour.

Individual half-hour private lesson for students outside the College of Music who have reached at least an intermediate level of achievement. NOTE: Section 001 - Classical only; Section 002 - Jazz only. Additional fee required.

Repeatability: This course may be repeated for additional credit.

MUSC 1257. Private Voice for Non-Music Majors. 1 Credit Hour.

Individual half-hour private lesson for students outside the College of Music who have reached at least an intermediate level of achievement. NOTE: Section 001 - Classical only; Section 002 - Jazz only. Additional fee required.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in MUSC 1256.

MUSC 1258. Private Voice for Non-Music Majors. 1 Credit Hour.

Individual half-hour private lesson for students outside the College of Music who have reached at least an intermediate level of achievement. NOTE: Section 001 - Classical only; Section 002 - Jazz only. Additional fee required.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in MUSC 1257.

MUSC 1259. Private Voice for Non-Music Majors. 1 Credit Hour.

Individual half-hour private lesson for students outside the College of Music who have reached at least an intermediate level of achievement. NOTE: Section 001 - Classical only; Section 002 - Jazz only. Additional fee required.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in MUSC 1258.

MUSC 1401. Piano Concentration. 2 Credit Hours.

Weekly private lesson and regularly scheduled master classes with major teacher. With instructor's permission, student may present either half or full senior recital.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 1402. Piano Concentration. 2 Credit Hours.

Weekly private lesson and regularly scheduled master classes with major teacher. With instructor's permission, student may present either half or full senior recital.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 1401.

MUSC 1403. Piano Major. 4 Credit Hours.

Weekly private lesson and regularly scheduled master classes with major teacher. Culminates in full recital during final semester of study.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 1404. Piano Major. 4 Credit Hours.

Weekly private lesson and regularly scheduled master classes with major teacher. Culminates in full recital during final semester of study.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 1403.

MUSC 1405. Secondary Piano for Music Majors. 1 Credit Hour.

Fulfills piano requirements for students in programs of study other than piano major or piano concentration.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 1406. Secondary Piano for Music Majors. 1 Credit Hour.

Fulfills piano requirements for students in programs of study other than piano major or piano concentration.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 1405.

MUSC 1407. Piano for Non-Music Majors I. 1 Credit Hour.

For the beginner. Instruction in groups (piano laboratory). Chords, transposition, sight reading, improvisation, elementary jazz, ensemble playing.

Repeatability: This course may not be repeated for additional credits.

MUSC 1408. Piano for Non-Music Majors II. 1 Credit Hour.

A sequel to Music 1407 (0030) with increased emphasis on playing by ear, development of technique, repertoire, improvisation, and ensemble playing.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 1407.

MUSC 1411. Private Piano for Non-Music Majors. 1 Credit Hour.

Individual half-hour private lesson for students outside the College of Music who have reached at least an intermediate level of achievement. NOTE: Lab fee required.

Repeatability: This course may be repeated for additional credit.

MUSC 1412. Private Piano for Non-Music Majors. 1 Credit Hour.

Individual half-hour private lesson for students outside the College of Music who have reached at least an intermediate level of achievement. NOTE: Lab fee required.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in MUSC 1411.

MUSC 1415. Introduction to Piano Pedagogy. 2 Credit Hours.

A general survey course. Key practical and pedagogical aspects of the piano teaching profession.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 1428. Accompanying and Piano Ensemble. 1 Credit Hour.

Training in both vocal and instrumental accompanying; two-piano and four-hand repertory. Senior piano majors should accompany two recitals per semester. NOTE: This class is for all applied piano majors.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUSC 1429. Accompanying and Piano Ensemble. 1 Credit Hour.

Training in both vocal and instrumental accompanying, two-piano and four-hand repertory. Senior piano majors should accompany two recitals per semester. NOTE: This class is for all applied piano majors.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUSC 1446. Private Keyboard for Music Majors. 1 Credit Hour.

Private keyboard instruction.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 1447. Private Keyboard for Music Majors. 1 Credit Hour.

Private keyboard instruction.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 1446.

MUSC 1448. Private Keyboard for Music Majors. 1 Credit Hour.

Private keyboard instruction.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 1447.

MUSC 1449. Private Keyboard for Music Majors. 1 Credit Hour.

Private keyboard instruction.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 1448.

MUSC 1501. Instrumental Concentration. 2 Credit Hours.

Weekly instrumental private lesson with major teacher.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 1502. Instrumental Concentration. 2 Credit Hours.

Weekly instrumental private lesson with major teacher.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 1501.

MUSC 1503. Instrumental Major. 4 Credit Hours.

Weekly instrumental private lesson with major teacher. Open only to candidates for a Bachelor of Music degree with a major in instrumental performance. Students are required to perform or teach private lessons outside the university, subject to availability and/or scheduling conflicts with other Boyer courses or obligations.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music.

Repeatability: This course may not be repeated for additional credits.

MUSC 1504. Instrumental Major. 4 Credit Hours.

Weekly instrumental private lesson with major teacher. Open only to candidates for a Bachelor of Music degree with a major in instrumental performance. Students are required to perform or teach private lessons outside the university, subject to availability and/or scheduling conflicts with other Boyer courses or obligations.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 1503.

MUSC 1529. Guitar for Non-Music Majors. 1 Credit Hour.

For beginning guitarists. Students will develop functional guitar skills for playing songs, including: basic chords, picking and strumming methods, and understanding the musical elements needed to play from a song sheet.

Repeatability: This course may not be repeated for additional credits.

MUSC 1531. Guitar for Non-Music Majors II. 1 Credit Hour.

This course is designed for students who have successfully completed MUSC 1529 or already have a basic proficiency on the instrument. Students will continue to develop guitar skills for playing songs and solo guitar pieces with an emphasis on right hand finger style technique (section 001) or plectrum technique (section 002). Reading standard musical notation for the guitar as well as chord tablature will be included. Some introductory elements of music theory will be introduced.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 1529.

MUSC 1603. Harpsichord Major. 4 Credit Hours.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 1604. Harpsichord Major. 4 Credit Hours.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 1603.

MUSC 1764. Popular Music and Social Change in the United States. 3 Credit Hours.

Popular music has become a defining feature of modern cultural existence. Not only do people listen (how could we avoid it if we even wanted to?) but we also engage in heated debates about controversies in this music. Why are people angry about Miley Cyrus and Iggy Azalea's performances of black musical styles? Is Kanye West a compelling presidential candidate? Why was the first Billboard topping hip hop album by a white group? How has country music become so important to patriotism and why does it focus on white performers? Why do artists like Beyoncé and Lady Gaga draw heated debates from both feminists and also sexists? In this course we will explore what these conversations reveal about our values and the social, economic, and technological forces shaping our lives. We will engage with songs; we'll read selections from journalism, artists' autobiographies, and scholarship; you'll observe a concert of your choice and interview a listener of your choice; and you will craft a playlist about a social issue that's important to you. In the process, you'll learn ways to approach these materials critically and engage with the tension between listener expectations of authenticity from our favorite musicians and the music industry's desire to make as much money as possible. The materials span several genres of music listened to in the United States in the last 100 years. No musical experience is required. The course will include short writing and creative assignments, a midterm, and a final exam.

Repeatability: This course may not be repeated for additional credits.

MUSC 2123. Class Voice for Non-Majors: Jazz. 1 Credit Hour.

Introduction to the concepts and techniques of modern vocal jazz culminating in the application and demonstration of skills including various scales, melodies, and improvisational techniques utilized in the standard jazz repertoire.

Repeatability: This course may be repeated for additional credit.

MUSC 2124. Class Voice for Non-Majors: Jazz. 1 Credit Hour.

Development of the concepts and techniques of modern vocal jazz culminating in the application and demonstration of skills including various scales, melodies, and improvisational techniques utilized in the standard vocal jazz repertoire.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in MUSC 2123.

MUSC 2133. Class Guitar for Non-Majors: Jazz. 1 Credit Hour.

Introduction of concepts and techniques of modern jazz guitar culminating in the application and demonstration of fundamental skills including various scales, melodies, harmonic progressions, and improvisation found in the standard jazz guitar repertoire.

Repeatability: This course may be repeated for additional credit.

MUSC 2134. Class Guitar for Non-Majors: Jazz. 1 Credit Hour.

Further development of concepts and techniques of modern jazz guitar culminating in the application and demonstration of skills including various scales, melodies, harmonic progressions, and improvisation found in the standard jazz guitar repertoire.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in MUSC 2133.

MUSC 2143. Class Piano for Non-Majors: Jazz. 1 Credit Hour.

Introduction of concepts and techniques of modern jazz on the piano culminating in the application and demonstration of fundamental jazz piano skills including various scales, melodies, improvisation, and harmonic progressions found in the standard repertoire.

Repeatability: This course may be repeated for additional credit.

MUSC 2144. Class Piano for Non-Majors: Jazz. 1 Credit Hour.

Further development of the concepts and techniques of modern jazz piano culminating in the application and demonstration of skills including various scales, melodies, harmonic progressions, and improvisational techniques utilized in the standard jazz repertoire.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in MUSC 2143.

MUSC 2201. Voice Concentration. 2 Credit Hours.

Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 1202.

MUSC 2202. Voice Concentration. 2 Credit Hours.

Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 2201.

MUSC 2203. Voice Major. 3 Credit Hours.

Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 1204.

MUSC 2204. Voice Major. 3 Credit Hours.

Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 2203.

MUSC 2211. Voice Class. 1 Credit Hour.

Voice class for music majors as specified for curriculum. NOTE: Class meets two hours per week.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 1212.

MUSC 2212. Voice Class. 1 Credit Hour.

Voice class for music majors as specified for curriculum. NOTE: Class meets two hours per week.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 2211.

MUSC 2323. Basic Conducting. 1 Credit Hour.

Fundamentals of conducting technique for both choral and instrumental organizations; musical terminology; basic conducting patterns, etc. NOTE: Although the conducting course sequence [Music 2323 (0123), Music 2324 (0124), Music 4323 (0330)] is intended primarily for music majors, it is possible for other students to enroll if they have evidence of a background in music theory. Non-music majors must obtain permission from the instructor before they register for a conducting class.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 1711.

MUSC 2324. Conducting Intermediate. 1 Credit Hour.

Further development of conducting techniques including irregular and changing meters; involvement with more complex scores emphasizing interpretive conducting and stylistic awareness.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 2323.

MUSC 2401. Piano Concentration. 2 Credit Hours.

Weekly private lesson and regularly scheduled master classes with major teacher. With instructor's permission, student may present either half or full senior recital.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 1402.

MUSC 2402. Piano Concentration. 2 Credit Hours.

Weekly private lesson and regularly scheduled master classes with major teacher. With instructor's permission, student may present either half or full senior recital.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 2401.

MUSC 2403. Piano Major. 4 Credit Hours.

Weekly private lesson and regularly scheduled master classes with major teacher. Culminates in full recital during final semester of study.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 1404.

MUSC 2404. Piano Major. 4 Credit Hours.

Weekly private lesson and regularly scheduled master classes with major teacher. Culminates in full recital during final semester of study.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 2403.

MUSC 2405. Secondary Piano for Music Majors. 1 Credit Hour.

Fulfills piano requirements for students in programs of study other than piano major or piano concentration.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 1406.

MUSC 2406. Secondary Piano for Music Majors. 1 Credit Hour.

Fulfills piano requirements for students in programs of study other than piano major or piano concentration.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 2405.

MUSC 2407. Piano for Non-Music Majors III. 1 Credit Hour.

A continuation of class piano study in small groups.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 1408.

MUSC 2408. Piano for Non-Music Majors IV. 1 Credit Hour.

A continuation of class piano study in small groups.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 2407.

MUSC 2411. Private Piano for Non-Music Majors. 1 Credit Hour.

Individual half-hour private lesson for students outside the College of Music who have reached at least an intermediate level of achievement. NOTE: Lab fee required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 1412.

MUSC 2412. Private Piano for Non-Music Majors. 1 Credit Hour.

Individual half-hour private lesson for students outside the College of Music who have reached at least an intermediate level of achievement. NOTE: Lab fee required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 2411.

MUSC 2415. Pedagogy of Technique. 2 Credit Hours.

Various technical approaches developed since the 18th century. Pedagogical schools will be examined and students will have an opportunity to test their abilities through the actual teaching of technique to peers.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 2416. Creative Activities for the Piano Teacher. 2 Credit Hours.

Objectives include the encouragement of keyboard exploration at various levels of development through a multitude of musical activities and games, devised by the members of the class; translation from theory to practical procedures.

Repeatability: This course may not be repeated for additional credits.

MUSC 2500. Collegiate Band Lesson. 1 Credit Hour.

Supplemental instruction for non-music major, Collegiate Band participants.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in MUSC 3510.

MUSC 2501. Instrumental Concentration. 2 Credit Hours.

Weekly instrumental private lesson with major teacher.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 1502.

MUSC 2502. Instrumental Concentration. 2 Credit Hours.

Weekly instrumental private lesson with major teacher.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 2501.

MUSC 2503. Instrumental Major. 4 Credit Hours.

Weekly instrumental private lesson with major teacher. Open only to candidates for a Bachelor of Music degree with a major in instrumental performance. Students are required to perform or teach private lessons outside the university, subject to availability and/or scheduling conflicts with other Boyer courses or obligations.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 1504.

MUSC 2504. Instrumental Major. 4 Credit Hours.

Weekly instrumental private lesson with major teacher. Open only to candidates for a Bachelor of Music degree with a major in instrumental performance. Students are required to perform or teach private lessons outside the university, subject to availability and/or scheduling conflicts with other Boyer courses or obligations.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 2503.

MUSC 2603. Harpsichord Major. 4 Credit Hours.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 1604.

MUSC 2604. Harpsichord Major. 4 Credit Hours.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 2603.

MUSC 3100. Small Jazz Ensemble. 1 Credit Hour.

Various workshops may be offered focusing on rhythm sections, brass, saxophone, guitar, percussion, bass, and vocalizing.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUSC 3110. Large Jazz Ensemble. 1 Credit Hour.

Emphasis on reading and stylization. Arrangements are used. NOTE: Weekly rehearsals.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUSC 3120. Vocal Jazz Ensemble. 1 Credit Hour.

Performing group with a focus on new and standard jazz literature for large ensemble made up primarily of vocalists with a small accompanying group. This course will provide regular and consistent exposure to and experience with standard and new vocal jazz literature.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Studies.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Jazz Studies Performance.

Repeatability: This course may be repeated for additional credit.

MUSC 3201. Voice Concentration. 2 Credit Hours.

Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 2202.

MUSC 3202. Voice Concentration. 2 Credit Hours.

Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 3201.

MUSC 3203. Voice Major. 3 Credit Hours.

Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 2204.

MUSC 3204. Voice Major. 3 Credit Hours.

Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 3203.

MUSC 3231. Musical Theater Scene Study. 2 Credit Hours.

Practical work in the application of performance techniques to specific scenes from the American Musical Theater provides further development for the student of Musical Theater. Vocal and acting skills are combined with the development of character in musical play scene-work including both song and dialogue. Students spend the semester in collaboration with fellow students on notable and challenging scenes from the musical theater.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater.

Repeatability: This course may not be repeated for additional credits.

MUSC 3232. Musical Theater Voice & Acting. 2 Credit Hours.

Practical work in the application of performance techniques to specific songs from the American Musical Theater of the first half of the 20th century. The incorporation of truthful acting with attention to given circumstances and objectives is blended with principles of healthy, supported singing.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater.

Repeatability: This course may not be repeated for additional credits.

MUSC 3251. Applied Lesson - Vocal. 2 to 4 Credit Hours.

Additional applied voice lesson for music students. NOTE: Additional private lesson fee.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUSC 3267. Vocal Repertoire. 2 Credit Hours.

A survey of solo vocal literature of various periods and styles. Performance and analysis.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 3268. Vocal Repertoire. 2 Credit Hours.

A survey of solo vocal literature of various periods and styles. Performance and analysis.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 3300. Choral Ensemble. 0 or 1 Credit Hours.

Performance of standard choral literature. At least one public performance per semester. NOTE: This ensemble is available to any undergraduate or graduate student enrolled in the University.

Repeatability: This course may be repeated for additional credit.

MUSC 3385. Diamond Peer Teachers - Internship I. 1 Credit Hour.

The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

Repeatability: This course may be repeated for additional credit.

MUSC 3386. Diamond Peer Teachers - Internship II. 1 Credit Hour.

The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

Repeatability: This course may be repeated for additional credit.

MUSC 3401. Piano Concentration. 2 Credit Hours.

Weekly private lesson and regularly scheduled master classes with major teacher. With instructor's permission, student may present either half or full senior recital.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 2402.

MUSC 3402. Piano Concentration. 2 Credit Hours.

Weekly private lesson and regularly scheduled master classes with major teacher. With instructor's permission, student may present either half or full senior recital.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 3401.

MUSC 3403. Piano Major. 4 Credit Hours.

Weekly private lesson and regularly scheduled master classes with major teacher. Culminates in full recital during final semester of study. Students are required to perform or teach private lessons outside the university, subject to availability and/or scheduling conflicts with other Boyer courses or obligations.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 2404.

MUSC 3404. Piano Major. 4 Credit Hours.

Weekly private lesson and regularly scheduled master classes with major teacher. Culminates in full recital during final semester of study. Students are required to perform or teach private lessons outside the university, subject to availability and/or scheduling conflicts with other Boyer courses or obligations.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 3403.

MUSC 3405. Secondary Piano for Music Majors. 1 Credit Hour.

Fulfills piano requirements for students in programs of study other than piano major or piano concentration.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 2406.

MUSC 3406. Secondary Piano for Music Majors. 1 Credit Hour.

Fulfills piano requirements for students in programs of study other than piano major or piano concentration.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 3405.

MUSC 3415. Pedagogy of Children. 2 Credit Hours.

A survey of available teaching methods and pedagogical approaches to be used with children in individual or group instruction, including an introduction to the basic Suzuki philosophy.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 3416. Pedagogy of the College Non-Music Major. 2 Credit Hours.

Designed to prepare pianists to teach college students who are not music majors, either in groups or privately, by providing them with methods and materials of instruction, and understanding of group dynamics, and techniques for eliciting creative activities. NOTE: One hour practice teaching required.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 3421. Suzuki for Pianists. 2 Credit Hours.

For experienced piano teachers as well as college-level piano students seeking in-depth knowledge of the Suzuki method.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 3422. Keyboard Literature. 3 Credit Hours.

A survey of keyboard literature of various periods and styles. Performance and analysis.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 3423. Keyboard Literature. 3 Credit Hours.

A survey of keyboard literature of various periods and styles. Performance and analysis.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 3443. Listening & Learning Skills for Pianists I. 3 Credit Hours.

Basic techniques to improve sight reading, learning facility, and aural/tactile relationships at the keyboard.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 3444. Listening & Learning Skills for Pianists II. 3 Credit Hours.

Advanced techniques to improve sight reading, learning facility, and aural/tactile relationships at the keyboard.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 3451. Applied Lesson - Keyboard. 2 to 4 Credit Hours.

Additional applied keyboard lesson for music students. NOTE: Additional private lesson fee.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUSC 3500. Collegiate Band. 0 to 1 Credit Hours.

Performance in all-University concert band.

Repeatability: This course may be repeated for additional credit.

MUSC 3501. Instrumental Concentration. 2 Credit Hours.

Weekly instrumental private lesson with major teacher.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 2502.

MUSC 3502. Instrumental Concentration. 2 Credit Hours.

Weekly instrumental private lesson with major teacher.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 3501.

MUSC 3503. Instrumental Major. 4 Credit Hours.

Weekly instrumental private lesson with major teacher. Open only to candidates for a Bachelor of Music degree with a major in instrumental performance. Weekly instrumental private lesson with major teacher. Students are required to perform or teach private lessons outside the university, subject to availability and/or scheduling conflicts with other Boyer courses or obligations. NOTE: This course is for majors only.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 2504.

MUSC 3504. Instrumental Major. 4 Credit Hours.

Weekly instrumental private lesson with major teacher. Open only to candidates for a Bachelor of Music degree with a major in instrumental performance. Weekly instrumental private lesson with major teacher. Students are required to perform or teach private lessons outside the university, subject to availability and/or scheduling conflicts with other Boyer courses or obligations. NOTE: This course is for majors only.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 3503.

MUSC 3510. Marching Band. 0 or 1 Credit Hours.

Performance in Temple University Marching Band at home university football games, select away trips, and other special events. NOTE: Attendance at pre-season band camp one week prior to the beginning of classes is required.

Repeatability: This course may be repeated for additional credit.

MUSC 3551. Applied Lesson - Instrumental. 2 to 4 Credit Hours.

Additional applied instrumental lessons for music students. NOTE: Additional private lesson fee.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUSC 3561. Multi-Percussion in Orchestra. 1 to 2 Credit Hour.

Course will enable students to develop the complex skills necessary to perform multi-percussion and drum set parts in the symphony orchestra.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 3571. International Exchange Applied Instrumental Lesson. 2 to 4 Credit Hours.

Weekly instrumental private lesson with major teacher. Open only to International Exchange students. Students are required to perform outside the university, subject to availability and/or scheduling conflicts with other Boyer courses or obligations.

Repeatability: This course may be repeated for additional credit.

MUSC 3572. International Exchange Applied Voice Lesson. 2 to 4 Credit Hours.

Weekly voice private lesson with major teacher. Open only to International Exchange students. Students are required to perform outside the university, subject to availability and/or scheduling conflicts with other Boyer courses or obligations.

Repeatability: This course may be repeated for additional credit.

MUSC 3573. International Exchange Large Ensemble. 1 Credit Hour.

Large ensemble with scheduled rehearsals and public performances. May include: symphony orchestra, wind symphony, symphonic band, choral ensembles, jazz band, and jazz lab band.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUSC 3574. International Exchange Small Ensemble. 1 Credit Hour.

Small ensembles with scheduled rehearsals and public performances. May include: chamber ensembles, percussion ensemble, new music ensemble, choral ensembles, and jazz ensembles.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUSC 3579. Orchestra Audition Prep. 1 Credit Hour.

Analysis of standard orchestral repertoire with emphasis upon the development of audition strategies and techniques.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUSC 3582. Independent Study. 1 to 4 Credit Hour.

The area of concentration may be selected by the student with the approval of his or her supervising teacher and the Associate Dean.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUSC 3603. Harpsichord Major. 4 Credit Hours.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 2604.

MUSC 3604. Harpsichord Major. 4 Credit Hours.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 3403.

MUSC 3611. Harpsichord for Pianists. 3 Credit Hours.

A practical introduction to performance on the harpsichord for pianists with little or no experience with historical keyboards. Topics include history, technique and repertoire from ca. 1500-present.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Performance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 4120. Special Topics. 1 to 4 Credit Hour.

Performance or scholarship-based topics with an emphasis upon advanced analysis and execution.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUSC 4152. Swing Owls Campus Community Jazz Band. 1 Credit Hour.

The Swing Owls is a jazz band comprised of Temple University students (majors and non-majors) and members of the Greater Philadelphia Community. No audition is required for membership. The ensemble meets one evening per week, totaling two hours of rehearsal, and performs a concert at the end of each semester. Members may elect to participate for Temple University academic credit or pay a nominal fee to join as a community member (course credit is not transcribed in the latter choice). NOTE: Ability to read music is required; personally owned instrument or rental needed.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may be repeated for additional credit.

MUSC 4201. Voice Concentration. 2 Credit Hours.

Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 3202.

MUSC 4202. Voice Concentration. 2 Credit Hours.

Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 4201.

MUSC 4203. Voice Major. 3 Credit Hours.

Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 3204.

MUSC 4210. Opera Ensemble. 0 or 1 Credit Hours.

Required for singers cast in Temple University Opera Theater productions.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Vocal Arts.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Music.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUSC 4223. Vocal Coaching. 1 Credit Hour.

Emphasis on style, diction, phrasing, and performance traditions. Preparation for senior recital. NOTE: Open only to Voice Majors. One hour per week.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 4224. Vocal Coaching. 1 Credit Hour.

Emphasis on style, diction, phrasing, and performance traditions. Preparation for senior recital. NOTE: Open only to Voice Majors. One hour per week.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 4223.

MUSC 4225. Vocal Pedagogy. 2 Credit Hours.

Basic principles and techniques of training the solo voice. NOTE: Open only to Voice Majors.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 4226. Diction Skills. 1 Credit Hour.

Study of the phonetic rules and sounds of the classical pronunciations of Italian and French as found in Art Song and Opera. The International Phonetic Alphabet is utilized. NOTE: Singing is required.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 4227. Diction Skills. 1 Credit Hour.

Study of the phonetic rules and sounds of the classical pronunciations of French, Latin and German as found in Art Song and Opera. The International Phonetic Alphabet is utilized. NOTE: Singing is required.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 4226.

MUSC 4228. Opera Workshop. 3 Credit Hours.

Opera Workshop is designed to give singers the opportunity to develop and refine singing/acting skills through the study of operatic literature. NOTE: Open only to Voice Majors.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUSC 4229. Opera Workshop. 2 Credit Hours.

Opera Workshop is designed to give singers the opportunity to develop and refine singing/acting skills through the study of operatic literature. NOTE: Open only to Voice Majors.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in MUSC 4228.

MUSC 4233. Musical Theater: Dress Rehearsal. 2 Credit Hours.

The Musical Theater Concentration culminates in MUSC 4233, an intensive audition and performance seminar specially designed to prepare students for the rigorous demands of auditioning for and performing in professional musical theater. Throughout the semester, visiting guest professionals from Philadelphia and New York City provide valuable insight into the realities of acting in the musical theater as a profession.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater.

Repeatability: This course may not be repeated for additional credits.

MUSC 4258. Performing Musical Theater. 2 Credit Hours.

Music Theater Performance Class offers the student the opportunity to develop and refine singing/acting skills through the preparation and presentation of solos, duets, ensembles and dialogues from American Music Theater repertoire.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUSC 4284. Voice Major. 3 Credit Hours.

Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in MUSC 4203.

MUSC 4296. Vocal Pedagogy. 3 Credit Hours.

Basic principles and techniques of training the solo voice with related writing assignments. NOTE: This is a writing-intensive course.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Voice & Opera.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 3204.

MUSC 4300. Concert Choir. 0 to 1 Credit Hours.

Auditions are held during the final week of fall semester for the spring semester, and at the end of spring semester and during August for fall semester. Auditions will be granted based on previous choral experience. Performance of a wide range of choral literature. NOTE: Active performance schedule on and off campus. Contact the office manager at 215-204-8304 for specific audition dates.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUSC 4310. Graduate Conductors Choir. 0 to 1 Credit Hours.

Two hours of rehearsal each week; two performances each semester.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Co-requisites: MUSC 4300.

Repeatability: This course may be repeated for additional credit.

MUSC 4323. Conducting (Choral). 2 Credit Hours.

Problems correlating vocal and choral idioms; analysis and interpretation of choral literature appropriate for use in school and community. NOTE: Although the conducting course sequence [Music 2323 (0123), Music 2324 (0124), Music 4323 (0330)] is intended primarily for music majors, it is possible for other students to enroll if they have evidence of a background in music theory.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 2324.

MUSC 4324. Conducting (Instrumental). 2 Credit Hours.

Advanced instrumental conducting techniques including asymmetrical time patterns, multi-meters, phrasing and rehearsal techniques. Instrumental score study and preparation. Conducting of band and orchestra repertoire of varying levels of difficulty with ensembles.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 2324.

MUSC 4352. Singing Owls Campus/Community Choir. 0 to 1 Credit Hours.

The Singing Owls is a chorus comprised of Temple University students and members of the Greater Philadelphia community, and is open to all without audition. The ensemble rehearses once weekly and performs once per semester. Repertoire is varied and diverse. Members may elect to participate for Temple University academic credit or pay a nominal fee to join as a community member.

Repeatability: This course may be repeated for additional credit.

MUSC 4353. Teaching Choral Music. 2 Credit Hours.

For the prospective teacher of vocal music; practical solutions to problems of audition procedures, development of musical skills within the choral rehearsal, repertoire and programming, voice classes, performance planning and execution, the changing voice, etc. NOTE: Required of music education majors with concentrations in voice and keyboard instruments.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 4323.

MUSC 4401. Piano Concentration. 2 Credit Hours.

Weekly private lesson and regularly scheduled master classes with major teacher. With instructor's permission, student may present either half or full senior recital.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 3402.

MUSC 4402. Piano Concentration. 2 Credit Hours.

Weekly private lesson and regularly scheduled master classes with major teacher. With instructor's permission, student may present either half or full senior recital.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 4401.

MUSC 4403. Piano Major. 4 Credit Hours.

Weekly private lesson and regularly scheduled master classes with major teacher. Culminates in full recital during final semester of study. Students are required to perform or teach private lessons outside the university, subject to availability and/or scheduling conflicts with other Boyer courses or obligations.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 3404.

MUSC 4431. Introduction to the Alexander Technique. 1 Credit Hour.

This course offers a basic understanding of the history and principles of the Alexander Technique. It is designed to enable the student to enhance expression and performance skills, prevent injuries, and develop healthy practice and rehearsal techniques. The technique offers a practical solution to on-going issues with pain and fatigue, effective expression and intonation, breath support and stage presence. The principles can be applied to all areas of creative expression, from instrumental, vocal and dance technique, to acting, writing, painting and sculpting.

Repeatability: This course may not be repeated for additional credits.

MUSC 4484. Piano Major. 4 Credit Hours.

Weekly private lesson and regularly scheduled master classes with major teacher. Culminates in full recital during final semester of study. Students are required to perform or teach private lessons outside the university, subject to availability and/or scheduling conflicts with other Boyer courses or obligations.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in MUSC 4403.

MUSC 4500. Instrumental Ensemble. 1 Credit Hour.

Large or small instrumental ensemble. Ensemble may include symphony orchestra, wind symphony, chamber music ensembles, percussion ensemble, brass ensembles, and other small instrumental ensembles.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUSC 4501. Instrumental Concentration. 2 Credit Hours.

Weekly instrumental private lesson with major teacher for music education/jazz and jazz arranging curricula.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 3502.

MUSC 4502. Instrumental Concentration. 2 Credit Hours.

Weekly instrumental private lesson with major teacher for music education/jazz and jazz arranging curricula. With instructor's permission, student may present either half or full recital during this final semester of study.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 4501.

MUSC 4503. Instrumental Major. 4 Credit Hours.

Weekly instrumental private lesson with major teacher. Open only to candidates for a Bachelor of Music degree with a major in instrumental performance. Weekly instrumental private lesson with major teacher. Students are required to perform or teach private lessons outside the university, subject to availability and/or scheduling conflicts with other Boyer courses or obligations. NOTE: This course is for majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 3504.

MUSC 4510. Instrumental Ensemble. 1 Credit Hour.

Large or small instrumental ensemble. Ensemble may include symphony orchestra, wind symphony, chamber music ensembles, percussion ensemble, brass ensembles, and other small instrumental ensembles.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUSC 4520. Ensemble. 1 Credit Hour.

For students performing in more than two ensembles with the same number or of the same type. Could be a large or small ensemble.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUSC 4521. Large Ensemble. 1 Credit Hour.

Large instrumental or vocal ensemble. Ensemble may include symphony orchestra, wind symphony, percussion ensemble, brass ensembles, musical theater orchestra, and choir.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUSC 4539. Instrumental Conducting Seminar: Score Analysis, Programming & Interpretation of Wind Ensemble Lit. 2 Credit Hours.

Focus on score study, programming, rehearsal techniques and advancement of personal interpretation specifically related to the wind ensemble and its literature.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (MUSC 4323 or MUSC 4324)

MUSC 4541. History of Wind & Brass Chamber Music. 2 Credit Hours.

Traces the development of small wind and brass chamber ensembles from circa 1000 to the present. Examines quintets, the Vienna octet school, harmoniemusik, and works for various combinations of instruments with emphasis on their literature.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 4544. Wind Repertory in History: European Antiquity through the 21st Century. 2 Credit Hours.

This course will survey the development and repertory of wind-band music from European Antiquity through the present day. Course topics will include the examination and analysis of the development of instruments, cornerstone pieces in each period, performance practice considerations, commissioning projects, current state of wind-band performance opportunities, varied styles of concert programming, audio identification, and developing strategies to determine quality repertory for the medium.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (MUSC 3201, MUSC 3203, MUSC 3401, MUSC 3403, MUSC 3501, or MUSC 3503)

MUSC 4552. Samba Owls. 1 Credit Hour.

A fun, high-energy musical ensemble exploring the rhythms, sounds, and movement of Brazil's samba schools. Participants will learn actively as a performing member of a *batucada*, the traditional percussion ensemble of the samba groups. Students are involved in rhythm, drumming, movement, and singing/vocalization. There are no musical prerequisites - anyone is welcome to join.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may be repeated for additional credit.

MUSC 4556. Afro-Cuban Percussion Techniques. 2 Credit Hours.

A practical study in the musical language and percussive traditions of Afro-Cuban and Latin American music. The goal is to equip the learner with greater knowledge, understanding, and practical performance skills with regard to percussion instruments of the Afro-Cuban musical traditions. Students will engage in group performance and improvisation and will hone ensemble and presentation skills. The course experience is largely a "hands-on" lab; therefore, students are required to attend the weekly meetings.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUSC 4560. Seminar in Guitar Performance and Literature. 1 to 2 Credit Hour.

Exploration of issues related to performance. Analysis of representative works. Attention to problems of transcription and performance practice. Performance of representative guitar chamber and ensemble literature.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUSC 4561. Percussion Pedagogy. 2 to 3 Credit Hours.

Course designed to enable students to develop the necessary knowledge and skills to make intelligent and informed decisions about the teaching of percussion instruments. Students will analyze, compare and critique curricula, teaching modalities, performance practices, methods, materials, and literature.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 1651.

MUSC 4563. Upper String Pedagogy. 2 Credit Hours.

Problems and teaching techniques; solo and ensemble literature; available teaching materials at beginning through advanced levels.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 4567. Viola for Violinists. 1 Credit Hour.

Performance-oriented course for violin performance majors or music education majors whose main instrument is violin. Focus is on the differences between violin playing and viola playing, including clef reading, vibrato, and bowing techniques. Orchestral excerpts, short solos, and chamber music from the baroque to the present are performed in class. Students are asked to bring their own viola if possible.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUSC 4570. Orchestral Repertoire. 1 to 2 Credit Hour.

Reading workshop to acquaint players with standard orchestral repertoire and playing techniques. NOTE: Separate sections offered for woodwinds, brasses, and string instruments.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUSC 4584. Instrumental Major. 4 Credit Hours.

Weekly instrumental private lesson with major teacher. Student is required to present a full recital during this semester of study. Open only to candidates for a Bachelor of Music degree with a major in instrumental performance. Weekly instrumental private lesson with major teacher. Students are required to perform or teach private lessons outside the university, subject to availability and/or scheduling conflicts with other Boyer courses. NOTE: This course is for majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in MUSC 4503.

MUSC 4603. Harpsichord Major. 4 Credit Hours.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 3604.

MUSC 4652. Owlchestra Campus Community String Orchestra. 1 Credit Hour.

The Owlchestra is a string orchestra comprised of Temple University students (majors and non-majors) and members of the Greater Philadelphia Community. No audition is required for membership. The ensemble meets one evening per week, totaling two hours of rehearsal, and performs a concert at the end of each semester. Members may elect to participate for Temple University academic credit or pay a nominal fee to join as a community member (course credit is not transcribed in the latter choice).

Repeatability: This course may be repeated for additional credit.

MUSC 4684. Harpsichord Major. 4 Credit Hours.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in MUSC 4603.

Music Education (MUED)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

MUED 1651. Percussion. 1 Credit Hour.

Methods for teaching percussion skills to students in a school setting. Topics may include but are not limited to: literature selection, various instrument performance idiosyncrasies, hand position and posture, maintenance, repair, proactive teaching and troubleshooting, methods and materials; instrument makes, accessories. Students are required to develop a fundamental playing knowledge of instruments and literature. NOTE: Required of all music education majors.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

MUED 1652. Woodwinds I. 1 Credit Hour.

Methods for teaching woodwind skills to students in a school setting. Topics may include but are not limited to: literature selection, instrument assembly, hand position and posture, maintenance, assembling, embouchure, tone production, transposition, fingerings, range; proactive teaching and troubleshooting, methods and materials; instrument makes, and accessories. Students are required to develop a fundamental playing knowledge of instruments. NOTE: Required of all music education majors.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

MUED 1653. Upper Strings. 1 Credit Hour.

Students with voice, piano, or guitar performance concentration may take either Music Education 1653 (0052) or Music Education 1654 (0053) [Music Education 1653 (0052) is recommended]. Methods for teaching string skills to students in a school setting. Topics may include but are not limited to: literature selection, fingering and bowing patterns, shifting, vibrato, hand position and posture, maintenance, tone production, proactive teaching and troubleshooting, methods and materials; instrument makes, and accessories. Students are required to develop a fundamental playing knowledge of instruments. NOTE: Required of all music education majors with band or orchestra emphasis.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

MUED 1654. Lower Strings. 1 Credit Hour.

Students with voice, piano, or guitar performance concentration may take either Music Education 1653 (0052) or Music Education 1654 (0053) [Music Education 1653 (0052) is recommended]. Methods for teaching string skills to students in a school setting. Topics may include but are not limited to: literature selection, fingering and bowing patterns, shifting, vibrato, hand position and posture, maintenance, tone production, proactive teaching and troubleshooting, methods and materials; instrument makes, accessories. Students are required to develop a fundamental playing knowledge of instruments. NOTE: Required of all music education majors with band or orchestra emphasis.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

MUED 1655. Brass I. 1 Credit Hour.

Methods for teaching brass skills to students in a school setting. Topics may include but are not limited to: literature selection, instrument assembly, hand position and posture, maintenance, embouchure, tone production, transposition, fingerings, range; proactive teaching and troubleshooting, methods and materials; instrument makes, accessories. Students are required to develop a fundamental playing knowledge of instruments. NOTE: Required of all music education majors.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

MUED 1656. Brass II. 1 Credit Hour.

Advanced methods for teaching brass skills to students in a school setting. Topics may include but are not limited to: literature selection, instrument assembly, hand position and posture, maintenance, embouchure, tone production, transposition, fingerings, range; proactive teaching and troubleshooting, methods and materials; instrument makes, accessories, and repairs. Students are required to develop a fundamental playing knowledge of instruments. NOTE: Required of all music education majors.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

MUED 1657. Woodwinds II. 1 Credit Hour.

Methods for teaching double reed skills to students in a school setting. Topics may include but are not limited to: literature selection, instrument assembly, hand position and posture, maintenance, embouchure, tone production, transposition, fingerings, range; proactive teaching and troubleshooting, methods and materials; instrument makes, and accessories. Students are required to develop a fundamental playing knowledge of instruments. NOTE: Required of all music education majors.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

MUED 1658. Guitar I. 1 Credit Hour.

Carefully sequenced developmental technical exercises designed to achieve competency with basic chord formations in all keys.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUED 1659. Guitar II. 1 Credit Hour.

A continuation of Music Education 1658 (0058) in which skills are further developed to include positions and more advanced folk and popular accompaniment techniques.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUED 1658.

MUED 1671. Collaboration & Creativity in the New Music Community. 3 Credit Hours.

This is an experiential course for students in the major. Its focus is on teaching music as a collaborative pursuit involving free and creative personal expression among all people in learning communities. Topics will include (but not be limited to) awareness and development of community music, roles of music industry and music institutions as resources in music instruction, organizing and leading collaborative musical experiences, social and cultural aspects of music involvement, the value of informal music making, improvisation, and composing. NOTE: This course is for majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in minimum GPA of 3 in: (MUED 2665, MUED 4666, MUED 3661, and MUED 2696)

MUED 2665. Music Learning & Development. 3 Credit Hours.

Understanding how learners develop and how individual learners' needs affect music learning can inform teachers how to teach. In this course, preservice music teachers study music development from the learners' perspective and begin to process ways in which music learning theories, approaches, processes, and methods can guide learners' development. NOTE: Includes field observations. This course is for majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MUED 3661 and MUED 4666)

MUED 2671. School Choral Ensembles. 2 Credit Hours.

In this course, preservice music teachers increase their understanding of vocal development, inclusive vocal settings, diverse music repertoire and transfer of music across in-school and out-of-school settings. Preservice music teachers consider a variety of approaches to ensemble formations (e.g.: non-select/select-implications of inclusion/exclusion; curricular/extra-curricular) and ways in which types of school ensembles (e.g.: Jazz, Show Choir, Barbershop, Gospel, Women's Chorus, Men's Chorus, Mixed Chorus) have traditionally been established and maintained. Contemporary research and practice, with implications for new types of vocal and choral ensembles in Pre-K-12 school settings, also will be considered. Emphasis is on building a course of study for choral music in schools. NOTE: Special authorization only. In-class performances and peer evaluations, and observations (in-class) required. This course is for majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

MUED 2672. Diction Using Choral Repertoire. 2 Credit Hours.

Orientation to the International Phonetic Alphabet and its application to literature appropriate for solo and choral literature in English, Italian, German, and French. NOTE: Special authorization only. In-class performances of literature in the language required. This course is for majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

MUED 2673. Jazz Education - Instrumental. 2 Credit Hours.

This course surveys strategies for the development of the instrumental jazz ensemble in secondary school settings. Topics will include (but not be limited to): instrumentation, rehearsal techniques, literature, listening, improvisation, styles, rhythm, articulation, rhythm section, and programming. NOTE: Special authorization only. Required of all music education majors with band or orchestra emphasis.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

MUED 2674. Jazz Education - Vocal. 2 Credit Hours.

This course surveys strategies for the development of the vocal jazz ensemble in secondary school settings. Topics will include (but not be limited to): Swing and show choirs, balancing voices, rehearsal techniques, literature, listening, improvisation, styles, rhythm, articulation, rhythm section, and programming. NOTE: Special authorization only; required for all music education majors with choral or general emphasis.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

MUED 2675. Inclusive Vocal Development: Pre-Kindergarten - Secondary. 2 Credit Hours.

In this course, preservice music teachers learn to guide their future students through stages of vocal development. Emphases include presentation of an exemplary vocal model for one's students, voice care for choral musicians and teachers, and considerations for selecting repertoire appropriate for Pre-Kindergarten, elementary, and secondary school choral musicians. NOTE: Special authorization only. In-class performances and peer evaluations, and observations (in-class) required. This course is for majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

MUED 2696. Teaching General Music to Inclusive Populations (TGMIP). 3 Credit Hours.

The principles, practices, and materials central to the general music program in elementary and secondary education. NOTE: Special authorization only. Required for all music education majors. Includes Field Experience.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MUED 2665, MUED 4666, and MUED 3661)

MUED 3385. Diamond Peer Teachers - Internship I. 1 Credit Hour.

The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

Repeatability: This course may be repeated for additional credit.

MUED 3386. Diamond Peer Teachers - Internship II. 1 Credit Hour.

The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

Repeatability: This course may be repeated for additional credit.

MUED 3631. Functional Voice I. 1 Credit Hour.

Students will learn how to use their voices appropriately and safely in clinical situations; how to sing standard clinical repertoire by memory. NOTE: A two-semester sequence for Music Therapy majors.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUED 3632. Functional Voice II. 1 Credit Hour.

A continued development of skills learned in Functional Voice I, where students will learn techniques on eliciting singing responses from various client populations. NOTE: A two-semester sequence for Music Therapy majors.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUED 3631.

MUED 3633. Functional Piano I. 1 Credit Hour.

Students will develop functional skills and repertoire for leading and accompanying vocal and instrumental activities in the music therapy setting.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUED 3634. Functional Piano II. 1 Credit Hour.

A continued development of skills learned in Functional Piano I, where students continue to learn functional skills for accompanying therapy sessions.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUED 3633.

MUED 3635. Functional Guitar I. 1 Credit Hour.

Students will develop functional singing and accompanying skills on guitar using the music therapy song literature. Second semester is a continuation.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUED 3636. Functional Guitar II. 1 Credit Hour.

A continuation of skills learned in Functional Guitar I, where students continue to learn various techniques and accompanying skills on guitar.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUED 3635.

MUED 3651. Music Education Lab Ensemble. 0 or 1 Credit Hours.

This is an experiential course with a focus on either concert band or Choral Ensemble Literature selection and rehearsal techniques appropriate for beginning and intermediate level ensembles. Students will participate through performance on primary and secondary instruments or by singing various choral parts as well as conducting and rehearsing.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in minimum GPA of 3 in: (MUED 2323 and MUED 2324)

MUED 3661. Introduction to Teaching Students with Special Needs. 3 Credit Hours.

A foundation for understanding the characteristics of exceptional children and the implications of these characteristics to music education. A variety of music materials especially designed or adaptable for teaching music to handicapped children discussed in terms of their practical use for classroom instruction.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

MUED 3662. Keyboard Harmony - Music Education. 3 Credit Hours.

Skills development in use of the keyboard as a classroom tool. Focus on chord progressions, sequences, modulations, harmonizations of small forms, transposition, extemporization, score reading. NOTE: Special authorization only. Required for all music education majors.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MUSC 2406 or MUST 2106)

MUED 3680. Music Therapy: Special Topics. 2 Credit Hours.

An in-depth examination of a particular topic in Music Therapy practice, research or theory.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (MUED 3689, MUED 3789, MUED 3889, or 'Y' in CRME01)

MUED 3689. Fieldwork in Music Therapy. 1 to 3 Credit Hour.

Supervised field placements where students learn how to plan and conduct music therapy sessions with different client populations.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUED 3789. Fieldwork in Music Therapy II. 1 to 3 Credit Hour.

Supervised field placements where students learn how to plan and conduct music therapy sessions with different client populations.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUED 3889. Fieldwork in Music Therapy III. 1 to 3 Credit Hour.

Supervised field placements where students learn how to plan and conduct music therapy sessions with different client populations.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUED 4611. Music Therapy Overview. 3 Credit Hours.

An introduction to music therapy theory and practice. Clinical case studies will be used to illustrate general principles of assessment, goal planning, treatment and evaluation.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUED 4613. Music Therapy Foundations. 3 Credit Hours.

An examination of philosophical, psychological, biological and sociological foundations for the use of music as therapy.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUED 4614. Psychiatric Music Therapy. 3 Credit Hours.

An examination of music therapy practice with psychiatric populations (e.g., schizophrenia, affective disorders, PTSD), with laboratory training in how to design and implement music experiences to meet therapeutic goals.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUED 4615. Rehabilitative Music Therapy. 3 Credit Hours.

A survey of music therapy literature based on physical rehabilitation (e.g., brain injury, stroke, cerebral palsy, neuromotor disease), with laboratory training in how to design and implement music experiences to meet therapeutic goals.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUED 4616. Developmental Music Therapy. 3 Credit Hours.

An examination of music therapy methods used with children who have developmental problems (e.g., mental retardation, learning disabilities, behavior problems, sensory disorders) with laboratory training in how to design and implement music experiences to meet therapeutic needs.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in MUED 4611.

MUED 4617. Medical Music Therapy. 3 Credit Hours.

A survey of music therapy literature based on medical applications (e.g., general hospital, surgery, chronic and terminal illness), with laboratory training in how to design and implement music experiences to meet therapeutic goals. NOTE: This course is for majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUED 4618. Music Therapy Ethics. 1 to 2 Credit Hour.

An examination of ethical issues in music therapy practice, research, education, and supervision.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUED 4619. Medical/Rehabilitative Music Therapy. 3 Credit Hours.

An examination of music therapy treatment in physical rehabilitation treatment (e.g., brain injury, stroke, cerebral palsy, neuromotor disease) and medical issues (surgery, diabetes, cancer, AIDS) with laboratory training in how to design and implement music experiences to meet therapeutic goals. NOTE: This course is for majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUED 4641. Music Therapy Experiences I: Creative Methods. 1 Credit Hour.

Students experience creative methods of Music Therapy and explore their therapeutic potential. NOTE: This course is for majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUED 4642. Music Therapy Experiences II: Recreative Methods. 1 Credit Hour.

Students experience recreative methods of Music Therapy and explore their therapeutic potential. NOTE: This course is for majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in MUED 4611.

MUED 4643. Music Therapy Experiences III: Receptive Methods. 1 Credit Hour.

Students experience receptive methods of Music Therapy and explore their therapeutic potential. NOTE: This course is for majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in MUED 4611.

MUED 4646. Music Therapy Research. 3 Credit Hours.

A survey of music therapy research provides a foundation for developing skills in formulating research questions, reviewing the literature, designing a study, analyzing and interpreting data, and writing reports. Ethical issues are considered.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUED 4650. Contemporary Problems in Music Education. 1 to 3 Credit Hour.

Study of recent trends and issues in Music Education through critical examination of research and practical application of selected techniques.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may be repeated for additional credit.

MUED 4652. Night Owls Campus/Community Band. 0 or 1 Credit Hours.

The Night Owls Campus/Community Band is a large concert wind band that is comprised of Temple University students (majors and non-majors) and community members from the Greater Philadelphia area. No audition is required for membership. The ensemble meets one evening per week, totaling two hours of rehearsal, and performs a concert at the end of each semester. Repertory performed includes standard wind literature and crowd-pleasing favorites. Members may elect to participate for Temple University academic credit or pay a nominal fee to join as a community member (course credit is not transcribed in the latter choice). NOTE: Ability to read music is required; personally owned instrument or rental needed.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may be repeated for additional credit.

MUED 4661. Curricular Options in Secondary School Music. 3 Credit Hours.

Training in effective and ethical music teaching, pedagogy, systematic observation skills, classroom management, and diverse populations. Classroom activities and assignments call on the synthesis of musical knowledge and skills acquired throughout the degree program in preparation for a successful Student Teaching experience.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUED 2665.

MUED 4663. Interactive Multimedia I. 3 Credit Hours.

This course is designed to teach students how to create interactive multimedia applications using authoring software, multimedia hardware, and multimedia elements such as sound files, digital video, standard MIDI files, and clip art. Students will complete a final project demonstrating their ability to effectively use the hardware and software in creating a useful interactive multimedia application for education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUED 4664. Interactive Multimedia II. 3 Credit Hours.

Students will be able to create multimedia objects using graphics, digital audio, digital video, and MIDI hardware and software. Each student will complete a final project demonstrating his or her ability to effectively use multimedia hardware and software in creating a useful application for education. The final project will be deployed on the World Wide Web.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUED 4663.

MUED 4666. Assessment of Music Learning. 3 Credit Hours.

Students learn to measure music learning (achievement), skill-based and cognitive-based, and to measure music potential (aptitude) across a range of ages. They write achievement tests, which they evaluate subjectively and statistically, and learn to evaluate the quality and appropriateness of standardized tests of music achievement and music aptitude. NOTE: Special authorization only. Required for all music education majors.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

MUED 4667. Teaching Instrumental Music to Inclusive Populations. 3 Credit Hours.

For the prospective teacher of instrumental music in the elementary and secondary schools. A synthesis of all previous work in instrumental music courses. Emphasis on efficient rehearsal and teaching techniques for small and large group settings; developing musical and technical skills of instrumental music students; recruiting; repertoire; programming; performance issues; evaluation; administration. NOTE: Required of music education majors.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MUED 1651, MUED 1652, MUED 1653, MUED 1654, MUED 1655, MUED 1656, MUED 1657, and MUED 2665)

MUED 4668. Senior Student Teaching Seminar. 1 to 3 Credit Hour.

Seminar for senior music education majors enrolled in Music Education 4689 (0351) and/or Music Education 4789 (0352). NOTE: Special authorization only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

MUED 4669. Teaching Choral Music to Inclusive Populations. 2 to 3 Credit Hours.

For the prospective teacher of vocal music; practical solutions to problems of audition procedures, development of musical skills within the choral rehearsal, repertoire and programming, voice classes, performance planning and execution, the changing voice, and needs of special learners. NOTE: Required for all music education majors.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in minimum GPA of 3 in: (MUED 2665, MUED 4666, and MUED 3661)

MUED 4670. Special Problems in Music Education. 1 to 4 Credit Hour.

Registration by special course authorization. NOTE: Arranged by semester, please consult with the instructor.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may be repeated for additional credit.

MUED 4680. Music Therapy: Special Topics. 1 to 4 Credit Hour.

An in-depth examination of a particular topic in Music Therapy practice, research, or theory.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Music Therapy, Music Therapy Jazz.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUED 4685. Music Therapy Clinical Internship. 1 to 6 Credit Hour.

Academic supervision of clinical experiences in music therapy with various client populations. NOTE: Weekly seminars with other interns are required. This course is for majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Therapy, Music Therapy Jazz.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUED 4689. Student Teaching-Elementary. 3 Credit Hours.

Field experience in elementary grades for senior music education majors. NOTE: Special authorization only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may be repeated for additional credit.

MUED 4696. Music Therapy Research. 3 Credit Hours.

A survey of music therapy research provides a foundation for developing skills in formulating research questions, reviewing the literature, designing a study, analyzing and interpreting data, and writing reports. Ethical issues are considered.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

MUED 4697. Music Therapy Foundations. 3 Credit Hours.

This writing intensive course involves a critical examination of music therapy theory, focusing on philosophical, psychological, biological, and socio-cultural foundations for the practice of music therapy.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in MUED 4611, (MUED 4614 or 'Y' in CRME02), (MUED 4616 or 'Y' in CRME04), (MUED 4619 or 'Y' in CRME03), MUED 3689, (MUED 3789 or 'Y' in CRME01), and MUED 3889.

MUED 4789. Student Teaching - Secondary. 3 Credit Hours.

Field experience in secondary grades for senior music education majors.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may be repeated for additional credit.

Music Studies (MUST)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

MUST 0802. The Art of Listening. 4 Credit Hours.

Experience Philadelphia's riveting arts scene through its awesome music performance groups. In The Art of Listening, you don't have to read music or play an instrument to discover how music of all kinds can be both edifying and entertaining. Class members will go on four field trips visiting Philadelphia's leading music halls to hear world-renowned performers playing a variety of music including Classical, Jazz, Broadway and World Music. Additionally, professional musicians active in the field will visit the classroom for demonstrations. Guided listening exercises will enable you to listen with increased clarity. Learning musical elements will empower you to acquire a skill set that can be applied to all of your listening preferences. Equally important, practicing open-minded listening may reveal new portals for greater appreciation of the arts and humanities and prompt you to ponder the importance of music in your life and to society. NOTE: This course fulfills the Arts (GA) GenEd requirement. Students cannot receive credit for this course if they have successfully completed MUST 0902.

Course Attributes: GA

Repeatability: This course may not be repeated for additional credits.

MUST 0804. Shakespeare and Music. 3 Credit Hours.

What is it about the Bard of Stratford-on-Avon? From the concert hall to the stage and silver screen, no other author's works have inspired more adaptations than those of William Shakespeare. In this new century, as the "cult of originality" continues to grow at an exponential rate and celebrity is sought as an end in itself (see Hilton, Paris), why have the works of a man whose very identity is shrouded in mystery remained so popular? This course will explore "Macbeth," "A Midsummer Night's Dream" and "Romeo and Juliet," and their adaptation by composers and choreographers. Students will then get a chance to "bend the Bard" on their own! NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core.

Course Attributes: GA

Repeatability: This course may not be repeated for additional credits.

MUST 0808. The Sounds of Philadelphia. 3 Credit Hours.

Often called "The Birthplace of the United States," Philadelphia has an extraordinarily rich and important musical history that is emblematic of the diverse populations that created this nation. From the late eighteenth century to the present day, Philadelphia has cultivated innovative musical styles that are as varied as the city's population itself. This course will explore the history of music in Philadelphia, using music as a gateway to understand and challenge assumptions regarding issues of race, gender, sexuality, class, ethnicity, and identity. In this course, students will learn about composers, musical artists, and institutions with deep roots in Philadelphia in the framework of issues related to race and diversity. They will be asked to critically reflect on experiences in their own lives that influenced their musical tastes and to explore the connections between musical preference and identity. NOTE: This course fulfills the Race and Diversity (GD) GenEd requirement.

Course Attributes: GD

Repeatability: This course may not be repeated for additional credits.

MUST 0809. World Musics & Cultures. 3 Credit Hours.

Have you ever wondered why musical compositions from different parts of the world sound so dissimilar? Discover how an artist's creative imagination is molded by the cultural values of the society at large. Listen to guest musicians demonstrate different styles of playing and attend a live concert. Examine folk, art and popular music from around the world and discuss the wonderful sounds that are produced. NOTE: This course fulfills the Arts (GA) GenEd requirement. Students cannot receive credit for this course if they have successfully completed MUST 0909.

Course Attributes: GA

Repeatability: This course may not be repeated for additional credits.

MUST 0812. Exploring Music. 3 Credit Hours.

Exploring Music is designed to be an enjoyable and engaging introduction to some of the most recognized and influential compositions and composers in Western music past and present. In this course, you will learn how to listen to music on deeper and more nuanced levels and explore its roles within the wider contexts of historical and contemporary societies. Throughout the course, you will be involved in the process of exploring music through viewing video recordings of concerts, operas, ballets, films, and/or staged productions, participating in active listening exercises, engaging in discussions about music, and attending at least one live concert. No musical background or training is assumed or required. NOTE: This course fulfills the Arts (GA) GenEd requirement.

Course Attributes: GA

Repeatability: This course may not be repeated for additional credits.

MUST 0902. Honors: The Art of Listening. 4 Credit Hours.

Are you an active or passive listener? What kind of music do you enjoy? How do you compare different musical styles, and what qualities make one performance different from another? Be challenged to rethink your entire conception of music by focusing on how to listen to music to deepen your appreciation of what you are hearing, and to ponder the importance of music in your life and to society. You will not be required to become a performer yourself, but you will become a more discriminating consumer of music through attendance at live concerts in the local area, by observation of in-class performances, rehearsals, and music lessons, and through guided listening exercises in and outside of class. Repertoire selected from Classical, Jazz, Broadway, and World Music will engage your intellectual and emotional response as a concert-goer, listener, researcher, critic, and communicator. (This is an Honors course.) NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed MUST 0802.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GA, HO

Repeatability: This course may not be repeated for additional credits.

MUST 0909. Honors World Musics & Cultures. 3 Credit Hours.

Have you ever wondered why musical compositions from different parts of the world sound so dissimilar? Why does Japanese music employ silence as a structural element and Chinese melodies use only five notes? Discover how an artist's creative imagination is molded by the cultural values of the society at large. Listen to guest musicians demonstrate different styles of playing and attend a live concert. Examine folk, art and popular music from around the world and discuss the wonderful and strange sounds that are produced. (This is an Honors course.) NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed MUST 0809.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GA, HO

Repeatability: This course may not be repeated for additional credits.

MUST 1045. Introduction to Music Theory and Literature. 2 Credit Hours.

Introduction to basic theoretical concepts of music. A wide range of musical compositions, drawn from different musical cultures and various periods of music history.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUST 1106. Jazz Secondary Piano. 1 Credit Hour.

Introduction to voicing techniques, sight reading, comping, improvisation, and advanced jazz voicings

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUSC 1405.

MUST 1118. Business of Music I. 2 Credit Hours.

Business fundamentals for the Performing Artist.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUST 1131. Aural Skills I Jazz-Comm. 2 Credit Hours.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUST 1132. Aural Skills II Jazz. 2 Credit Hours.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUST 1133. Harmony I: Jazz. 3 Credit Hours.

Basic jazz theory with emphasis upon standard melodic and harmonic structures in jazz practice, diatonic intervals, seventh chords, modulation, inversions, secondary dominant chords, tritone substitutions, melodic and harmonic analysis.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUST 1134. Harmony II: Jazz. 4 Credit Hours.

Intermediate jazz theory with emphasis upon intermediate rhythmic and melodic transcription, chord-scale relationship, harmonic analysis, extended voicings, modal harmony.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 1133.

MUST 1701. Music Theory for Non-Music Majors. 2 Credit Hours.

Basic musical theory. Basic scales, intervals, rhythm and chord structures, simple harmonization, rudimentary aural theory. Some previous training is helpful, but not necessary. NOTE: For non-music majors.

Repeatability: This course may not be repeated for additional credits.

MUST 1702. Introduction to Music. 1 Credit Hour.

A companion course to Music Studies 1761 (C061) for first-term freshmen. This course provides guidance with the assignments of the core course. Emphasis is on reading, listening, speaking, and writing within the context of the core course. Assistance is also given in the continued development of English-language skills, especially academic reading and the acquisition of a general academic vocabulary. NOTE: Offered at Temple University Japan only.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 1701.

MUST 1703. Introduction to World Music. 3 Credit Hours.

Exposes students to the diversity of music cultures existing in the world today and also to the particular instruments, genres, and musical contexts with which they are associated. Students become acquainted with research topics of interest to ethnomusicologists in recent years. NOTE: (1) Open to non-music majors only. No prior musical experience or coursework is necessary. (2) This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors.

Course Attributes: IS

Repeatability: This course may not be repeated for additional credits.

MUST 1704. Music in American Society. 3 Credit Hours.

Using a historical framework, this course will survey various styles of music found in the United States. Folk, fine art, and popular music examples will be examined on the basis of their intrinsic qualities, as well as in connection with their social, economic, and political milieu. Issues of racism in American society's musical life will be an ongoing theme. NOTE: (1) No prior musical experience or course work is necessary. (2) This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AC

Repeatability: This course may not be repeated for additional credits.

MUST 1705. Music Theory for Non-Music Majors II. 3 Credit Hours.

"Music Theory for Non-Majors II" is a continuation of "Music Theory for Non-Majors I." It is a partly theoretical, partly skills-based approach to learning the basics of music theory. In addition to covering more advanced rudiments (all diatonic 7th chords, all common types of cadences and phrase structures, simple chromaticism, larger forms, etc.), students will complete counterpoint and part-writing exercises, do rhythmic and solfège exercises in class and write short compositions. For the final exam, students will be expected to do some or all of the following: write a two-part melodic dictation; complete a simple harmonic dictation; sing melodies with solfège (prepared and at sight); analyze form (either aurally or visually); analyze phrase structures, cadences, Roman Numerals, and non-chord tones; realize a figured bass; and harmonize a soprano line (SATB).

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 1701.

MUST 1711. Theory I. 4 Credit Hours.

Introduction to melody, modal counterpoint, all species of two-part writing and basic voice leading, along with simple diatonic harmony and figured bass. Exercises include writing original second parts to given melodies, four-part harmonization of diatonic melodies, and analysis of music literature excerpts. NOTE: (1) Special authorization required for non-music majors. (2) This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Course Attributes: AR

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: 'Y' in MTPT.

MUST 1712. Theory II. 4 Credit Hours.

Continuation of the study of tonal harmony; introduction of chromaticism, diatonic modulation, and expanded forms such as sonata allegro and rondo through analysis of larger works and composition of short pieces. NOTE: Special authorization required for non-music majors. Section 005 - Jazz Majors only. Jazz Harmony I & Aural Skills I-- Basic jazz musicianship with emphasis upon sight-singing, interval recognition, jazz syncopation, triads, seventh and ninth chords, basic chord progressions, melodic and harmonic dictation.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MUST 1711 or MUST 3770)

MUST 1741. Aural Theory I. 2 Credit Hours.

A basic course in the aural perception and singing of intervals, scales, and triads. Special attention to application of these concepts as well as other musical parameters in the aural perception of a wide variety of literature. NOTE: Remedial section available.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUST 1742. Aural Theory II. 2 Credit Hours.

Further study of intervals, scales, and triads, with special attention given to tonal music; developing the power to visualize, sing, and write music from dictation.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 1741.

MUST 1758. Composition Lesson I. 3 Credit Hours.

Weekly composition lesson under supervision of the private teacher. The student is expected to create original work in acceptable professional notation. Works created during the semester will be reviewed by the composition faculty at the end of the term in a brief interview with the student.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUST 1759. Composition Lesson II. 3 Credit Hours.

Weekly composition lesson under supervision of the private teacher. The student is expected to create original work in acceptable professional notation. Works created during the semester will be reviewed by the composition faculty at the end of the term in a brief interview with the student.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 1758.

MUST 1761. Introduction to Music. 3 Credit Hours.

An introduction to the elements of music and the evolution of musical styles in representative masterpieces from the baroque to the contemporary periods. To broaden knowledge of music and enhance listening enjoyment. NOTE: (1) For non-music majors. (2) This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AR

Repeatability: This course may not be repeated for additional credits.

MUST 1762. Music in Movie Epics. 3 Credit Hours.

This course begins by developing concepts to discuss cinematic techniques, narrative ideas, musical ideas, and the use of sound in movies. After this foundation, the course turns to contemporary movie epics, such as *The Lord of the Rings*, *Star Wars*, and the *Harry Potter* movies to show how this genre shapes our understanding of heroism, struggle, good and evil, narrative trajectory, etc. Students will interpret individual scenes and the ways that music and sound create an aura of suspense, psychology, power, failure, success, etc. as these movies respond to and create a culture of the heroic.

Repeatability: This course may not be repeated for additional credits.

MUST 1763. American Popular Music. 2 Credit Hours.

Survey of all styles of twentieth century American Popular music. NOTE: For non-music majors.

Repeatability: This course may not be repeated for additional credits.

MUST 1911. Honors Theory I. 4 Credit Hours.

Introduction to melody, modal counterpoint, all species of two-part writing and basic voice leading, along with simple diatonic harmony and figured bass. Exercises include writing original second parts to given melodies, four-part harmonization of diatonic melodies, and analysis of music literature excerpts.

NOTE: (1) Special authorization required for non-music majors. (2) This course can be used to satisfy the university Core Arts (AR) requirement.

Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. All students must receive department and deans office permission to enroll.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: 'Y' in MTPT.

MUST 1912. Honors Theory II. 4 Credit Hours.

Continuation of the study of tonal harmony; introduction of chromaticism, diatonic modulation, and expanded forms such as sonata allegro and rondo through analysis of larger works and composition of short pieces. NOTE: This is an honors course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 1911.

MUST 1961. Honors Introduction to Music. 3 Credit Hours.

An introduction to the elements of music and the evolution of musical styles in representative masterpieces, from early music to the contemporary periods. The course is intended to broaden students' knowledge of music and to enhance listening enjoyment. NOTE: (1) This is an Honors course for non-music majors. (2) This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: AR, HO

Repeatability: This course may not be repeated for additional credits.

MUST 2105. Jazz Secondary Piano. 1 Credit Hour.

Continuation of voicing techniques, sight reading, comping, improvisation, and advanced jazz voicings.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 1106.

MUST 2106. Jazz Secondary Piano. 1 Credit Hour.

Continuation of voicing techniques, sight reading, comping, improvisation, and advanced jazz voicings.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 2105.

MUST 2111. Music in Advertising and Marketing. 2 Credit Hours.

The study of music as it relates to the advertising and marketing industries. Topics discussed will include composition and lyric writing for broadcast, advertising, marketing films and videos, and multi-image presentations. NOTE: Designed for music majors with a theory background.

Repeatability: This course may not be repeated for additional credits.

MUST 2112. Pop Song Writing. 2 Credit Hours.

Composing songs in pop idiom. Emphasis on chord progression, melody, and lyrics, as well as actual performance in class of student compositions.

NOTE: A thorough understanding of jazz harmony is essential.

Repeatability: This course may not be repeated for additional credits.

MUST 2113. History of Pop. 3 Credit Hours.

Popular song styles of the 20th century from a variety of idioms: blues, folk, pop groups, rock, film, etc. Listening, analysis, and criticism.

Repeatability: This course may not be repeated for additional credits.

MUST 2114. History of Jazz. 3 Credit Hours.

Survey of jazz practice in the 20th century with emphasis upon the major styles and the major artists.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUST 2131. Aural Skills III: Jazz. 2 Credit Hours.

Advanced musicianship with emphasis upon advanced sight singing, advanced interval recognition, advanced chord progressions, modal applications, transcription. NOTE: Open only to Jazz Studies/Music Majors.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 1132.

MUST 2133. Harmony III: Jazz. 3 Credit Hours.

Advanced jazz theory with emphasis upon advanced melodic and rhythmic transcription, reharmonization, non-functional harmony.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 1134.

MUST 2703. Music in History. 3 Credit Hours.

The history, style, and musical forms from antiquity through the Renaissance. Musical analysis and individual assignments. NOTE: Open only to music majors; others by permission.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MUST 1712 or MUST 3770)

MUST 2704. Music in History. 3 Credit Hours.

The history, style, and musical forms of the Baroque period. Musical analysis and individual assignments. NOTE: Open only to music majors; others by permission.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MUST 1712 or MUST 3770)

MUST 2711. Theory III. 4 Credit Hours.

This course seeks to develop visual, aural and written skills in the formal analysis of tonal music by combining written and aural theory. Materials covered in Theory I and II are carried forward to study the tonal language of literature from Baroque, Classical, and Romantic styles that include examples of basic phrase structures, binary and ternary forms, variation, rondo, sonata-allegro and concerto forms, Lieder, and the contrapuntal procedures in canon and fugue. Students will learn to separate a whole into its melodic, harmonic and rhythmic parts, to explore the relationship of these parts to the whole and to each other, and to compose original phrases possessing similar relationships. Students will also develop aural skills in the sight-singing and dictation of chromatic and modulating material, and the performance of rhythms utilizing small subdivisions and changing meters. Students must demonstrate mastery in both written and aural theory skills to pass the course.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Course Attributes: QB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 1712.

MUST 2712. Theory IV. 4 Credit Hours.

Theory IV entails the study of contemporary music. Topics include the study of modality, atonality, twelve-tone, and other techniques of modern music. The aim is to learn the musical vocabulary of contemporary music through reading, analysis and basic composition exercises, and to gain a better understanding of musical style, structure and form through the analysis of pieces from the repertoire. The course involves both aural and written components. In the aural component, students learn to sight sing melodies in contemporary music and recognize common harmonic and motivic procedures. NOTE: Special authorization required for non-music majors. Section 5--Jazz Majors only. Jazz Harmony III & Aural Skills III--Advanced musicianship with emphasis upon advanced sight singing, advanced interval recognition, advanced chord progressions, modal applications, transcription.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 2711.

MUST 2733. American Musical Theater. 3 Credit Hours.

A look at the changing forms and styles of the musical theater in America from the nineteenth-century extravaganza to contemporary Sweeney Todd. Emphasizes such significant Broadway shows as "Show Boat," "Oklahoma," "My Fair Lady," and "West Side Story" and the contributions of composers, lyricists, and other artists responsible for the success of those shows.

Repeatability: This course may not be repeated for additional credits.

MUST 2741. Aural Theory III. 2 Credit Hours.

Continuation of aural perception of tonal music with concentration on modulation and chromaticism; aural analysis of smaller forms.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 1742.

MUST 2742. Aural Theory IV. 2 Credit Hours.

Continuation of aural perception with an emphasis on 20th century literature and techniques.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 2741.

MUST 2748. Composition I. 2 Credit Hours.

Original composition. Development of inventive ability. Required for theory majors.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUST 2749. Composition II. 2 Credit Hours.

Original composition. Development of inventive ability.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUST 2758. Composition Lesson III. 3 Credit Hours.

Weekly composition lesson under supervision of the private teacher. The student is expected to create original work in acceptable professional notation. Works created during the semester will be reviewed by the composition faculty at the end of the term in a brief interview with the student.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 1759.

MUST 2759. Composition Lesson IV. 3 Credit Hours.

Weekly composition lesson under supervision of the private teacher. The student is expected to create original work in acceptable professional notation. Works created during the semester will be reviewed by the composition faculty at the end of the term in a brief interview with the student.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 2758.

MUST 2900. Honors Music Studies Special Topics. 3 to 4 Credit Hours.

Contingent on the special topic.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

MUST 2911. Honors Theory III. 4 Credit Hours.

This course seeks to develop visual, aural and written skills in the formal analysis of tonal music by combining written and aural theory. Materials covered in Theory I and II are carried forward to study the tonal language of literature from Baroque, Classical, and Romantic styles that include examples of basic phrase structures, binary and ternary forms, variation, rondo, sonata-allegro and concerto forms, Lieder, and the contrapuntal procedures in canon and fugue. Students will learn to separate a whole into its melodic, harmonic and rhythmic parts, to explore the relationship of these parts to the whole and to each other, and to compose original phrases possessing similar relationships. Students will also develop aural skills in the sight-singing and dictation of chromatic and modulating material, and the performance of rhythms utilizing small subdivisions and changing meters. Students must demonstrate mastery in both written and aural theory skills to pass the course. Students must receive departmental and dean's office approval to enroll.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MUST 1712 or MUST 1912)

MUST 2912. Honors Theory IV. 4 Credit Hours.

Theory IV entails the study of contemporary music. Topics include the study of modality, atonality, twelve-tone, and other techniques of modern music. The aim is to learn the musical vocabulary of contemporary music through reading, analysis and basic composition exercises, and to gain a better understanding of musical style, structure and form through the analysis of pieces from the repertoire. The course involves both aural and written components. In the aural component, students learn to sight sing melodies in contemporary music and recognize common harmonic and motivic procedures. NOTE: Special authorization required for non-music majors. Section 5 - Jazz Majors only. Jazz Harmony III and Aural Skills III - Advanced musicianship with emphasis upon advanced sight singing, advanced interval recognition, advanced chord progressions, modal applications, transcription. Students must receive department and dean's office approval to enroll.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MUST 2711 or MUST 2911)

MUST 2962. Honors History of American Popular Music. 3 Credit Hours.

Popular song styles of the 20th century from a variety of idioms: blues, folk, pop groups, rock, film, etc. Listening, analysis, and criticism.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

MUST 3105. Jazz Class Piano. 1 Credit Hour.

Arranged each semester, please consult with the instructor. NOTE: Course required for 1) all undergraduate music therapy majors with a piano concentration and 2) graduate music therapy majors who failed the diagnostic piano test and have the necessary piano technique.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 2106.

MUST 3106. Jazz Class Piano. 1 Credit Hour.

Arranged each semester. Please consult with the instructor. NOTE: Course required for 1) all undergraduate music therapy majors with a piano concentration and 2) graduate music therapy majors who failed the diagnostic piano test and have the necessary piano technique.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 3105.

MUST 3196. History of Pop. 3 Credit Hours.

This writing-intensive course focuses on popular song styles of the 20th and 21st centuries from a variety of idioms: blues, folk, pop groups, rock, film, etc. Listening, analysis, and criticism.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

MUST 3385. Diamond Peer Teachers - Internship I. 1 Credit Hour.

The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUST 3386. Diamond Peer Teachers - Internship II. 1 Credit Hour.

The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUST 3696. Music in History. 3 Credit Hours.

The history, style, and musical forms from the preclassic to the early romantic. Music analysis, essay exams, listening assignments, and research paper.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MUST 2703 or MUST 2704)

MUST 3710. Theory Seminar. 1 to 3 Credit Hour.

Practical application of current pedagogical principles with outside projects. Weekly seminar designed for and required of all theory majors in the junior and senior years. NOTE: Four semesters required.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in MUST 2712.

MUST 3713. Orchestration. 3 Credit Hours.

Instrumental characteristics and potential. Varied problems in sectional, ensemble, and orchestral scoring. Laboratory work possible in connection with practice orchestra.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 2712.

MUST 3714. Contemporary Music. 3 Credit Hours.

Late 19th century orchestral practices; theories of Sessions, Hindemith, Bartok, Wuorinen; concentration on neoclassic style. NOTE: Labs included.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUST 3741. Keyboard Harmony. 3 Credit Hours.

The playing of chord progressions, sequences, modulations, and harmonization of small forms. Transposition, extemporization, reading from open score. NOTE: Music Education students take Mus Ed 3662 (0245).

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MUSC 2406 or MUST 2106)

MUST 3748. Composition Junior Seminar I. 2 Credit Hours.

A one-hour composition lesson every second week for composition majors.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 2749.

MUST 3749. Composition Junior Seminar II. 2 Credit Hours.

A one-hour composition lesson every second week for composition majors.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 3748.

MUST 3758. Composition Lesson V. 3 Credit Hours.

Weekly composition lesson under supervision of the private teacher. The student is expected to create original work in acceptable professional notation. Works created during the semester will be reviewed by the composition faculty at the end of the term in a brief interview with the student.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 2759.

MUST 3759. Composition Lesson VI. 3 Credit Hours.

Weekly composition lesson under supervision of the private teacher. The student is expected to create original work in acceptable professional notation. Works created during the semester will be reviewed by the composition faculty at the end of the term in a brief interview with the student.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 3758.

MUST 3763. Analog and Modular Sound Synthesis. 3 Credit Hours.

This class examines the history and techniques of making music with analog and modular synthesizers. Students gain sound sculpting and composition skills using several analog and modular synthesizers. Skills include learning how the modules in an analog synthesizer work and can be linked together into a larger system to produce a vast palette of timbres. Students also develop an ability to recognize different analog synthesis techniques by ear, and compose several short pieces of music using sounds they create. Students acquire an understanding of how analog synthesizers are used in and have shaped many musical genres.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUST 3764. Scoring for Film and Digital Media. 3 Credit Hours.

Students will learn the aesthetics, terminology, procedures, and technical aspects of scoring for the visual medium. They will develop an understanding of the software used to synchronize original music to film and video, including MIDI, sample libraries, and sequencing. Students will complete projects that focus on a broad range of techniques, such as spotting, click tracks, understanding dramatic narrative, and scoring under dialogue. Further understanding of scoring techniques will occur through analysis of significant examples from the film music literature. Students will gain a fundamental understanding of the film industry, including how to identify and secure opportunities for scoring, the basics of how to approach the logistics of a feature length film, budgeting, and the personnel involved in projects large and small. The role of music in other visual media, such as video games, theatrical production, and interactive media, will be briefly explored.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUST 3765. Scoring and Audio Design for Video Games. 3 Credit Hours.

Students gain a basic understanding of composing interactive music and designing audio for video games. Students will become proficient in the software involved in this process, including a DAW, middleware, and game distribution. The vocabulary and technology of audio production are taught, as well as an understanding of the function of music in interactive media. The business skills necessary to enter and develop a successful career in game audio will be explored. The course contains a laboratory component in which students develop sequencing skills and work with synchronized animation.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUST 3770. Topics in Music Theory. 1 to 3 Credit Hour.

Survey of advanced written and aural concepts in music theory.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUST 3780. Topics in Music History. 1 to 3 Credit Hour.

Survey of advanced concepts in music history.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUST 3796. Music in History. 3 Credit Hours.

The history, style, and musical forms from the late romantic through the contemporary periods. Music analysis, essay exams, listening assignments, and research paper.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MUST 2703 or MUST 2704)

MUST 3896. Theory Seminar II. 2 to 3 Credit Hours.

Practical application of current pedagogical principles with outside projects. Required weekly writing intensive seminar for theory majors, emphasizing critical writing and discussion.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Course Attributes: WI

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in MUST 2712.

MUST 3900. Honors Music Studies Special Topics. 3 or 4 Credit Hours.

Contingent on the special topic.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

MUST 4110. Seminar in Jazz Composition and Arranging. 2 Credit Hours.

Current and past trends in jazz and pop composition. Students compose and perform original music. Class analysis of works. NOTE: Weekly seminar meetings.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (MUST 2712 or MUST 3770)

MUST 4111. Jazz Style and Analysis. 2 Credit Hours.

In-depth examination of the music of one or two artists with an emphasis upon style, melodic and harmonic content, and importance of the artist(s) to the jazz canon.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MUST 2712 or MUST 3770)

MUST 4112. Jazz Arranging I. 3 Credit Hours.

Writing for various small and large jazz groups. Emphasis upon jazz orchestration and chord substitutions.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MUST 2712 or MUST 3770)

MUST 4113. Jazz Improvisation: Theory and Practice I. 2 Credit Hours.

Application of melodic and harmonic improvisational concepts and devices to standard jazz repertoire. Emphasis upon melodic stylistic development.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MUST 2711 or MUST 3770)

MUST 4114. Jazz Improvisation: Theory and Practice II. 2 Credit Hours.

More advanced melodic and harmonic improvisational concepts applied to standard jazz repertoire with an emphasis upon stylistic development.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 4113.

MUST 4115. Jazz Arranging II. 3 Credit Hours.

Advanced arranging concepts for small and large jazz ensembles.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 4112.

MUST 4120. Seminar in Advanced Jazz Composition and Arranging. 2 Credit Hours.

Advanced composition in the jazz idiom.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in MUST 4110.

MUST 4700. Latin Amer Mus Ensemble. 0 to 1 Credit Hours.

Repeatability: This course may be repeated for additional credit.

MUST 4701. Music in Global Cultures. 3 Credit Hours.

Course to provide a foundational knowledge of global musics and to enable further study in this area. The degree program includes significant elective credits so that students can pursue advanced study if desired. While the content can vary from semester to semester depending upon the expertise and research interests of the instructor, the course's overall goal is to engage music both beyond the canon and from diverse cultural origins.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 2712.

MUST 4706. Live Recording and Mixing for Broadcast. 3 Credit Hours.

This course explores fundamental planning and procedures for capturing live music for video broadcast. Topics include planning, staging, preparation and execution of a live performance recording, followed by procedures for effective and cohesive mixing for broadcast. We will initiate and complete a typical "real world" music performance broadcast delivery project. This course has a prerequisite that students must have already taken MUST 4713 (Sound Recording) and MUST 4714 (Sound Editing).

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MUST 4713 or 'Y' in CRMU01) and (MUST 4714 or 'Y' in CRMU02)

MUST 4707. Computer Programming for Musicians. 3 Credit Hours.

This course is an introduction to computer programming specifically designed to enable making music with a computer. Through a combination of creative activities and projects using the Python programming language, one of the most common languages used today for making music with computers, students learn foundational pedagogical concepts of computer programming and computational thinking, all within a musical context.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Technology.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 4711 and MUST 4712 (may be taken concurrently)

MUST 4710. Early Music Ensemble. 1 Credit Hour.

An opportunity to perform music from medieval through preclassical times. Reproduction of original instruments, principles of performance practice in original form and as they emerge through modern efforts at reconstruction. NOTE: Limited to 20 singers and instrumentalists.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUST 4711. Computers in Musical Applications. 3 Credit Hours.

Introduction to theory and practice of digital synthesis of musical sound. Sampling theory, additive synthesis, and modulation synthesis are examined using models. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Course Attributes: SB

Repeatability: This course may not be repeated for additional credits.

MUST 4712. Computer Synthesis of Music. 3 Credit Hours.

Advanced study of software synthesis methods building on Music Studies 4711 (C315). Subtractive synthesis and reverberation techniques are examined. Synthesis algorithms are implemented using the C Sound language.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 4711.

MUST 4713. Sound Recording. 3 Credit Hours.

A course in concert hall recording of live music including topics such as room acoustics, electrical signals, microphones, recording decks and editing systems. A quantitative approach to theory will be balanced by practical laboratory instruction. NOTE: The course is required for students who have elected the Music Technology Component.

Repeatability: This course may not be repeated for additional credits.

MUST 4714. Sound Editing. 3 Credit Hours.

A course in digital audio editing that applies principles and techniques learned in Sound Recording. Students work with ProTools software and complete a series of projects to develop listening and editing skills.

Repeatability: This course may not be repeated for additional credits.

MUST 4715. World Music. 3 Credit Hours.

How do different cultures hear music? What meanings does music have in society? This course will address these questions in traditional, popular, and Western-style musics around the world, with focus on the Caribbean, Japan, India, Indonesia, Latin America, and the Mediterranean. Discussions of concepts in ethnomusicology and contemporary social issues will be combined with hands-on performance.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Dance, Music Education, Music, Musical Theater.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUST 4716. Composing Music for Films. 3 Credit Hours.

Students learn to use MIDI equipment and software to compose music for synchronization to film and video. The vocabulary and technology of film production are taught, as well as an understanding of the function of music in documentary and experimental film and video. The course contains a laboratory component in which students develop sequencing skills and work with synchronized videotape.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 4711.

MUST 4717. Counterpoint. 3 Credit Hours.

The principles of two- and three-part counterpoint and practical application in the form of the invention and three-part imitative writing of the 18th century.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MUST 1712 or MUST 3770)

MUST 4718. Analysis. 3 Credit Hours.

A supplement and sequel to the analysis introduced in Music Studies 2703 (0160), Music Studies 3796 (W261) and Music Studies 2711 (C243). Development of aural perception techniques. NOTE: Individual assignments.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MUST 2711 or MUST 3770)

MUST 4719. MIDI. 3 Credit Hours.

An introduction to the use of MIDI Technology, including basic synthesis, sound design, sequencing, and sampling.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 4711.

MUST 4720. New Music Seminar. 1 Credit Hour.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUST 4721. Computer Music Studio. 3 Credit Hours.

Independent composition study following completion of either Music Studies 4719 (0346), Music Studies 4712 (0316), or Music Studies 4716 (0335).

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MUST 4712, MUST 4716, or MUST 4719)

MUST 4722. Advanced Orchestration. 2 Credit Hours.

Full scoring for orchestra and band, ranging from monody to complex texture.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 3713.

MUST 4723. Score Reading. 3 Credit Hours.

A continuation of Music Studies 3741 (0241). Emphasis on reading from open score with the alto, tenor, and soprano clefs in addition to the G and F clefs. Also, modulation to remote keys, varied sequences.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 3741.

MUST 4724. Printing Music Scores and Parts. 3 Credit Hours.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

MUST 4725. Advanced Audio Production. 3 Credit Hours.

The class will focus on advanced skills of audio production based on skills learned in both Sound Recording (MUST 4713) and Sound Editing (MUST 4714). Work will be done on the most common Digital Audio Workstation, Pro Tools, but is applicable to all DAWs. Prerequisites are both Sound Recording (MUST 4713) and Sound Editing (MUST 4714).

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 4713 and MUST 4714.

MUST 4727. Electronic Music Composition: Practice, History, Theory. 3 Credit Hours.

The history of electro-acoustic music, which is essential to music in the 20th century. Composers who wrote for electronic instruments include Edgard Varèse, Olivier Messaien and Paul Hindemith, the "musique concrète" school (Pierre Schaeffer, Pierre Henry, Edgard Varèse, etc.), Karlheinz Stockhausen, Gyorgi Ligeti, Luciano Berio, Milton Babbitt, John Cage, Iannis Xenakis, and Mario Davidovsky. These composers used unique and varied technologies in their music. New technologies soon crossed over into pop music, and now dominate commercial music and film. A dialogue between composers and engineers is now crucial in order to make all aspects of sound available to composers. This is available to composers, theorists, historians, and instrumentalists, who must master the extended techniques that are now an essential part of new music performance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 1711, MUST 1712, MUST 2711, and MUST 2712.

MUST 4730. Electronic Music Ensemble. 1 Credit Hour.

An opportunity to perform electro-acoustic and digital music using laptops, tablets, various sensors, controllers, synths and multi-channel speakers. Members act as performers, researchers, composers and software developers.

Repeatability: This course may be repeated for additional credit.

MUST 4731. Arts Enterprise. 3 Credit Hours.

Through this course, emerging arts professionals will understand and be able to plan for the economic impact of working as a freelance artist on their personal finances. Understanding fiscal principles and vocabulary will enable budget planning and long term personal economic impact assessments. Business fundamentals and the relationship between effective personal finance management and best business practices are explored.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College, Theater, Film & Media Arts.

Repeatability: This course may not be repeated for additional credits.

MUST 4732. Programming in Max. 3 Credit Hours.

This course will use the visual programming language Max to explore and implement various topics in electro-acoustic music and digital media. Topics covered will include digital sound synthesis (additive, subtractive and modulation synthesis), signal processing and sequencing. Students will learn mathematical and programming techniques for expressive digital audio signal processing and software design. Topics covered will include spectral audio programming, algorithmic synthesis, compiling, MIDI, OSC, mobile applications, live processing, and software architecture. Students will create their own interactive programs and algorithms modeled after course concepts and use these to compose a series of "études". Additionally, a working history of electronic music will complement course topics.

Repeatability: This course may not be repeated for additional credits.

MUST 4748. Composition Senior Seminar I. 3 Credit Hours.

A one-hour composition lesson every week for composition majors. NOTE: Attendance required for departmental concerts and special events.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 3749.

MUST 4749. Composition Senior Seminar II. 3 Credit Hours.

A one-hour composition lesson every week for composition majors. NOTE: Attendance required for departmental concerts and special events.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 4748.

MUST 4758. Composition Lesson VII. 3 Credit Hours.

Weekly composition lesson under supervision of the private teacher. The student is expected to create original work in acceptable professional notation. Works created during the semester will be reviewed by the composition faculty at the end of the term in a brief interview with the student.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 3759.

MUST 4759. Composition Lesson VIII. 3 Credit Hours.

Weekly composition lesson under supervision of the private teacher. The student is expected to create original work in acceptable professional notation. Works created during the semester will be reviewed by the composition faculty at the end of the term in a brief interview with the student.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in MUST 4758.

MUST 4762. Introduction to Music Technology for Non-Majors. 3 Credit Hours.

Introduction to the ways in which computer software and hardware can be used to create, edit, and produce audio, music, and multimedia files. Various music styles and genres, such as hip hop, house, techno, ambient, drum and bass, EDM, experimental, and trap, will be explored through lectures, demonstrations, and hands-on individual and group projects. Additional topics will include working with loops, mixing audio, and the differences between various file formats. A final project is required that demonstrates the student's ability to create a complete musical project using a variety of audio software and file formats. The course is open to all students at Temple with the exception of Music Technology majors. A basic knowledge of music notation and the ability to read music are strongly recommended, though not required.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Music Technology.

Repeatability: This course may not be repeated for additional credits.

MUST 4780. Special Topics Music Studies. 1 to 4 Credit Hour.

Advanced focus upon a specific aspect of music studies.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Film and Media Arts, Music Studies, Music Education, Music, Theater.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College, Theater, Film & Media Arts.

Repeatability: This course may be repeated for additional credit.

MUST 4782. Independent Study. 1 to 4 Credit Hour.

The area of concentration selected by the student with the approval of the supervising teacher and Associate Dean.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUST 4785. Music Industry Internship. 3 to 4 Credit Hours.

This course is an intensive internship program designed to help students gain hands-on field experience in some aspect of the music industry of the student's choice. During the internship, students will learn how to polish their resumes and cover letters, make a business card, interview, network, and acquire job skills in their internship positions.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUST 4786. Music Industry Internship. 3 Credit Hours.

This course is an intensive internship program designed to help students gain hands-on field experience in some aspect of the music industry of the student's choice. During the internship, students will learn how to polish their resumes and cover letters, make a business card, interview, network, and acquire job skills in their internship positions.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College.

Repeatability: This course may be repeated for additional credit.

MUST 4799. Music History: Final Project. 3 Credit Hours.

This course will serve as a capstone project designed to help students synthesize experiences from their 3-plus years of coursework, while also preparing them for further study or employment after graduation. The student will choose an advisor and will work one-on-one with that mentor to design and complete this project. The nature and content of the final project will be up to the student, in consultation with the advisor, so that there is some flexibility based on the skills and interests of the student. Possible projects include: a research paper; a paper or presentation on pedagogy; a lecture/recital; an edition of an existing composition; transcription and analysis of jazz, non-western music, or contemporary music; an internship. Evaluation of the student's work will be based on the quality and originality of the final document, performance, or presentation.

Department Restrictions: Must be enrolled in one of the following Departments: Music:Studies.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music History.

Repeatability: This course may not be repeated for additional credits.

MUST 4882. Project in Music Technology. 3 Credit Hours.

This course is taken during the senior year. Under faculty approval and supervision, MUST 4882 will culminate in a significant capstone project. The project will require that students demonstrate an ability to integrate and synthesize basic musical and technological knowledge and skills in the conceptualization and creation of the final outcome, such as a piece of software, hardware, media product, or multimedia product. Student projects will be showcased and discussed by each student as a capstone event, open to the public. A written project proposal is due to the Program Director 4 weeks prior to registration.

Repeatability: This course may be repeated for additional credit.

Naval Science - Navy ROTC (NAVS)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

NAVS 1001. Naval Orientation. 3 Credit Hours.

A three-hour course designed to familiarize the student with the history, characteristics and present employment of sea power. Particular emphasis is placed upon our naval forces and their capability in achieving and maintaining national objectives. Naval organization and operational functions are discussed in conjunction with sea power concepts. Additionally, the student is given an insight into the Naval Service, shipboard organization and safety, time-management skills and study techniques. NOTE: Fall only. This course is taken at the University of Pennsylvania.

Repeatability: This course may not be repeated for additional credits.

NAVS 1002. Sea Power and Maritime Affairs. 3 Credit Hours.

A three-hour course providing a broad survey of naval history designed to add historical perspective to current defense problems. Topics include: naval power as an aspect of national defense policy, navies as an instrument of foreign policy, strategy selection, resource control, technology, and personnel management. NOTE: Spring only. This course is taken at the University of Pennsylvania.

Repeatability: This course may not be repeated for additional credits.

NAVS 1003. Naval Science Drill. 0 Credit Hours.

A no-credit laboratory promoting naval leadership and professional development. While emphasis is given to military drill, leadership development, and physical fitness, the course also includes lectures from sources in and out of the Navy. Guest speakers cover topics on leadership, Navy career paths, equal opportunity, rights and responsibilities, AIDS awareness, terrorism/counter-terrorism, naval warfare doctrine, employment of naval forces, ethics and values, operations security, and safety. NOTE: This course is taken at the University of Pennsylvania.

Repeatability: This course may be repeated for additional credit.

NAVS 2001. Leadership & Management. 3 Credit Hours.

This three-hour course emphasizes principles of leadership, personnel and material management, and subordinate development in the context of the naval organization. Practical applications are explored through experiential exercises and case studies. NOTE: Fall only. This course is taken at the University of Pennsylvania.

Repeatability: This course may not be repeated for additional credits.

NAVS 2002. Navigation. 3 Credit Hours.

A three-hour course, with comprehensive study of the theory and practice of terrestrial, celestial, and electronic navigation and the laws of vessel operations. Topics include fundamentals of coastal and harbor piloting, nautical astronomy, electronic navigation, and means of navigating without reference to land. International and inland nautical Rules of the Road are studied. Case studies and practical exercises are used to reinforce the fundamentals of marine navigation. NOTE: Spring only. This course is taken at the University of Pennsylvania.

Repeatability: This course may not be repeated for additional credits.

NAVS 3001. Naval Ships Systems I: Engineering. 3 Credit Hours.

A three-hour course designed to familiarize the student with the engineering concepts necessary for an understanding of the structural design and mechanical operation of naval vessels. Emphasis is placed on: understanding the methods used for propulsion, including nuclear, internal combustion and gas turbine engines; understanding the generation and distribution of electrical power; analyzing various shipboard support systems used (such as distillation and air conditioning); and, basic considerations and techniques for hull design of naval vessels, including the concepts of buoyancy, equilibrium, stability, and the effects of flooding on the design characteristics. NOTE: Fall only. This course is taken at the University of Pennsylvania.

Repeatability: This course may not be repeated for additional credits.

NAVS 3002. Naval Ships Systems II: Weapons. 3 Credit Hours.

A three-hour course on the theory and concepts of weapon systems are examined using the systems approach. Topics include: sensors and detection systems, tracking systems, computational systems, weapon delivery systems, the fire control problem, and systems integration. This course provides preliminary insight into the basic principles that lead to further development and comprehension of the technology underlying all modern weapon systems. Case studies used to illustrate and reinforce concepts introduced in the course. NOTE: Spring only. This course is taken at the University of Pennsylvania.

Repeatability: This course may not be repeated for additional credits.

NAVS 3003. Evolution of Warfare. 3 Credit Hours.

This three-hour course is designed to add broad historical perspective to understanding military power. Treating war and the military as an integral part of society, the course deals with such topics as: war as an instrument of foreign policy, military influences on foreign policy, the military as a reflection of society, budgetary operations, personnel management and strategy selection. NOTE: Offered in even-numbered years. This course is taken at the University of Pennsylvania.

Repeatability: This course may not be repeated for additional credits.

NAVS 4001. Naval Operations and Seamanship. 3 Credit Hours.

Three-hour course on modern naval operations including relative motion analysis pertaining to ships at sea, underway replenishment, naval meteorology, ship handling, and tactical communications. The process of command and control and leadership is examined through case studies of actual incidents at sea. NOTE: Fall only. This course is taken at the University of Pennsylvania.

Repeatability: This course may not be repeated for additional credits.

NAVS 4002. Leadership and Ethics. 3 Credit Hours.

The capstone, three-hour course of the NROTC curriculum provides the ethical foundation and basic leadership tools to be effective Navy/Marine Corps officers. The topics of responsibility, accountability, ethics, the law of armed conflict, military law, division organization and training, and discipline are introduced through practical exercises, group discussion, and case studies. NOTE: Spring only. This course is taken at the University of Pennsylvania.

Repeatability: This course may not be repeated for additional credits.

NAVS 4003. Fundamentals of Maneuver Warfare. 3 Credit Hours.

This course prepares future military officers and other leaders for service by studying modern tactical principles, current military developments, and other aspects of warfare and their interactions with and influences on maneuver warfare doctrine. There is a specific focus on the United States Marine Corps as the premier maneuver warfighting organization. Study also includes historical influences on tactical, operational, and strategic levels of maneuver warfare practices in the current and future operating environments.

Repeatability: This course may not be repeated for additional credits.

Neuroscience - CLA (NSCI)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

NSCI 0817. Brain Matters. 3 Credit Hours.

One of the last frontiers in science is the brain. We know a great deal about the structure and function of the brain and nervous system, but it is challenging to comprehend fully the complexity of a system made up of 100 billion components that are interacting with one another using tens of trillions of connections that can change and rewire during development and aging. Neuroscience is the multidisciplinary field in which brain research falls.

Neuroscience is one of the fastest growing domains in all of science - and good bet for a future career path. Neuroscientists investigate brain function from the level of molecular genetics, to cellular dynamics, to brain anatomy and physiology, to relations between brain, behavior, and cognition, to brain development and aging, to diseases of the brain. In this course, we will touch on knowledge about the brain at all these levels, and more. We will also discuss case studies of brain impairment. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot receive credit for this course if they have successfully completed Psychology 0817.

Course Attributes: GS

Repeatability: This course may not be repeated for additional credits.

NSCI 1002. Careers in Neuroscience. 1 Credit Hour.

This course will cover the wide range career options available in Neuroscience, focusing on what is possible with an undergraduate and graduate degree. Traditional career paths will be discussed, such as medicine and research, as well as "non-traditional" paths in clinical/science administration. We will then focus on professional development. Topics covered will include inviting guest speakers that can provide information about where to find research/volunteering/job opportunities, workshops on resumes and personal statements, and practice with public speaking in various science-specific formats (science presentations and job/school interviews). By the end of this course, you will be well versed in what a degree in Neuroscience can provide you, and you will have the professional skills and application materials to prepare for this career. Because there is significant overlap in course content, students will receive credit for only one of these courses: CLA 1002, CJ 1002, ENG 1801, HIST 1012, NSCI 1002, POLS 1002, PSY 1002, SOC 1002.

Repeatability: This course may not be repeated for additional credits.

NSCI 1051. Fundamentals of Neuroscience. 3 Credit Hours.

One of the last frontiers in science is the brain. Neuroscience is one of the fastest growing domains in all of science - and a good bet for a future career path. Neuroscientists investigate brain function from the level of molecular genetics, to cellular dynamics, to brain anatomy and physiology, to relations between brain, behavior and cognition, to brain development and aging, to diseases of the brain. In this course, we will touch on knowledge about the brain at all of these levels. The major course goal is to introduce you to neuroscience and its multidisciplinary dimensions.

Repeatability: This course may not be repeated for additional credits.

NSCI 1951. Honors Fundamentals of Neuroscience. 3 Credit Hours.

One of the last frontiers in science is the brain. Neuroscience is one of the fastest growing domains in all of science - and a good bet for a future career path. Neuroscientists investigate brain function from the level of molecular genetics, to cellular dynamics, to brain anatomy and physiology, to relations between brain, behavior and cognition, to brain development and aging, to diseases of the brain. In this course, we will touch on knowledge about the brain at all of these levels. The major course goal is to introduce you to neuroscience and its multidisciplinary dimensions. Note: Students who have received credit for NSCI 1051 will not receive additional credit for this course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

NSCI 2001. Functional Neuroanatomy. 3 Credit Hours.

This course provides a broad overview of the structures of the brain and their function. Gross anatomy of the central nervous system will be covered. The organization of the major neural systems underlying sensory, motor, and cognitive function will be emphasized.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (NSCI 1051 or NSCI 1951)

NSCI 2121. Development/Plasticity/Repair. 3 Credit Hours.

The major aim of this course is to present the neurobiology of development from conception to birth and neurological and behavioral development in infancy and childhood. The initial emphasis is on embryonic and fetal development of the central nervous system and emergent behavioral plasticity. Sensory and motor developments in the fetus are examined. Postnatal development of the cerebral cortex and behavioral outcomes are explored in the context of environmental effects that can amplify or inhibit adaptive capacity. Biological (e.g., genetic) and environmental (e.g., parenting) influences on brain development of emotion and cognition are addressed. The tremendous plasticity of the brain is emphasized. Plasticity is the ability of the nervous system to respond to change. Neural malleability is maximal in early development, but the capacity for change and repair in the nervous system is maintained throughout life.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (NSCI 1051 or NSCI 1951) and (NSCI 2122 or BIOL 1012)

NSCI 2122. Cellular Neuroscience. 3 Credit Hours.

An exciting scientific frontier is the molecular genetics and cellular dynamics of brain function. This course addresses phenomena at a cellular and molecular level that underlie brain plasticity and function. The cellular basis of the nervous system, some genetic factors involved in neural cell division and proliferation, proteins enabling neural receptor function, and molecules that comprise neurotransmitters will be covered. The molecular cascade that is initiated by glutamate release and responses of AMPA and NMDA receptors that results in genetic changes and structural formation of synapses is one example of molecular mechanisms to be addressed in this course.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (NSCI 1051 or NSCI 1951)

NSCI 2222. The Neurobiology of Disease. 3 Credit Hours.

Advances in basic neuroscience research have the potential to lead to understanding, treatment, and even cures for major nervous system disease. This course will provide students with state-of-the-art knowledge about applied neuroscience - the causes and treatment of some major diseases of the central nervous system. There is an emphasis on neuropathologies at all points of the life span - from diseases in infancy such as Phenylketonuria and Tay Sachs disease, to diseases in adulthood such as Multiple Sclerosis, AIDS and forms of demyelination caused by the JC virus, to neurodegenerative diseases of old age such as Alzheimer's disease and Parkinson's disease.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (NSCI 1051 or NSCI 1951) and NSCI 2001.

NSCI 3000. Current Topics in Neuroscience. 3 Credit Hours.

The goal of this class is to explore in depth a current topic in neuroscience. Potential topics include addiction, schizophrenia, Alzheimer's disease, memory reconsolidation, and more. Note: A semester's course will cover one topic in depth and not cover multiple topics. In addition, students will also read primary literature (research articles), lead a 10 minute discussion on an article, write a review on a related topic, and present slides with their view. These exercises are intended to promote scientific analysis and the development of public speaking and writing skills.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (NSCI 1051 or NSCI 1951), PSY 1003, and NSCI 2001.

NSCI 3002. Neurobiology of Pain and the Opioid Epidemic. 3 Credit Hours.

This course will investigate the neural and psychological perspectives on pain and the opioid epidemic. We will begin with an evolutionary and historical view of why pain exists and how it was treated before the advent of modern medicine. Next, we will discuss the neurological underpinnings of both acute and chronic pain, focusing on pain pathways at the peripheral level and the role of the limbic system in pain at the central level. Next, we will address the pharmacology of pain treatments and the disorders they treat, with heavy focus on opioids and the current epidemic. This discussion will be facilitated using the book "Dreamland" that details the origins and impact of the opioid epidemic. Our reading and discussions of "Dreamland" will help provide historical context for the opioid epidemic, and allow us to explore the societal implications of addiction. Furthermore, the book will allow us to critically look at the major institutions and groups that played a role in the epidemic, from the dealers to pharmaceutical companies to physicians. By the end of the course, you will have an in-depth knowledge of the basic science of pain processing, pathways involved in addiction, and the broader origins of opioid addiction in the United States.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in NSCI 2001.

NSCI 3005. Affective Neuroscience. 3 Credit Hours.

The brain is not just a thinking machine; it is also a feeling machine. This course explores the neural substrates behind emotions such as love, trust, fear, and pleasure. We will also discuss the relationship between emotions and cognition, the effect of emotions on animal and human behavior, and the biological basis of affective disorders such as anxiety and depression.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 2501, PSY 2502, or NSCI 2001) and PSY 1003.

NSCI 3006. Stress and the Brain. 3 Credit Hours.

Stress, in some form or other, is part of our everyday lives. How we respond to stress can either ensure our immediate survival or threaten long-term physical and mental well-being. This course will survey the clinical and preclinical research to understand how the brain initiates stress responses, and how stress, in turn, impacts the brain to alter behavior. The role that stress plays in the development of disorders, such as depression and post-traumatic stress disorder, will also be explored.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 2501, PSY 2502, or NSCI 2001) and PSY 1003.

NSCI 3007. Neuropharmacology of Drugs of Abuse. 3 Credit Hours.

This course will explore how drugs of abuse act within the brain. We will discuss the acute and longterm effects of selected drugs of abuse on behavior, mood, cognition and neuronal function and material from studies with humans is integrated with basic studies on the neurobiological basis of drug action and drug abuse -- including detailed coverage of synaptic transmission and the distribution, regulation and integration of brain neurotransmitter systems. The focus is on addictive or illicit drugs, and all the major classes are discussed, including: opiates (heroin, morphine, opium), sedative - hypnotics (alcohol, barbiturates, chloral hydrate), anxiolytics (benzodiazepines), psychomotor stimulants (amphetamine, cocaine), marijuana, hallucinogens (LSD, mescaline), hallucinogenic-stimulants (MDA, MDMA), and dissociative anesthetics (PCP).

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 2501, PSY 2502, or NSCI 2001) and PSY 1003.

NSCI 3008. Decision Neuroscience. 3 Credit Hours.

How do we make decisions in social and economic contexts? What factors influence our decisions? How can neuroscience be used to better understand our decisions? To answer these questions, this course focuses on how new research in neuroscience, psychology, and behavioral economics shapes our broader understanding of decision making. The topics covered in the course include functional organization of key brain systems, approaches to measuring and interpreting neuroscience data, methods for measuring decision-making behavior, economic and cognitive modeling, and impact of neuroscience on real-world decision-making. Emerging topics will include applications in policy, marketing, and finance.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in PSY 1003 and (PSY 2104, PSY 2501, PSY 2502, or NSCI 2001)

NSCI 3013. Behavioral Epigenetics. 3 Credit Hours.

In the broadest sense, the term epigenetics refers to the study of environmental influences on gene expression. These processes encompass a multitude of mechanisms by which DNA is regulated, all of which are independent of DNA mutation. Epigenetic modifications are highly dynamic and respond quickly to environmental changes, such as diet or stress. Epigenetic marks represent concrete mechanisms for the long-held idea that biology and behavior are shaped by complex interactions between genetic and environmental factors. Some of these epigenetic marks are passed on to future generations via the germline and influence neuroprogramming in the next generation offspring. In the brain, where most neurons are post-mitotic, epigenetic processes play a critical role in regulating gene expression and synaptic plasticity, which are pivotal events for the regulation of behavior.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in NSCI 1051.

NSCI 3087. Techniques in Neuroscience. 3 Credit Hours.

A major reason that neuroscience is such a dynamic and rapidly advancing field is that it relies on cutting edge technology. Throughout the history of neuroscience, advances have come with the development of new techniques. In this course, students will learn about a variety of traditional techniques in basic and clinical neuroscience as well as newly developed techniques driving the field to new insights. Methods to be discussed will be selected from among: genetic assays, genotyping, histology, immunohistochemistry, stereotaxic surgery, electrophysiology (patch clamping, single and multiple unit recording, EEG), behavioral assessment of animals, neuropsychological assessment in humans, human electrophysiology, transcranial magnetic stimulation, MRI and fMRI. From among identified neuroscience techniques, students will select one and prepare a demonstration or video.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (NSCI 1051 or NSCI 1951) and NSCI 2122.

NSCI 3096. Conducting Neuroscience Research. 3 Credit Hours.

The objective of this writing intensive course is to develop critical thinking and analytical skills necessary for applying the scientific method in neuroscience. In the course, students will complete readings of primary sources, discuss literature, and participate in activities to strengthen research abilities. This experience will reinforce key methodological and statistical concepts that were taught earlier in the curriculum, while stimulating growth in understanding neuroscience and research processes in general. Students will present reports in writing and in class presentations.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (NSCI 1051 or NSCI 1951), PSY 1003, and (NSCI 2001 or NSCI 2122)

NSCI 3602. Clinical Neuropsychology. 3 Credit Hours.

This course will provide background on basic functional anatomy of the central nervous system and neuropsychological theories and methods. The primary focus of the course will be the clinical assessment and treatment of neuropsychological disorders, such as aphasia, agnosia, dementia, and others. NOTE: This course is cross-listed with PSY 3602; students will receive credit for only one of these two courses.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1003, PSY 2168, STAT 2102, or STAT 2103), (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101), and any 2000-level PSY course.

NSCI 3604. Food on the Brain. 3 Credit Hours.

This course is about food and eating from a variety of perspectives including from a neuroscience, developmental, and an individual differences perspective. We will review the neurobiology of tasting and consuming food; examine lifespan and gender differences. We will examine eating in healthy individuals but also will cover health and clinical psychology topics such as eating and weight disorders. We will review the current understanding of food as an addictive substance and consider food and eating occurs within a social and environmental context.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in PSY 1003 and (PSY 2601, HRPR 2103, or NSCI 2001)

NSCI 3900. Honors Special Topics. 3 Credit Hours.

The goal of this Honors class is to explore in depth a current topic in neuroscience. Potential topics include addiction, schizophrenia, Alzheimer's disease, memory reconsolidation, and more. Note: A semester's course will cover one topic in depth and not cover multiple topics.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

NSCI 4182. Independent Study in Neuroscience 1. 1 to 4 Credit Hour.

Neuroscience majors are encouraged to gain first-hand experience with research as provided by Independent Study. This course is available in the laboratories of neuroscience faculty members at Temple University listed on the Neuroscience web site: www.temple.edu/cla/neuroscience. Students will carry out supervised neuroscience research by observing and participating in ongoing research in the laboratory. This course requires the student to spend 3-4 hours per credit per week of a 14-week semester in the lab.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Neuroscience.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (NSCI 1051 or NSCI 1951)

NSCI 4191. Collaborative Research I. 1 to 4 Credit Hour.

Faculty advisor needed for research in a particular area. For projects outside Temple University, approval must be obtained through a faculty member who will handle the liaison with the outside institution and ensure uniformity of requirements.

Repeatability: This course may be repeated for additional credit.

NSCI 4197. Capstone in Neuroscience. 4 Credit Hours.

The focus of this capstone is a topic important to many domains in neuroscience. Different topics will be covered in different semesters. This course has two major components: (1) instruction and practice on scientific writing of research papers and proposals, and instruction and practice on oral presentations; (2) Integration of content in basic and clinical neuroscience. The course will allow students to follow issues in neuroscience from cellular and molecular levels to translation and application in human life. The emphasis is on synthesis and application of material learned in the neuroscience major. NOTE: This course is limited to neuroscience majors in their senior year.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Neuroscience.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in NSCI 3087.

NSCI 4282. Independent Study in Neuroscience 2. 1 to 4 Credit Hour.

Neuroscience majors are encouraged to gain first-hand experience with research as provided by Independent Study and may take up to 8 independent study credits. Independent Study in Neuroscience 2 follows Neuroscience 4182, Independent Study in Neuroscience 1, and can be taken in the same laboratory or in another lab of a neuroscience faculty member at Temple University. Faculty members sponsoring this course are listed on the Neuroscience web site: www.temple.edu/cla/neuroscience. Students will carry out supervised neuroscience research by observing and participating in ongoing research. This course requires the student to spend 3-4 hours per credit per week of a 14-week semester in the lab.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Neuroscience.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (NSCI 1051 or NSCI 1951)

NSCI 4291. Collaborative Research II. 1 to 4 Credit Hour.

Faculty advisor needed for research in a particular area. For projects outside Temple University, approval must be obtained through a faculty member who will handle the liaison with the outside institution and ensure uniformity of requirements.

Repeatability: This course may be repeated for additional credit.

New Media Interdisciplinary (NMIC)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

NMIC 1451. Survey of New Media. 3 Credit Hours.

This lecture course introduces the history and theory of computer/telecommunications media and new media arts. Today's convergence of computational, telecommunications and audiovisual media is transforming human interaction at personal, local and global levels. Paradoxically it has introduced new modes of alienation while creating new means of contact. Simulation and interactivity suggest new kinds of realism. Random-access databases offer both greater control of information and the emergence of hypermedia narratives that allow the reader to get lost in information. Readings include the commentaries and works of philosophers, theorists, writers and artists and draw on theoretical and historical texts, fiction, interactive multimedia, audiovisual media and the internet.

Repeatability: This course may not be repeated for additional credits.

NMIC 2002. Introduction to Interdisciplinary New Media 2. 3 Credit Hours.

Designing for a public community. The class will investigate both the technological and theoretical issues associated with public space, installation, information design and accessibility. The class assignment is to design an interactive experience in public space.

Repeatability: This course may not be repeated for additional credits.

NMIC 3001. Design and Visual Language. 4 Credit Hours.

An introduction to creating, planning and producing visual communication design for the screen and print. Examining composition, typography as an element of information design and the interaction of color and form, text and image. Exploring the computer in relation to print animation, web and interactivity.

Repeatability: This course may not be repeated for additional credits.

NMIC 3002. Physical Computing. 4 Credit Hours.

Physical Computing is an approach to learning how humans communicate through computers that starts by considering how humans express themselves physically. Students spend a lot of time building circuits, soldering, writing programs, building structures to hold sensors and controls, and figuring out how best to make all of these things relate to a person's expression.

Repeatability: This course may not be repeated for additional credits.

NMIC 3010. Special Topics in Production. 4 Credit Hours.

Rotating class in New Media. Please check www.temple.edu/nmic for details or contact h.iverson@temple.edu.

Repeatability: This course may be repeated for additional credit.

NMIC 3020. Special Topics. 4 Credit Hours.

Rotating class in New Media. Please check www.temple.edu/nmic for details or contact h.iverson@temple.edu.

Repeatability: This course may be repeated for additional credit.

NMIC 3030. Special Topics in New Media. 4 Credit Hours.

Rotating class in New Media. Please check www.temple.edu/nmic for details or contact h.iverson@temple.edu.

Repeatability: This course may be repeated for additional credit.

NMIC 3040. Special Topics. 4 Credit Hours.

Rotating class in New Media. Please check www.temple.edu/nmic for details or contact h.iverson@temple.edu.

Repeatability: This course may be repeated for additional credit.

NMIC 4001. New Media Synthesis. 4 Credit Hours.

A capstone course in the New Media Interdisciplinary Concentration. A studio and critique based class for the development of a portfolio project suitable for grant and school applications. Projects will be conceptualized, prototyped and written about in a proposal format.

Repeatability: This course may not be repeated for additional credits.

NMIC 4002. Neighborhood Narratives. 4 Credit Hours.

Neighborhood Narratives is an out-of-the-classroom New Media interdisciplinary education project. It introduces students to the concept of locative media, where all types of media (analogue, digital, text, sound, image, etc.) are applied to real places and thus trigger real social interactions. The class researches the relationship between the self and place, the reciprocal action between what we carry with us and how we find our way through an urban landscape. Students design their own projects, using alternative methods that tie their stories to the environment at hand. The class provides a context within which to explore new and old models of communication, community and exchange. Neighborhood Narratives links the Philadelphia main campus of Temple University with its international campuses in London, Tokyo and Rome. The international network of classes videochats with each other throughout the semester, sharing their experiences and projects. All the location-based stories from each site are connected and archived using the web and mobile telephones. The final assignments are presented on location in the city.

Repeatability: This course may be repeated for additional credit.

NMIC 4003. Game of Life. 4 Credit Hours.

How can observation and participation in everyday life be translated into gaming structures? The class will review a broad sample of both traditional and electronic games. Students will be given assignments and readings to provoke analysis of digital environments, to explore interactive narrative, and to inspire the creation of an interactive universe of their own construction.

Repeatability: This course may not be repeated for additional credits.

NMIC 4010. Special Topics. 3 Credit Hours.

Rotating class in New Media. Please check www.temple.edu/nmic for details or contact h.iverson@temple.edu.

Repeatability: This course may be repeated for additional credit.

NMIC 4020. Special Topics. 3 Credit Hours.

Rotating class in New Media. Please check www.temple.edu/nmic for details or contact h.iverson@temple.edu.

Repeatability: This course may be repeated for additional credit.

NMIC 4030. Special Topics. 3 Credit Hours.

Rotating class in New Media. Please check www.temple.edu/nmic for details or contact h.iverson@temple.edu.

Repeatability: This course may be repeated for additional credit.

NMIC 4040. Special Topics. 1 to 4 Credit Hour.

Rotating class in New Media. Please check www.temple.edu/nmic for details or contact h.iverson@temple.edu.

Repeatability: This course may be repeated for additional credit.

NMIC 4082. Independent Study. 1 Credit Hour.

Directed projects and independent study in interdisciplinary new media. Topics will vary.

Repeatability: This course may be repeated for additional credit.

Nursing (NURS)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

NURS 1001. Introduction to Professional Nursing. 3 Credit Hours.

This course begins with an introduction to professional nursing, exploring its past, present, and future. It examines the role of the nurse in community and acute care settings. Essential concepts such as health and illness, therapeutic communication, and ethics are explored as they relate to the role of the nurse in the delivery of health care. The application of mathematics in safe medication administration is introduced.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Nursing.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Nursing 4 Year.

Repeatability: This course may not be repeated for additional credits.

NURS 1003. Introduction to the Nursing Profession. 1 Credit Hour.

This course begins with an introduction to professional nursing, exploring its past, present and future. It examines the role of the nurse in community and acute care settings. Essential concepts such as health and illness, therapeutic communication and ethics are explored as they relate to the role of the nurse in the delivery of health care.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Nursing.

Repeatability: This course may not be repeated for additional credits.

NURS 1089. Nursing and Healthy Lifestyles Management. 3 Credit Hours.

This course focuses on the role of the nurse in health promotion and disease prevention for individuals in the community through the use of interventions that support lifestyle changes. The links between lifestyle issues such as nutrition, stress management and physical activity, and disease prevention are explored. Specific topics will include: key trends in the US diet; diet-related disease; weight management approaches; food sources, policies and their implications; physical activity and other behaviors; supporting therapeutic lifestyle changes; physiological stress factors; and life expectancy and quality issues. A fieldwork experience provides an opportunity for students to practice communication techniques and apply theoretical concepts within a community setting focusing on education for health promotion, risk reduction, and disease prevention across the lifespan.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Nursing.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Nursing 4 Year.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (NURS 1001 or 'Y' in CRNU02)

NURS 2001. Ethical, Legal and Social Implications of Genetics and Genomics. 3 Credit Hours.

This course explores genetic concepts and principles as major determinants of population health, with the definition of population, such as the food supply and other ecosystems, extended beyond humanity, when applicable. Genetic and genomic (G and G) theory and research are discussed, with an emphasis on how genes interact with each other and the environment in ways that create problems or predispose individuals and other biological organisms to common health-threatening conditions such as heart disease, arthritis, diabetes, cancer, immune-pathologies or genome alteration, including germline gene alteration. Translation of G and G principles into clinical practice and other scientific applications are considered, including recognition of disease patterns among genetically related groups. Theories of ethical and legal principles and their extension to current genetic applications, especially human clinical practice situations, are examined. Completion of first year science courses is highly recommended. For example, a first-year introductory biology course or Anatomy and Physiology are recommended prerequisites, as well as appropriate courses covering basic genetic theory. This course is offered to nursing students and others in the Temple University College of Public Health (CPH), the Honors Program or even interested undergraduates beyond CPH.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

NURS 2144. Health Assessment. 3 Credit Hours.

An introductory course to health assessment is presented with emphasis on understanding the range of normal and common abnormal findings. The focus is on individuals across the lifespan including newborn, pediatric, adult, and geriatric populations. Theory and practice focus on effective interviewing for the health history, health assessment techniques, and systematic method of recording data. Defining characteristics of nursing diagnoses are identified. Principles of therapeutic communication and critical thinking are emphasized.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Nursing.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing 4 Year.

Co-requisites: NURS 2189, NURS 2261.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CHEM 1021, 'Y' in CHM4, or 'Y' in CRCH08), (CHEM 1023, 'Y' in CHM5, or 'Y' in CRCH09), (KINS 1224, 'Y' in KIN2, or 'Y' in CRKI03), and (NURS 1089 or 'Y' in CRNU06)

NURS 2189. Nursing Community Home I. 1 Credit Hour.

This course is the first of five courses in the major that situates the student in a selected community with a focus on the underserved and service learning. The role of the generalist practice nurse in the care of the community is emphasized. The student primarily engages in health promotion and teaching (primary prevention) within a framework of collaborative community engagement and decision-making that is data-driven and integrates community norms and practices.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Nursing.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing 4 Year.

Co-requisites: NURS 2144, NURS 2261.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CHEM 1021, 'Y' in CHM4, or 'Y' in CRCH08), (CHEM 1023, 'Y' in CHM5, or 'Y' in CRCH09), (KINS 1224, 'Y' in KIN2, or 'Y' in CRKI03), and (NURS 1089 or 'Y' in CRNU06)

NURS 2261. Pharmacology for Generalist Nursing Practice. 3 Credit Hours.

The major classifications of drugs are examined with particular attention to principles of pharmacokinetics, pharmacodynamics, and pharmacotherapeutics. The role of the generalist practice nurse in the management of client care as it relates to medication therapy is delineated. Particular emphasis is placed on teaching individuals and community groups about medications and the nurse's responsibilities in preventing medication errors.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Nursing.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing 4 Year.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CHEM 1021, 'Y' in CHM4, or 'Y' in CRCH08), (CHEM 1023, 'Y' in CHM5, or 'Y' in CRCH09), (KINS 1224, 'Y' in KIN2, or 'Y' in CRKI03), and (NURS 1089 or 'Y' in CRNU06)

NURS 2289. Community Home II. 1 Credit Hour.

This course is the second of 5 courses in the major that situates the student in the community with a focus on the underserved and service learning. Primary prevention is explored further. Education, health care trends and accessibility and availability of resources that promote health and well-being will be considered and will inform design and evaluation of meaningful nursing interventions.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Nursing.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing 4 Year.

Co-requisites: NURS 2589.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in NURS 2189, (NURS 2261 or 'Y' in CRNU04), (NURS 2144 or 'Y' in CRNU03), and (BIOL 2001, 'Y' in BIO9, or 'Y' in CRBI09)

NURS 2589. Generalist Nursing Practice I: Principles of Care and Clinical Decision Making. 5 Credit Hours.

Through a combination of classroom, laboratory and fieldwork activities students learn how to develop the plan of care and implement essential therapeutic interventions for common health problems from a theoretical research base. Students are challenged to engage in clinical decision-making in the management of client care and the application of integrated nursing therapeutics for clients experiencing common health alterations.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Nursing.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing 4 Year.

Co-requisites: NURS 2289.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in NURS 2189, (NURS 2261 or 'Y' in CRNU04), (NURS 2144 or 'Y' in CRNU03), and (BIOL 2001, 'Y' in BIO9, or 'Y' in CRBI09)

NURS 2901. Honors Ethical, Legal and Social Implications of Genetics and Genomics. 3 Credit Hours.

This course explores genetic concepts and principles as major determinants of population health, with the definition of population, such as the food supply and other ecosystems, extended beyond humanity, when applicable. Genetic and genomic (G & G) theory and research are discussed, with an emphasis on how genes interact with each other and the environment in ways that create problems or predispose individuals and other biological organisms to common health-threatening conditions such as heart disease, arthritis, diabetes, cancer, immune-pathologies or genome alteration, including germline gene alteration. Translation of G & G principles into clinical practice and other scientific applications are considered, including recognition of disease patterns among genetically related groups. Theories of ethical and legal principles and their extension to current genetic applications, especially human clinical practice situations, are examined. Completion of first year science courses is highly recommended. For example, a first-year introductory biology course or Anatomy and Physiology are recommended prerequisites, as well as appropriate courses covering basic genetic theory. This course is offered to nursing students and others in the Temple University College of Public Health (CPH), the Honors Program or even interested undergraduates beyond CPH.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

NURS 3089. Generalist Nursing Practice II: Medical Surgical and Psychiatric Nursing. 6 Credit Hours.

This course focuses on the application of theories, concepts, research, and issues related to the care of clients, across the lifespan, with identified chronic health problems in need of secondary health care services. Concepts of disability, rehabilitation, mental illness, cancer, and other chronic illnesses are explored. Students will engage in the management of care for clients with chronic diseases and/or disabilities. Related issues of development, diagnosis, treatment, and family concerns are included. Fieldwork experiences will include sites along the continuum of care including acute inpatient, rehabilitation, long-term care and hospice facilities, as well as clients' homes. Involvement of the client, family and community as integral members of the health care team is emphasized. End of life issues and hospice care are also addressed.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Nursing.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing 4 Year.

Co-requisites: NURS 3289.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (NURS 2589 or 'Y' in CRNU01), NURS 2289, (PSY 2301 or 'Y' in CRPS04), and (SBS 1104 or 'Y' in CRSB01)

NURS 3189. Generalist Nursing Practice III: Maternal Child Health Nursing. 6 Credit Hours.

This course focuses on the application of theories, concepts, research, genetics, and issues related to the primary and secondary management of reproductive health and the primary care of children. The student will provide nursing care to the new family, explore normal growth and development of the child from the embryonic stage through adolescence, and engage in interventions aimed at supporting women's and men's reproductive health throughout the lifespan. Health promotion, health maintenance, major health concerns, common illnesses, cultural practices, and their influences on each developmental stage will be explored.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Nursing.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Co-requisites: NURS 3305, NURS 3489.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (NURS 3089 or NURS 3789), NURS 3289, and (EPBI 2219 or 'Y' in CREP01)

NURS 3204. Perspectives on Health I: Thinking Globally. 3 Credit Hours.

This is the first part of a two course sequence that examines social determinants of health. Epidemiological concepts provide foundational tools needed to compare and contrast the health status of persons living in developing and developed societies. Students delve into the social, political, behavioral, environmental, and occupational determinants of health at the global level through resources commonly used in international health. Disparities in health and access to health care will be examined. The independent role that nurses play in the promotion, restoration, maintenance and advocacy of health in the global arena is highlighted. Students will be introduced to professional international nursing communities and a variety of organizations involved in global health.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Nursing.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Nursing 4 Year.

Co-requisites: NURS 3305, NURS 3489, NURS 3789.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in NURS 3289, NURS 3689, NURS 4296, and (EPBI 2219, 'Y' in STT6, or 'Y' in CREP01)

NURS 3289. Nursing Community Home III. 1 Credit Hour.

This course is the third of five courses in the major that situates the student in a selected community with a focus on the underserved and service learning. The role of the generalist practice nurse in the care of the community is further developed, with a focus on the decision-making team, the emerging role of the nurse as a leader and health advocate in the community setting and the design, implementation and evaluation of nursing interventions to meet community need that address primary and secondary prevention.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Nursing.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing 4 Year.

Co-requisites: NURS 3089.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in NURS 2289, (NURS 2589 or 'Y' in CRNU01), (SBS 1104 or 'Y' in CRSB01), and (PSY 2301, 'Y' in PSY3, or 'Y' in CRPS04)

NURS 3296. Perspectives on Health, Thinking Globally. 3 Credit Hours.

This course examines social determinants of health and epidemiological concepts, providing foundational tools needed to compare and contrast the health status of persons living in developing and developed countries. Students delve into the social, political, behavioral, environmental, and occupational determinants of health at the global level through resources commonly used in global health. Disparities in health and access to health care will be examined. The integral role that nurses play in the promotion, maintenance, restoration and advocacy of health in the global arena is highlighted. Throughout the semester, students will work on developing a program planning proposal for a specific health-related concern and will be provided with instructor feedback on multiple drafts. Students will be introduced to global nursing communities.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Nursing.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing 4 Year.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in NURS 3089 and NURS 3289.

NURS 3305. Evidence Based Practice and Nursing Research: Analysis and Critical Appraisal. 3 Credit Hours.

This course serves to cultivate a foundational understanding of the research process and the practice of evidence-based care. Translation of research findings into the clinical practice environment will be emphasized. The interaction of theory, research, and clinical expertise in the development of evidence-based practice is examined. Strategies for critically reviewing, integrating, and disseminating findings from clinical research will be discussed as well as the implications of findings for nursing practice. Through the development of evidence-based practice projects, confidence with evaluating studies using informatics and understanding research and research implementation processes is gained. The conduct of research in an ethical context is explored.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Nursing.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Nursing 4 Year.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in NURS 3089, NURS 3289, and (EPBI 2219 or 'Y' in CREP01)

NURS 3389. Perspectives on Health II: Acting Locally. 3 Credit Hours.

This course is the second half of a two-course sequence concerned with the determinants of health. Application of theoretical knowledge attained from prior courses is emphasized. In collaboration with a previously selected oppressed community, a fieldwork project aimed at promoting health in the selected community is carried out. The design, implementation, and critical evaluation of the project are essential components.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing 4 Year.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (NURS 4889 or 'Y' in CRNU05), NURS 4589, and NURS 4198.

NURS 3489. Community Home IV. 1 Credit Hour.

This course is the fourth of five courses in the major that situates the student in a selected community with a focus on the underserved and service learning. The role of the generalist practice nurse in the care of the community is expanded to include nursing interventions that address tertiary prevention and chronic disease management, while maintaining interventions that promote health (primary prevention) and prevent progression and support remission of risk conditions (secondary prevention).

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Nursing.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing 4 Year.

Co-requisites: NURS 3189.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in NURS 3289, NURS 3089, and (EPBI 2219 or 'Y' in CREP01)

NURS 4000. Special Topics. 1 Credit Hour.

Topics may vary semester to semester. Please check Class Schedule in Self Service Banner for specific topic.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Nursing.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing 4 Year.

Co-requisites: NURS 4889.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in NURS 3489, NURS 3789, NURS 3204, and (NURS 3305 or 'Y' in CRNU07)

NURS 4198. Health Policy and Economics. 3 Credit Hours.

This writing-intensive course focuses on the roles of economics, policy, legislation, and regulation in regard to health care and public health services in the U.S. Emphasis is placed on social, cultural, economic, and demographic factors that have had an impact on health care policy, with particular focus on distributive justice in health care. Students explore relationships between broad societal constructs and the evolution of nursing legislation from generalist to advanced practice licensure and certification. Basic principles of access, equity, quality care, and health promotion and prevention are discussed and debated within the broad context of health insurance in the U.S. Students explore the effects of federal health care and social welfare programs on the quality and quantity of nursing care delivered.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Nursing 4 Year.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in NURS 3189, NURS 3489, NURS 3296, and (NURS 3305 or 'Y' in CRNU07)

NURS 4489. Senior Seminar: Evidence Based Practice Fieldwork Experience. 3 Credit Hours.

This is sequentially the final course in the nursing major. In collaboration with partner agencies, a relevant practice issue is identified and an evidence-based practice project is produced. Emphasis is placed on the critique and synthesis of relevant literature and other sources of evidence. Formulation of recommendations for practice, planning for implementation, and the development of evaluation strategies are key components. Awareness of the effect of cultural beliefs, values, and practices of individuals, families, and communities on healthcare preferences is an essential element. Systems of structural power, social justice, and ethics are integrated into practice.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Nursing 4 Year.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Co-requisites: NURS 4885.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in NURS 4198, NURS 4589, and (NURS 4889 or 'Y' in CRNU05)

NURS 4589. Community Home V. 1 Credit Hour.

This course is the final of five courses in the major that situates the student in a selected community with a focus on the underserved and service learning. Integration of the many roles of the generalist practice nurse in the care of the community occurs, which includes interventionist, leader, health advocate and informed member of the health team. Benefit and necessity of a holistic review that incorporates an understanding of the social determinants of health, the cultural and current normative practices of the population of interest, timely surveillance data and collaboration with a range of professional and community stakeholders is recognized as foundational to designing, implementing and evaluating meaningful and sustainable interventions to meet community need and improve health outcomes.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Nursing.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing 4 Year.

Co-requisites: NURS 4889.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in NURS 3189, NURS 3489, NURS 3296, and (NURS 3305 or 'Y' in CRNU07)

NURS 4882. Independent Study in Nursing. 1 to 6 Credit Hour.

Individual study of a theoretical or clinical nursing problem or topic. Student-initiated focus under the guidance of appropriate faculty.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Nursing.

Repeatability: This course may be repeated for additional credit.

NURS 4885. Generalist Nursing Practice Internship. 3 Credit Hours.

The internship experience is designed to prepare the student to function as a graduate nurse and focuses on the integration and synthesis of scientific knowledge with clinical nursing practice and the development of the professional nursing role. During this course the student is paired with a professional nurse. Students select a practice area from a variety of options in primary, secondary, or tertiary care settings. Students provide the full range of direct and indirect nursing care and evaluate the outcomes of care. Principles of leadership, accountability, and self-regulation will be applied to clinical practice as the student operationalizes the professional nursing role.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Nursing.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Nursing 4 Year.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Co-requisites: NURS 3389, NURS 4489.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (NURS 4889 or 'Y' in CRNU05), NURS 4589, and NURS 4198.

NURS 4889. Generalist Nursing Practice IV: Tertiary Care Across the Lifespan. 6 Credit Hours.

This course focuses on the application of theories, concepts, research, and issues related to acute illness requiring specialized nursing care across the lifespan in tertiary care settings. Concepts such as high risk pregnancy, critical care, trauma, burns, and organ transplants will be addressed. The synthesis of core nursing knowledge in the management of clients across the lifespan with potentially life-threatening, unstable, and complex health problems is emphasized.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Nursing.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing 4 Year.

Co-requisites: NURS 4589.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in NURS 3189, NURS 3489, NURS 3296, and (NURS 3305 or 'Y' in CRNU07)

Nutrition (NUTR)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

NUTR 1000. Special Topics in Nutrition. 1 to 2 Credit Hour.

The focus of this course is a topic relevant to the discipline of nutrition or a closely related sub-discipline that is not covered by regular departmental course offerings. The specific topics may vary from semester to semester. Please check under Class Schedule in Self-Service Banner for the specific topic of this course.

Repeatability: This course may be repeated for additional credit.

Occupational Therapy (OTHR)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

OTHR 1001. Exploring Occupational Therapy. 2 Credit Hours.

This course, designed for non-majors, serves as an overview and introduction to occupational therapy (OT). Socio-historical influences leading to the establishment of the profession will be explored, as well as the philosophical foundation of "occupation" as therapeutic intervention. Experiential learning includes guided observation of a clinical setting as well as hands-on activities. Weekly readings from multiple sources inform students of professional issues and first-hand experiences of individuals adapting to disability and rehabilitation.

Repeatability: This course may not be repeated for additional credits.

Philosophy (PHIL)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

PHIL 0824. Landscape of American Thought. 3 Credit Hours.

America once was envisioned by its colonizers as a new world, as a city upon a hill beckoning to humanity. After centuries of conquest, enslavement, immigration, and political struggle, conditions for sustaining this early vision continue to evolve. Explore the emergence of some of the most distinctive and influential American voices to inform our national debate about freedom, the individual, race, democracy, and oppression, as it has unfolded over the past two centuries. Through consideration of selected works of some of the most renowned figures to shape the landscape of American public discourse, we return to face the question of the promise of America, as it plays out today in the thought of some of the leading public intellectuals of our time. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed Philosophy 0924.

Course Attributes: GU

Repeatability: This course may not be repeated for additional credits.

PHIL 0839. Philosophy of the Human. 3 Credit Hours.

What is it to be human? To have human experiences and values? What is it like to walk in the shoes of others who may not share our experiences and values? In what ways, if any, do we treat others unequally in the social and political spheres, and are these unequal treatments justified? This course examines a range of answers to these questions and more. Potential topics include, but are not limited to: different historical and cultural perspectives on being human; issues related to the human self, justice, morality, and the socio-cultural; and the relationships between the human condition and broader facets of contemporary life. Traditional historical and contemporary philosophical works, as well as influential literary, empirical, and cinematic pieces, will be used to explore, analyze, and propose answers to what it is to be human. Philosophy of the Human is a 3 credit hour Human Behavior General Education course. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed PHIL 0939.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

PHIL 0847. The Meaning of the Arts. 3 Credit Hours.

As we blend philosophical inquiry into the nature of several of the arts and the roles they play in society with analyses of particular artistic practices, we shall critically examine questions like these: Is the main goal of art to imitate or represent the world? If so, do painting, sculpture, architecture, photography, movies, music, dance, theater, performance art, literature, handicrafts, fashion, bodily ornamentation and the like, provide knowledge about ourselves and the world around us? What is - or should be - the relationship between art and some of the other great domains of human thought, action, and concerns such as religion or the realm of social and political relations, especially matters concerning gender, sexuality, class, race, morality, and community? Do the arts or artistic institutions have specific social functions? For example, is there a connection between museums, imperialism, and nationalism? Are films embedded in networks of commodity production? Are there specifically urban or global dimension to these questions? NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed Philosophy 0947.

Course Attributes: GA

Repeatability: This course may not be repeated for additional credits.

PHIL 0859. The Making of American Society: Melting Pot or Culture Wars?. 3 Credit Hours.

Terrorism, illegal immigration, gay marriage, religious conflict, political in-fighting, corporate corruption, racial animosities, civil liberties assaults, media conglomeration, Wal-Mart goes to China and the rich get richer. America in the 21st century is a contentious society. How did we get to this place in time? Examine what makes American society distinctive from other advanced industrial democracies as we study the philosophical origins of America, the development of social and economic relationships over time, and the political disputes dominating contemporary American life. The course relies heavily on perspectives from History, Sociology and Political Science to explain the challenges facing contemporary American society. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: AMST 0859, History 0859, POLS 0859, or SOC 0859.

Course Attributes: GU, SI

Repeatability: This course may not be repeated for additional credits.

PHIL 0863. Religion in the World. 3 Credit Hours.

Learn about the major religious traditions found worldwide today: Hinduism, Buddhism, Judaism, Christianity, Islam, and several indigenous traditions. Examine the beliefs, practices, and values of these groups in order to understand the worldviews and ways of life of the people who practice them. Our interdisciplinary analysis and interpretation of specific examples of religious experience will help shed light on the overall meaning of religion and human existence. We will carefully consider examples while also focusing on particular thematic issues, like cosmology and ritual. Develop appreciation for the religious vibrancy and diversity that exist in human cultures while you actively engage in the learning process through class presentation, class participation, paper-writing, and a self-selected field trip. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: Religion 0863, 0963, 1101, C053, Asian Studies 0863, Critical Languages 0863, or Philosophy 0863.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

PHIL 0877. Climate Change and Climate Justice. 3 Credit Hours.

The impacts of climate change fall disproportionately on frontline communities, including the Global South, communities of color, the poor, women, and the young, including college students. How should the impacts and burdens of climate change be distributed? How do environmental loss, damage, and danger transform issues of diversity and oppression in the 21st century? What kind of response to climate change would be fair? How much must each of us change in order to make a fair response possible? This course offers an accessible, in depth introduction to ethical problems about climate justice, with attention to environmental racism, indigenous rights, gender, age, and other aspects of diversity, and to the role of individuals and institutions in climate change. Students cannot receive credit for this course if they have successfully completed PHIL 0977.

Course Attributes: GD

Repeatability: This course may not be repeated for additional credits.

PHIL 0878. Asians, Asian Americans, and Pacific Islanders in the United States: Race, Diversity, and Identity. 3 Credit Hours.

Who are Asians, Asian Americans, and Pacific Islanders (APIs) in the American context? How have APIs shaped the making of state and society in the United States in terms of culture, law, economics, and politics? What major crises and historical events have generated racism and racialized stereotyping against API communities? How have API minorities mobilized against exclusion, racism, and marginalization to advance new interests and goals, especially when juxtaposed with other minority groups and social forces? What is the future of APIs in America? This course introduces students to the tapestry of API experiences in America. It recovers their importance through lectures and discussions, based upon careful analysis of written texts and creative materials.

Course Attributes: GD

Repeatability: This course may not be repeated for additional credits.

PHIL 0939. Honors Philosophy of the Human. 3 Credit Hours.

What is it to be human? To have human experiences and values? What is it like to walk in the shoes of others who may not share our experiences and values? In what ways, if any, do we treat others unequally in the social and political spheres, and are these unequal treatments justified? This course examines a range of answers to these questions and more. Potential topics include, but are not limited to: different historical and cultural perspectives on being human; issues related to the human self, justice, morality, and the socio-cultural; and the relationships between the human condition and broader facets of contemporary life. Traditional historical and contemporary philosophical works, as well as influential literary, empirical, and cinematic pieces, will be used to explore, analyze, and propose answers to what it is to be human. Philosophy of the Human is a 3 credit hour Human Behavior General Education course. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed PHIL 0839.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GB, HO

Repeatability: This course may not be repeated for additional credits.

PHIL 0947. Honors The Meaning of the Arts. 3 Credit Hours.

As we blend philosophical inquiry into the nature of several of the arts and the roles they play in society with analyses of particular artistic practices, we shall critically examine questions like these: Is the main goal of art to imitate or represent the world? If so, do painting, sculpture, architecture, photography, movies, music, dance, theater, performance art, literature, handicrafts, fashion, bodily ornamentation and the like, provide knowledge about ourselves and the world around us? What is - or should be - the relationship between art and some of the other great domains of human thought, action, and concerns such as religion or the realm of social and political relations, especially matters concerning gender, sexuality, class, race, morality, and community? Do the arts or artistic institutions have specific social functions? For example, is there a connection between museums, imperialism, and nationalism? Are films embedded in networks of commodity production? Are there specifically urban or global dimension to these questions? (This is an Honors course.) NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed Philosophy 0847.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GA, HO

Repeatability: This course may not be repeated for additional credits.

PHIL 0977. Honors Climate Change and Climate Justice. 3 Credit Hours.

The impacts of climate change fall disproportionately on frontline communities, including the Global South, communities of color, the poor, women, and the young, including college students. How should the impacts and burdens of climate change be distributed? How do environmental loss, damage, and danger transform issues of diversity and oppression in the 21st century? What kind of response to climate change would be fair? How much must each of us change in order to make a fair response possible? This course offers an accessible, in depth introduction to ethical problems about climate justice, with attention to environmental racism, indigenous rights, gender, age, and other aspects of diversity, and to the role of individuals and institutions in climate change. Students cannot receive credit for this course if they have successfully completed PHIL 0877.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GD, HO

Repeatability: This course may not be repeated for additional credits.

PHIL 1001. Philosophical Challenges to the Individual. 3 Credit Hours.

This course combines historical and contemporary sources to study individuals and their social settings. Thus it introduces the basic issues of ethics, and social and political philosophy. It serves as the entry course not only for further study of these fields, but also for the study of business and professional ethics and philosophy of law. NOTE: (1) Philosophy majors or minors who have taken 1101 (0100), Introduction to Philosophy, should not take this course. (2) This course can be used to satisfy the university Core Individual & Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: IN

Repeatability: This course may not be repeated for additional credits.

PHIL 1055. Critical Thinking. 3 Credit Hours.

A course in reasoning well: logically and critically. Increase your ability to read something and decide if it should persuade or be rejected. How to back up what you say with evidence and/or good arguments. While the course is not a "prep" for the LSAT's, and other exams that test critical abilities, it focuses directly on the skills necessary to do well in them. NOTE: Philosophy majors or minors who have taken 1066 (C066), Introduction to Logic should not take this course.

Repeatability: This course may not be repeated for additional credits.

PHIL 1061. Art and Society. 3 Credit Hours.

Besides treating the major issues internal to the arts and their criticism (e.g., definitions of art and aesthetic experience, artistic expression, form, representation, critical interpretation and evaluation), the course also deals with wider questions of the social function and value of the arts, several of which relate to current issues of gender, race, and ethnicity. NOTE: This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AR

Repeatability: This course may not be repeated for additional credits.

PHIL 1062. Morality and the Law. 3 Credit Hours.

Recommended for pre-law and pre-social administration students. The course provides a basic grounding in moral and legal philosophy, and addresses issues on which both touch, such as capital punishment, affirmative action, sexual behavior, and the right to welfare. NOTE: This course can be used to satisfy the university Core Individual & Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: IN

Repeatability: This course may not be repeated for additional credits.

PHIL 1063. American Thinkers. 3 Credit Hours.

The major figures and central problems of American philosophy will be surveyed historically, with a view to examining what is distinctive in American thought and how American philosophy relates to its natural cultural context. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AC

Repeatability: This course may not be repeated for additional credits.

PHIL 1066. Introduction to Logic. 3 Credit Hours.

The meaning of such logical notions as the validity of arguments, the equivalence of statements, and the inconsistency of sets of statements. Symbolization of the logically relevant features of statements and testing of arguments for validity, sets for inconsistency, etc. Development of logical theory in connection with these notions and techniques. NOTE: (1) Students who have taken Philosophy 1055 (0055), Critical Thinking, should consult with an advisor before taking this course. (2) This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: QB

Repeatability: This course may not be repeated for additional credits.

PHIL 1076. Philosophy East and West. 3 Credit Hours.

Systematic and comparative study of representative philosophies of India, China, Japan, and Western Europe. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors.

Course Attributes: IS

Repeatability: This course may not be repeated for additional credits.

PHIL 1077. Science in Context. 3 Credit Hours.

A study of scientific method by critical examination of cases of scientific work in their social, political, and psychological context. Attention to the values and ethical concerns in scientific inquiry. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement.

Course Attributes: SB

Repeatability: This course may not be repeated for additional credits.

PHIL 1101. Introduction to Philosophy. 3 Credit Hours.

Philosophical problems in the works of great thinkers from ancient times to present. Selected questions concern the nature of reality, human freedom, the foundations of knowledge, standards of value, and the existence of God. NOTE: Students who have taken 1001 (C050), Challenges to the Individual should consult with an advisor before taking this course.

Repeatability: This course may not be repeated for additional credits.

PHIL 1196. Introduction to Philosophy. 3 Credit Hours.

This course is an introduction to philosophy that focuses on the reading, thinking, and writing skills needed for the study of philosophy. The course concentrates on close readings of a few texts rather than a broad survey of the philosophical tradition. NOTE: This course fulfills one of the two writing requirements for the major.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

PHIL 1861. Art and Society. 3 Credit Hours.

Besides treating the major issues internal to the arts and their criticism (e.g., definitions of art and aesthetic experience, artistic expression, form, representation, critical interpretation and evaluation), the course also deals with wider questions of the social function and value of the arts, several of which relate to current issues of gender, race, and ethnicity.

Repeatability: This course may not be repeated for additional credits.

PHIL 1955. Honors Critical Thinking. 3 Credit Hours.

Honors version of 1055 (0055).

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

PHIL 1962. Honors Morality & the Law. 3 Credit Hours.

Honors version of 1062 (C062). NOTE: This course can be used to satisfy the university Core Individual & Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, IN

Repeatability: This course may not be repeated for additional credits.

PHIL 1966. Honors Introduction to Logic. 3 Credit Hours.

Honors version of 1066 (C066). NOTE: This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, QB

Repeatability: This course may not be repeated for additional credits.

PHIL 1977. Honors Science in Context. 3 Credit Hours.

A study of scientific method by critical examination of cases of scientific work in their social, political, and psychological context. Attention to the values and ethical concerns in scientific inquiry. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, SB

Repeatability: This course may not be repeated for additional credits.

PHIL 2100. Special Topics. 3 Credit Hours.

Arranged each semester. Please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

PHIL 2121. Introduction to Ethical Theory. 3 Credit Hours.

An introduction to major schools of ethical theory such as utilitarian ethics, deontological ethics, virtue ethics, and the ethics of care. Specific problems from metaethics and applied ethics may also be treated.

Repeatability: This course may not be repeated for additional credits.

PHIL 2125. Philosophy of African-American Experiences. 3 Credit Hours.

An introduction to African-American philosophy and the issues around which it has developed: the meaning of racial identity, concepts of personhood, the nature of racial oppression and its relation to gender and class oppression, strategies for black liberation. We will pay close attention to the ways in which African American philosophy is simultaneously a development of and a radical critique of Anglo-European philosophy. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: RS

Repeatability: This course may not be repeated for additional credits.

PHIL 2126. Contemporary Social Philosophy. 3 Credit Hours.

An overview of recent and current thinking about philosophically relevant problems of and in the present-day world. Normally a few key texts will be focused upon, drawn from writing of the late 20th and early 21st centuries. Environment, racial tension, globalization, economy, the nature of power, generational conflict, and the persistence of war are some typical topics.

Repeatability: This course may not be repeated for additional credits.

PHIL 2131. Introduction to Aesthetics. 3 Credit Hours.

This course addresses major issues internal to the arts and their criticism such as definitions of art and aesthetic experience, artistic expression, form, representation, critical interpretation and evaluation. The course may also address more specific issues such as the relationship of art and race, art and freedom of expression, art and morality. NOTE: Students who have taken PHIL 2931 will not earn additional credits for this course.

Repeatability: This course may not be repeated for additional credits.

PHIL 2141. Philosophy of Biology. 3 Credit Hours.

This course explores a range of philosophical questions about biology, such as: What is the nature of biological explanation? Are there laws of biology? Is the current debate about creationism and intelligent design a scientific debate? Is there a unique taxonomy of biological organisms? Has human nature evolved? What is genetic determinism and is there any evidence for it? This course is geared toward scientifically-minded philosophers, philosophically-minded scientists, and everyone in between. Duplicate credit warning: Students who have taken PHIL 2941 will not receive credit for taking PHIL 2141.

Repeatability: This course may not be repeated for additional credits.

PHIL 2143. Introduction to Theory of Knowledge. 3 Credit Hours.

This class is concerned with the study of knowledge, otherwise known as epistemology. What is knowledge? How do we come to know things? Do we really know anything? What are the limits of human knowledge? In this course we will explore these questions. More specifically, we will examine the traditional theory of knowledge, influential counterexamples to the traditional theory of knowledge, evidentialist theories of justification, nonevidentialist theories of justification, skepticism about our knowledge of the world, and how certain social factors play a role in the acquisition of knowledge.

Repeatability: This course may not be repeated for additional credits.

PHIL 2144. Introduction to the Philosophy of Mind. 3 Credit Hours.

An introductory overview of the most important issues in contemporary philosophy of mind and cognitive studies. Especially aimed at students of Psychology.

Repeatability: This course may not be repeated for additional credits.

PHIL 2152. Introduction to Feminist Philosophy. 3 Credit Hours.

This course covers major themes in feminist philosophy through canonical and recent texts. Themes include the sex/gender distinction; oppression, equality and justice; work and family; feminist care ethics; pornography and prostitution; sex-positivity and sex-negativity; feminist epistemology and feminist critiques of science. Throughout the course, discussions will consider the intersection of gender with race, class, disability, global location, sexuality, and age.

Repeatability: This course may not be repeated for additional credits.

PHIL 2154. Political Philosophy. 3 Credit Hours.

An examination of such issues as the source of obligation to obey the state, natural rights, the limits of governmental authority, and the justification of various forms of government. Readings drawn from classical and contemporary sources.

Repeatability: This course may not be repeated for additional credits.

PHIL 2157. Environmental Ethics. 3 Credit Hours.

A study of the ethical dimensions of several contemporary environmental controversies. The course examines the major theoretical approaches to environmental ethics, including human-centered (anthropocentric), animal-centered (zoocentric), and nature-centered (biocentric and ecocentric) value systems, as well as the most important critiques of these ethical approaches. The course will also address specific issues such as biodiversity and wilderness preservation; human use of animals as food, entertainment, and research subjects; environmental racism and toxic dumping; sustainable development, population and consumption. NOTE: Students will receive credit only one time for any of the following course numbers: ENST 2157, ENST 2957, PHIL 2157, or PHIL 2957.

Course Attributes: SF, SS

Repeatability: This course may not be repeated for additional credits.

PHIL 2161. History of Philosophy: Greek. 3 Credit Hours.

A survey of ancient Greek philosophy from the Presocratics through the Hellenistic Period. Primary and secondary materials used.

Repeatability: This course may not be repeated for additional credits.

PHIL 2172. History of Philosophy: Modern. 3 Credit Hours.

A historical and critical study of the thought of selected philosophers from Descartes to Hume emphasizing their treatment of such topics as perception, the mind/body relationship, the structure of knowledge, and personal identity.

Repeatability: This course may not be repeated for additional credits.

PHIL 2900. Honors Topics in Philosophy. 3 to 4 Credit Hours.

Arranged each semester; please consult with the instructor or department for the topic offered.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

PHIL 2921. Honors Introduction to Ethical Theory. 3 Credit Hours.

Honors version of Philosophy 2121 (0121).

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

PHIL 2925. Honors Philosophy of African-American Experiences. 3 Credit Hours.

Honors version of 2125 (R125). NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, RS

Repeatability: This course may not be repeated for additional credits.

PHIL 2931. Honors Introduction to Aesthetics. 3 Credit Hours.

This course addresses major issues internal to the arts and their criticism such as definitions of art and aesthetic experience, artistic expression, form, representation, critical interpretation and evaluation. The course may also address more specific issues such as the relationship of art and race, art and freedom of expression, art and morality. NOTE: Students who have taken PHIL 2131 will not earn additional credits for this course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

PHIL 2941. Honors Philosophy of Biology. 3 Credit Hours.

This course explores a range of philosophical questions about biology, such as: What is the nature of biological explanation? Are there laws of biology? Is the current debate about creationism and intelligent design a scientific debate? Is there a unique taxonomy of biological organisms? Has human nature evolved? What is genetic determinism and is there any evidence for it? This course is geared toward scientifically-minded philosophers, philosophically minded scientists, and everyone in between. Duplicate credit warning: Students who have taken PHIL 2141 will not receive credit for taking PHIL 2941.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

PHIL 2957. Honors Environmental Ethics. 3 Credit Hours.

A study of the ethical dimensions of several contemporary environmental controversies. The course examines the major theoretical approaches to environmental ethics, including human-centered (anthropocentric), animal-centered (zoocentric), and nature-centered (biocentric and ecocentric) value systems, as well as the most important critiques of these ethical approaches. The course will also address specific issues such as biodiversity and wilderness preservation; human use of animals as food, entertainment, and research subjects; environmental racism and toxic dumping; sustainable development, population and consumption.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, SF, SS

Repeatability: This course may not be repeated for additional credits.

PHIL 3002. Philosophy of Religion. 3 Credit Hours.

Issues in philosophy of religion, including the nature of religion, the relation between reason and faith, concepts of God and proofs of the existence of God, religious and mystical experience, the nature of religious language, the problem of evil, the relation of religion to morality, concepts of death and immortality, conflicting truth-claims of different religions, and interreligious dialogue. NOTE: This course is equivalent to REL 3002; students can receive credits only one time for either course.

Repeatability: This course may not be repeated for additional credits.

PHIL 3075. Pre-Law Seminar. 3 Credit Hours.

The course deals with issues related to lawyers and the practice of law such as professional ethics, legal reasoning and the nature of legal education. NOTE: Requires permission of instructor to register. Students must consult with the instructor in the Fall to arrange an internship placement.

Repeatability: This course may not be repeated for additional credits.

PHIL 3085. Pre-Law Internship. 3 Credit Hours.

Internship with a legal office or law-related office in the Philadelphia area. NOTE: Must consult course instructor in the Fall to arrange placement.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: minimum GPA of 3 in: courses numbered 0700 to 4999.

PHIL 3123. The Ethics of War and Peace. 3 Credit Hours.

Wars cause tremendous and unconscionable damage, yet according to just war theory, they can be justified, either as a form of self-defense (and the defense of others), or as a means of securing the conditions for a future peace. In this course, we will undertake a critical examination of just war theory and consider some of the moral complexities surrounding the issues of war and peace. Related issues may be discussed, such as the moral status of terrorism, torture, drone combat, and nonviolent resistance.

Repeatability: This course may not be repeated for additional credits.

PHIL 3168. Themes in Existentialism. 3 Credit Hours.

The meaning of life and death, freedom and anxiety, joy and suffering, faith and despair -- these and other dimensions of the human condition will be explored. The course covers existential philosophers such as Kierkegaard, Nietzsche, Camus, and Sartre, though it may also focus on existentialism in film, existentialism in theater and literature, or non-Western philosophies of existence.

Repeatability: This course may not be repeated for additional credits.

PHIL 3210. Special Topics in Philosophy. 3 Credit Hours.

Arranged each semester. Please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

PHIL 3211. Intermediate Logic. 3 Credit Hours.

An introduction to the meta theory of the elementary logic of predicates and quantifiers (familiarity with which is presupposed). Proofs that a standard derivation system is sound and complete are central.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PHIL 1066 or PHIL 1966)

PHIL 3216. Philosophy of Science. 3 Credit Hours.

Basic issues in the current philosophy of science, and particularly various accounts of such key notions of science as hypotheses, confirmation, laws, causation, explanation, and theories.

Repeatability: This course may not be repeated for additional credits.

PHIL 3217. Feminist Epistemology and Philosophy of Science. 3 Credit Hours.

Human knowledge is influenced by gender ideologies. This course examines the pervasiveness of these influences, and the resultant implications for the possibility of attaining objectivity and truth in inquiry. Scientific knowledge and philosophical theories of the nature of knowledge are special focuses of attention in this course. Scientific knowledge is considered through detailed discussion of cases in empirical science. The complex relations between gender, race, and class are also discussed in relation to these epistemological issues.

Repeatability: This course may not be repeated for additional credits.

PHIL 3218. Philosophy of Medicine. 3 Credit Hours.

Philosophy of Medicine is a new and growing field in philosophy of science and the medical humanities, which looks at the specific characteristics of theories in medicine and ways of knowing in medicine. It asks questions such as: What is the meaning of illness and of health? Are some diseases (e.g. end stage renal disease, chronic fatigue syndrome, ADHD) partly or wholly socially constructed? What are the differences between conventional and alternative or non-Western approaches to illness and healing? What is "evidence based medicine," and what are its limitations? What is the new technique of "narrative medicine?" What is meant by claiming that medicine is an "art" as well as a science? We will learn about the "biopsychosocial" model of clinical care, causation and genetic disease, the classification of diseases and phenomenological accounts of illness.

Repeatability: This course may not be repeated for additional credits.

PHIL 3220. Special Topics in Philosophy. 4 Credit Hours.

Arranged each semester. Please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

PHIL 3222. Contemporary Ethical Theory. 3 Credit Hours.

Issues in ethical theory that have come to prominence since the 20th century. Both meta-ethical issues (about the meaning and justification of ethical statements) and normative issues (about obligation, responsibility, and goodness) will be examined.

Repeatability: This course may not be repeated for additional credits.

PHIL 3223. Feminist Ethics and Political Philosophy. 3 Credit Hours.

An examination of feminism's contribution to ethics, political philosophy, and legal theory. Issues may include: the role of care versus that of justice in determining moral obligations; the nature and causes of women's oppression (including the difference between the sexual oppression experienced by white women and the additional forms of oppression to which women of color/third-world women are subject); pornography and prostitution; equality and difference; essentialism as it pertains to gender and race; feminist jurisprudence; postmodern feminism.

Repeatability: This course may not be repeated for additional credits.

PHIL 3225. Good & Bad, Right & Wrong. 3 Credit Hours.

This course focuses on basic concepts in ethics. For example, good and bad, right and wrong are among the most basic ethical concepts. Other basic ethical concepts include: freedom, justice, morality, practical reason, happiness, obligation, duty, rights, value, conscience, care, trust, and friendship. From semester to semester the course will select one or more of these concepts and examine them in depth. The standard method of examination in philosophy is conceptual analysis, that is, the analysis of concepts. But depending on the concepts chosen, the examination will be informed or supplemented by the study of language, psychology, or history.

Repeatability: This course may not be repeated for additional credits.

PHIL 3226. Classics in Moral Philosophy. 3 Credit Hours.

A study of the major works in the history of moral philosophy selected from among the writings of such philosophers as Plato, Aristotle, Hobbes, Spinoza, Hume, Kant, Mill, Nietzsche, Moore.

Repeatability: This course may not be repeated for additional credits.

PHIL 3229. Latin American and Latinx Philosophy. 3 Credit Hours.

This course surveys central ideas and debates in the Latin American and Latinx philosophical traditions. We will pay special attention to the impact of European colonialism in the production and reception of philosophical ideas in Latin America and Latinx communities in the US. This survey ranges from pre-colonial indigenous philosophy to the present. We will discuss classical and contemporary Andean and Mesoamerican indigenous philosophies and why they are often not treated on par with Western forms of knowledge. We will also cover philosophical debates in colonial and post-colonial Latin America. We will examine how the colonial experience shaped Latin American philosophers' ideas around race, gender, nationhood, education, progress, and authenticity. We will also reflect on aspects of the lived experience of Latinxs in the United States, such as immigration and the controversies around Latinx identity. NOTE: This course is regularly cross-listed with LAS 3229 and SPAN 3229. Students may receive credit for only one of the following: PHIL 3229, LAS 3229, or SPAN 3229.

Repeatability: This course may not be repeated for additional credits.

PHIL 3232. History of Aesthetics. 3 Credit Hours.

A study of major works in the history of aesthetics selected from such philosophers as Plato, Aristotle, Hume, Kant, Schopenhauer, Hegel, Dewey, Bell, Collingwood, Beardsley, Langer, Dickie, Danto, and contemporary figures.

Repeatability: This course may not be repeated for additional credits.

PHIL 3235. Classics in Moral Philosophy. 3 Credit Hours.

A study of the major works in the history of moral philosophy. This course will generally focus on figures and schools from classical Greek and Roman moral philosophy.

Repeatability: This course may not be repeated for additional credits.

PHIL 3240. Special Topics. 3 Credit Hours.

Arranged each semester. Please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

PHIL 3243. Philosophy of Law. 3 Credit Hours.

An introduction to philosophical problems arising in the examination of legal systems, including questions and theories about the nature of law itself, about legal responsibility and legal punishment, and about standards of fairness in settling legal disputes.

Repeatability: This course may not be repeated for additional credits.

PHIL 3245. Philosophical Psychology. 3 Credit Hours.

Formerly known as Philosophy of Psychology; students may not receive additional credits under the new title. Throughout its history, philosophy has taken an interest in psychology. In the theory of knowledge, philosophers have been concerned with cognition and its particular forms and components: perception, belief, concepts, and reasoning. In ethics, philosophers have been concerned with action and emotion. And in metaphysics, they have been interested in the nature of the mind itself and consciousness. Central to this course are topics and questions at the intersection of philosophy and contemporary empirical psychology. The choice of topics varies from semester to semester.

Repeatability: This course may not be repeated for additional credits.

PHIL 3249. Ethics in Medicine. 3 Credit Hours.

Exploration of ethical issues generated by the application of scientific and technological advances to the preservation, destruction, and programming of human life. Topics may include: ethics of medical research, abortion, euthanasia, behavior control, allocation of scarce medical resources, and the ethics of patient-physician interaction. NOTE: Students who have taken PHIL 3949 will not earn additional credits for this course.

Repeatability: This course may not be repeated for additional credits.

PHIL 3280. Special Topics. 3 Credit Hours.

Arranged each semester; please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

PHIL 3283. Undergraduate Tutorial. 3 Credit Hours.

Independent study for undergraduates with one of the professors in the department. NOTE: Arrangements with that professor must be made before signing up for the course.

Repeatability: This course may be repeated for additional credit.

PHIL 3910. Honors Special Topics in Philosophy. 3 Credit Hours.

Arranged each semester. Please consult with the instructor.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

PHIL 3949. Honors Ethics in Medicine. 3 Credit Hours.

This course is an exploration of ethical issues generated by the application of scientific and technological advances to the preservation, destruction, and programming of human life. Topics may include: ethics of medical research, abortion, euthanasia, behavior control, allocation of scarce medical resources, and the ethics of patient-physician interaction. NOTE: Students who have taken PHIL 3249 will not earn additional credits for this course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

PHIL 3968. Honors Themes in Existentialism. 3 Credit Hours.

Honors version of 3168 (0186).

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

PHIL 4221. Social and Political Philosophy. 3 Credit Hours.

This course studies the major value questions that are addressed in contemporary theories of the nature of society and the state, including the requirements of justice in the distribution of benefits and burdens within a political society, and the justification of democracy as not only processes of majority rule but as involving participation and deliberation among citizens. The recognition of cultural identities and the role of gender and race are considered, and proposed norms of inclusiveness and diversity are analyzed. The course goes on to take up the challenge posed for philosophical theory by globalization in its economic and ecological impacts, and analyzes the norms of human rights and solidarity across borders that may be relevant in this new context. An emphasis will be placed on alternative philosophical frameworks within contemporary social and political philosophy, such as contractarianism, consequentialism, and care ethics. Readings will include such philosophers as John Rawls, Jurgen Habermas, Thomas Pogge, Iris Marion Young, and Nancy Fraser.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any PHIL course numbered 2000 to 4999 or POLS 2496)

PHIL 4229. Philosophy in Literature. 3 Credit Hours.

Selected philosophical themes as they appear in classical and modern literature. Frequently the themes concern the "enlightenment project," "modernism," and their critics.

Repeatability: This course may not be repeated for additional credits.

PHIL 4233. Problems in Aesthetics. 3 Credit Hours.

An examination of the philosophical issues concerning the nature and importance of the arts and artistic practice, including questions about the nature of aesthetic experience, the definition of art, representation and expression in art, the ontological status of artworks, truth and reference in art, and the values of art.

Repeatability: This course may not be repeated for additional credits.

PHIL 4240. Topics in the Philosophy of Psychology. 3 Credit Hours.

Selected topics - varies according to the expertise of the instructor.

Repeatability: This course may be repeated for additional credit.

PHIL 4241. Theory of Knowledge. 3 Credit Hours.

An examination of knowledge and belief. The specific subtopics involving them include truth, perception, innate ideas, justification, induction, the a priori, mathematical knowledge and rationalism versus empiricism.

Repeatability: This course may not be repeated for additional credits.

PHIL 4242. Metaphysics. 3 Credit Hours.

An examination of the most general features of the universe. Topics include the character of truth, the existence of abstract entities, the nature of persons, free will, the existence or non-existence of God, ontological commitment, the relation of philosophy to science, causation, modal properties, reality and appearance, and various forms of realism and anti-realism.

Repeatability: This course may not be repeated for additional credits.

PHIL 4244. Philosophy of Mind. 3 Credit Hours.

An examination of the character of mental and psychological states. Specific issues may include the nature of persons, relations between natural and psychological sciences, action, mental content and its relation to language.

Repeatability: This course may not be repeated for additional credits.

PHIL 4251. Philosophy of Language. 3 Credit Hours.

The study of theories of meaning and meaningfulness. Selected topics may include reference, vagueness, speech act theory, and metaphor. NOTE: Students who have taken PHIL 4951 will not earn additional credit for this course.

Repeatability: This course may not be repeated for additional credits.

PHIL 4253. Philosophy of History. 3 Credit Hours.

Problems of historical knowledge, e.g., problems about the historian's claim to explain historical events (causation in history, reasons for actions, challenges to the objectivity of history) and problems about historical interpretation (including global interpretations of the historical process, such as Augustine's, Kant's, and Hegel's).

Repeatability: This course may not be repeated for additional credits.

PHIL 4269. Contemporary British and American Philosophy. 3 Credit Hours.

Selected topics in 20th and 21st century English-speaking philosophy, varying according to instructor and semester.

Repeatability: This course may not be repeated for additional credits.

PHIL 4271. 19th Century Philosophy. 3 Credit Hours.

Selected European philosophers from Hegel to Bradley.

Repeatability: This course may not be repeated for additional credits.

PHIL 4273. Greek Philosophy. 3 Credit Hours.

Interpretation and critical examination of the dialogues of Plato and the works of Aristotle.

Repeatability: This course may not be repeated for additional credits.

PHIL 4274. Pragmatism and American Thought. 3 Credit Hours.

American pragmatism and naturalism, with emphasis on Emerson, James, Peirce, Mead, Dewey, and contemporary pragmatists.

Repeatability: This course may not be repeated for additional credits.

PHIL 4275. British Empiricism. 3 Credit Hours.

Selected topics in 17th and 18th century philosophers such as Locke, Berkeley, Hume and Reid.

Repeatability: This course may not be repeated for additional credits.

PHIL 4276. Contemporary Continental Philosophy. 3 Credit Hours.

Phenomenology and existentialism, with emphasis on such 20th century philosophers as Husserl, Heidegger, Sartre, Merleau-Ponty, Foucault, Derrida, and other post-structuralists.

Repeatability: This course may not be repeated for additional credits.

PHIL 4277. Continental Rationalism. 3 Credit Hours.

This course is devoted to selected topics in 17th and 18th century philosophers in the Rationalist tradition such as Descartes, Spinoza, Malebranche and Leibniz.

Repeatability: This course may not be repeated for additional credits.

PHIL 4278. Philosophy of Culture. 3 Credit Hours.

This course addresses central themes in philosophy of culture such as philosophical problems raised by the notion of cultural conditions of possibility, the relation of mythic knowledge to scientific and philosophical knowledge, the role of signs and symbols in the theories of culture, and the distinction between a philosophical anthropology and anthropological theory.

Repeatability: This course may not be repeated for additional credits.

PHIL 4279. Kant. 3 Credit Hours.

In depth study of some of the major critical writings of Kant.

Repeatability: This course may not be repeated for additional credits.

PHIL 4282. Undergraduate Tutorial. 3 Credit Hours.

Independent study for undergraduates with one of the professors in the department. NOTE: Arrangements with that professor must be made before signing up for the course.

Repeatability: This course may be repeated for additional credit.

PHIL 4297. Pre-Law Tutorial. 3 Credit Hours.

An alternative capstone course for majors headed toward the legal profession.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Philosophy.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

PHIL 4298. Senior Seminar. 3 Credit Hours.

The normal capstone course for philosophy majors.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Philosophy.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

PHIL 4999. Honors Senior Thesis. 3 Credit Hours.

The writing of the thesis required for graduation with distinction in philosophy.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

Physical Activity (ACTV)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ACTV 1000. Special Topics in Fitness. 1 or 2 Credit Hour.

The Kinesiology Physical Activity Program (KPAP) Special Topics courses are designed to educate students on how to become, and stay, physically fit through proper fitness- and health-related practices. Student learning outcomes include learning, developing and demonstrating the components of health-related fitness skills, while participating in a safe and healthy environment. Course topics vary from one semester to another and may include topics such as: advanced yoga, bodyweight training, advanced Pilates, dance and suspension training. Please contact the KPAP Director for upcoming course offerings.

Repeatability: This course may be repeated for additional credit.

ACTV 1001. Introduction to Fitness. 1 Credit Hour.

Introduction to Fitness is designed to help students learn about the health-related fitness components of muscular strength, muscular endurance, flexibility, aerobic capacity and body composition. Students will gain knowledge and develop skills needed to participate at a beginning level of fitness activity. Students will learn to set personal fitness goals and create their own fitness/physical activity plan. Students will be introduced to various forms of physical activity used in both group and/or individual settings. Students will also be introduced to equipment and instructed on proper usage. Fitness activities include weight training, aerobics, running, walking, etc. Students will apply these skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

ACTV 1002. Cardiovascular Fitness for a Healthy Lifestyle. 2 Credit Hours.

Cardiovascular Fitness for a Healthy Lifestyle is an introductory course focused on the promotion of health and fitness through physical activity. The course will develop and enhance students' knowledge and understanding of the scientific basis of the relationship between physical activity, health and fitness. Through activities designed for the development and maintenance of the circulatory and respiratory systems, students will learn how to develop and assess their own personal fitness and discover the benefits of fitness in combating cardiovascular risk factors and other chronic diseases. Students will apply these skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

ACTV 1003. Fitness for Life. 2 Credit Hours.

Fitness for Life introduces students to the principles related to the health-related components of physical fitness, aerobic capacity, muscular strength and endurance, flexibility, and body composition. Students will learn to apply these principles to lifelong activities. Students will assess their current fitness level, develop an activity program commensurate with personal goals, and research current findings concerning exercise, fitness, and nutrition. Lifetime activities will be explored including weight training, individual sports, endurance sports and recreational activity. Physical and psychological preparation and values of the activity are included. Students will apply these skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

ACTV 1004. Walking/Jogging/Running. 2 Credit Hours.

Walking/Jogging/Running focuses on the physical, cognitive and social skills necessary to safely transport your body from one place to another, under your own muscle power. Students will learn about cardiovascular and respiratory endurance that can be enjoyed throughout a person's lifetime. Students will learn to create and use various strategies for aerobic fitness improvement, identifying proper techniques, training methods, appropriate stride, pace, rhythmic breathing, energy cost and muscle load. Other areas of emphasis include, but are not limited to environment, safety, equipment, perceived exertion, nutrition, weight management and record keeping. An optional activity may include one or two local jogging/running event(s).

Repeatability: This course may not be repeated for additional credits.

ACTV 1006. Strength Training for Women. 2 Credit Hours.

Strength Training for Women is an introductory course of progressive resistance exercise. Students will learn the knowledge and skills needed to practice and apply weight training principles in sport, fitness and recreation. Muscular strength and muscular endurance will be studied, along with muscular structure and muscular function. Basic training techniques such as overload principle, specificity of training, progression and various types of exercise training programs are taught. Students will develop personal goals for a beginning weight training program and learn how to participate in and enjoy lifelong weight training activities. Students will also examine the psychological preparation and values related specifically to women that accompany weight training. Students will apply these skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

ACTV 1007. Bodyweight Training. 2 Credit Hours.

Bodyweight Training is an introductory course in which students learn effective resistance exercises using their own body weight and simple items around the home environment. This course covers the basics of movement, concepts of muscular strength and endurance, and body composition. Various training techniques, calisthenics exercises, compound exercises, and body control are also taught. Students will learn how to apply these skills in a safe and responsible manner, develop personal goals for their own bodyweight training program, and gain experience incorporating muscular strengthening activities as a lifelong practice.

Repeatability: This course may not be repeated for additional credits.

ACTV 1008. Beginning Weight Training. 2 Credit Hours.

Beginning Weight Training is an introductory course involving progressive resistance exercise. Students will use both external weights and bodyweight while learning weight training principles for participation in sports, recreation, or to improve their general fitness. Muscular strength and muscular endurance will be studied, along with muscular structure and muscular function. Students will learn various training techniques, such as the overload principle, specificity of training, and progression. Students will examine the psychological preparation and values that accompany weight training. Students will apply these skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

ACTV 1009. Intermediate Weight Training. 2 Credit Hours.

Intermediate Weight Training builds upon the basic principles covered in Beginning Weight Training. Students will increase their knowledge and skills needed to improve individual weight training performance for sport, recreation and fitness. Advanced forms of muscular contraction, progressive overload, specificity of training, exercise intensity, and various types of exercise programs are taught. Students will also examine the components of psychological preparation and values that accompany the sports of weightlifting and powerlifting. Students will apply these skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (KINS 1062, KINS 1106, ACTV 1006, or ACTV 1008)

ACTV 1011. ZUMBA from Around the World. 2 Credit Hours.

ZUMBA from Around the World combines fitness and cultural diversity in an easy-to-follow, interactive course that encompasses three components of culture - music, history and dance. Students will engage in activities that develop and improve muscular strength, aerobic capacity and flexibility, while advancing the practical knowledge and application of choreography, dance skills and physical health from a global perspective. Zumba introduces various cultural dances so that students will be able to understand how human movement influences cultural interaction, inform diversity and enhance physical activity. Additionally, the societal and psychological benefits of physical activity through aerobic fitness and dance will be investigated. Students will apply these activities and skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

ACTV 1013. Introduction to Yoga. 2 Credit Hours.

Introduction to Yoga develops whole-person health and fitness for the reduction of stress. Students are introduced to the basic principles of yoga and will learn and apply methods and knowledge to increase body awareness and self-understanding. Students will also practice fundamental skills and movements, along with critical thinking strategies that make yoga a safe, daily practice. Physical and psychological preparation and values of the activity are required to fully understand course material. Students will apply these skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

ACTV 1014. Intermediate Yoga. 2 Credit Hours.

Intermediate Yoga expands upon principles and postures covered in ACTV 1013 Introduction to Yoga. Intermediate Yoga provides students with more knowledge of yoga and offers more time to explore advanced movements. Students will learn the physiology and movements of yoga and apply them to individual practice. The ethics of yoga, history, principles in anatomy, motor development and biomechanics are expanded upon from Introduction to Yoga. Individual practice will include asana (posture), pranayama (breathing), and meditation led by the instructor and by fellow students.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ACTV 1013 or KINS 1064)

ACTV 1015. Yin Yoga: The Other Half of Yoga. 2 Credit Hours.

Yin Yoga is a complementary yoga practice to the more dynamic vinyasa (Yang) style that is predominant in today's western culture. In Yin Yoga, "the other half of yoga", students will learn to perform long-holds and supportive poses influencing the nervous system and deeper connective tissues. A deceptively simple practice, Yin Yoga transforms an asana (posture) into a deeper experience of meditation, reducing stress and anxiety. Students will learn to stretch and lengthen muscles and tissues, how to breathe through discomfort, fully relax, and find stillness. This course provides life-long usable techniques in the management of pain, caregiver fatigue, burnout, and chronic health conditions. This course will be a combination of yin yoga and vinyasa flow practices.

Repeatability: This course may not be repeated for additional credits.

ACTV 1018. Introduction to Pilates. 2 Credit Hours.

In Introduction to Pilates students will gain the basic knowledge and skills necessary to enhance their well-being and experience everyday health benefits. As a form of physical therapy, students will learn this holistic approach to well-being by improving balance, concentration, lowering stress, coordination, posture, core strength and flexibility. Students will learn to focus on the mind-body connection, helping the mind to maintain awareness of deep breathing and functional body movement. Students will develop and obtain the ability to apply these skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

ACTV 1023. Martial Arts - Capoeira Angola (Brazilian Martial Arts). 2 Credit Hours.

Capoeira Angola can be described as a combination of art, dance, fight and game, incorporating corporal expression in diverse movements with music, instruments and song. It is a dialogue of bodies in motion, questions and answers through bodily improvisation to musical rhythms that are unique to its appearance. To gain an authentic understanding of Capoeira's philosophy and practice, students will engage in physical training and music instruction, while also discussing books, articles and films that illuminate the cultural legacy of Africa and Brazil. Students will immerse themselves in a living lineage of tradition, history and legendary masters. Special attention will be paid to the lineage of Mestre Pastinha, regarded by many as the guardian of Capoeira Angola.

Repeatability: This course may not be repeated for additional credits.

ACTV 1024. Beginning Tae Kwon Do. 2 Credit Hours.

Beginning Tae Kwon Do introduces students to the skills and knowledge for using the hands, arms, legs and feet to attack and defend oneself. Students will learn breathing and muscle control, competitive rules, the ranking system, safety, fitness, history, values, and etiquette. Tae Kwon Do is a Korean form of martial arts and is taught from a traditional perspective and supplemented by modern scientific principles. Students will learn how to apply physical and psychological preparation and values of participation in the activity. Students will apply these skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

ACTV 1026. Beginning Aikido. 2 Credit Hours.

Beginning Aikido introduces students to the art of self-defense based on non-resistance, rather than strength. Aikido, "the way of harmony", is a unique art which can be practiced by people of all ages and levels of physical fitness. The study of Aikido techniques teaches smooth, balanced and coordinated movement in a non-competitive, cooperative atmosphere. Students strive with one another to refine their movements and further their understanding of Aikido principles. Physical and psychological preparation and values of the activity are included. Students will apply skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

ACTV 1028. Beginning Karate. 2 Credit Hours.

Beginning Karate introduces students to the principles and techniques of this weaponless self-defense of Karate. Students will learn the fundamentals of self-defense against multiple opponents while employing the basic kinesthetics of blocking, kicking and striking. Students will be introduced to the code of ethics, history and the rules of formal competition. Students will learn the significant fitness and mental benefits of lifelong karate training. Physical and psychological preparation and values of the activity are included. Students will apply skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

ACTV 1031. Judo. 2 Credit Hours.

Judo introduces the principles and techniques of grappling, throwing, falling, groundwork, as well as the rules and customs of the sport. Students will develop fitness, confidence and discipline while learning the moral values of Judo. Students will learn to use their opponent's own strength to put them off balance, using minimum effort for maximum efficiency, to throw the opponent to the ground or mat and immobilize them with a pin. Physical conditioning and psychological preparation and values of the activity are included. Students will apply skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

ACTV 1033. Wrestling. 2 Credit Hours.

Wrestling introduces students to the knowledge and movement skills necessary to participate in scholastic (folkstyle) wrestling. Students will gain an overall understanding of the sport through demonstration and experiential learning. Various techniques, positions, and holds are discussed and practiced. Students will learn about wrestling styles, rules, strategies and best practices. Students will apply practice and skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

ACTV 1034. Introduction to Fencing. 2 Credit Hours.

Introduction to Fencing provides students with a basic understanding of the fundamental skills and knowledge necessary for fencing. Students learn fencing skills such as retreat, advance, lunge, parry and feint. Students will also practice defensive and offensive strategies, while learning proper care and selection of equipment, rules of the sport, and injury prevention. Physical and psychological preparation and values of the activity are included. Students will apply skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

ACTV 1035. Personal Defense for Women. 2 Credit Hours.

Personal Defense for Women introduces a five-stage approach to personal protection (awareness, avoidance, prevention, physical action and follow up). Physical defensive skills involve "live" simulations while focusing on the concerns and needs of women. Personal Defense for Women is based on the foundations of the R.A.D. (Rape Aggression Defense) system. Students will learn personal protection and safety skills which can be practiced within a comfortable learning environment. Physical and psychological preparation and values of the activity are included. Students will apply skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

ACTV 1039. Pickleball. 2 Credit Hours.

Pickleball is a fun paddle sport that combines the elements of tennis, badminton and ping-pong. Pickleball may be played indoors or outdoors, as doubles or singles. Students will learn the skills, basic strategies, etiquette and rules of this exciting game. Pickleball is a simple game that is easy to learn, but can develop into a quick, fast-paced, competitive game for all players. How to select proper equipment, as well as finding opportunities for further participation in Pickleball will be addressed. Students will apply skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

ACTV 1041. Badminton. 2 Credit Hours.

This course introduces students to the skills, etiquette and rules of badminton. Students will learn how to develop appropriate strategies for both singles and doubles play. The sport will help students develop aerobic stamina, agility, strength and precision. Students will improve their fitness and the motor coordination necessary for recreational life-long play. Physical and psychological preparation and values of the activity are included. Students will apply skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

ACTV 1042. Beginning Tennis. 2 Credit Hours.

Beginning Tennis introduces students to the fundamental skills, strategies and etiquette of the sport of tennis. Students will become acquainted with a basic knowledge of the rules and will practice fundamental skills to become lifelong tennis participants. The emphasis of this course will be the development of movement skills and a progression from hitting to rallying. Physical and psychological preparation and values of the activity are included. Students will apply skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

ACTV 1043. Intermediate Tennis. 2 Credit Hours.

Intermediate Tennis builds upon the skills learned in Beginning Tennis by improving footwork, focusing on stroke refinement, consistent ball placement, improved shot execution, and developing advanced strategies. Knowledge of the rules and court positioning will be enhanced to assist the student as they perform on an advanced recreational level and for a lifetime. Physical and psychological preparation and values of the activity are included. Students will apply skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (KINS 1054 or ACTV 1042)

ACTV 1044. Beginning Golf. 2 Credit Hours.

Beginning Golf introduces students to the skills, strategies, etiquette, rules and selection of proper equipment, as well as opportunities for participation in golf. This introductory course is designed with the intent of teaching students the basic skills necessary to walk onto a golf course and play a knowledgeable, competent and enjoyable round of golf. Physical and psychological preparation and values of the sport are included. Students will apply skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

ACTV 1045. Intermediate Golf. 2 Credit Hours.

The Intermediate Golf course advances the skills learned in Beginning Golf. Advanced strategies, etiquette, knowledge of the rules and proper equipment selection will be taught, including current technological advances in the sport. This course has been designed with the intent of assisting students with the advanced skills necessary to play a knowledgeable, competent and competitive round of golf on a local golf course or recreational tournament. Physical and psychological preparation and values of the sport are included. Students will apply skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (KINS 1019 or ACTV 1044)

ACTV 1047. Gymnastics. 2 Credit Hours.

This introductory course will introduce students to the skills of floor exercise, tumbling, trampoline, and vaulting (for men and women); rings, horizontal bar, parallel bars, and side horse (for men); balance beam and uneven bars (for women). Students will gain the knowledge and skills needed to safely participate in beginning gymnastics. Students will be introduced to competition skill judging and gym equipment/apparatus. Physical and psychological preparation and values of the sport are included. Students will apply skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

ACTV 1048. Lifetime Indoor Games and Sports. 1 Credit Hour.

In Lifetime Indoor Games and Sports students are exposed to several indoor games and sports. Students will learn skills, rules and strategies needed to participate at beginning levels of selected lifetime indoor activities. Depending on the instructor, the indoor activities may include spikeball, floorball, futsal, dodgeball, net games and racquet sports. Historical and cultural influences will also be taught. Physical and psychological preparation and sportsmanship of the activity are included. Students will apply skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

ACTV 1049. Lifetime Outdoor Games and Sports. 1 Credit Hour.

In Lifetime Outdoor Games and Sports students are exposed to several outdoor games and sports. Students will learn skills, rules and strategies needed to participate at beginning levels of selected lifetime outdoor activities. Depending on the instructor, the outdoor activities may include bocce, disc golf, ultimate, softball, rugby and flag football. Historical and cultural influences will also be taught. Physical and psychological preparation and sportsmanship of the activity are included. Students will apply skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

ACTV 1051. Volleyball. 2 Credit Hours.

This course introduces students to the skills, etiquette and rules of volleyball. Volleyball can help students improve muscle strength in arms, shoulders and legs. Students will improve their hand-eye coordination, reflexes and balance necessary for recreational life-long play. As a non-contact and mixed gender sport, students will get to know other students, practice teamwork, improve communication and have fun. Students will apply skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

ACTV 1052. Soccer. 2 Credit Hours.

This course introduces students to the playing skills, strategies, history, etiquette and rules necessary for participation in soccer as a lifetime recreational sport. The course will utilize both indoor and outdoor playing/practice spaces. When indoors, the course will give attention to the international sport of Futsal, a game played on a hard-court emphasizing control, improvisation and technique. When on the outdoor field, emphasis will be on skills required for a traditional larger playing space. Physical, psychosocial factors and values of participation in the activity are included. Students will apply skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

ACTV 1053. Basketball. 2 Credit Hours.

Basketball introduces the skills, strategies, etiquette, knowledge of the rules, and how to prepare for opportunities for participation in basketball as a lifetime recreational sport. Physical and psychological preparation and values of participation in the activity are included. Students will apply skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

ACTV 1057. Adventure Climbing. 2 Credit Hours.

Adventure Climbing focuses on the physical, cognitive and social skills necessary to safely participate in climbing at ropes courses, rock climbing, aerial adventure parks and related settings. Students will learn safety and spotting techniques, selection of climbing equipment, knot tying, Prusik climbing, belaying and rappelling. Physical and psychological preparation and values of the activity are included. Students will apply skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

ACTV 1058. Outdoor Activities and Leadership Skills. 2 Credit Hours.

This outdoor leadership course will lead students to explore the outdoors safely, with good self-care practices, and engaging in the environmental principles put forth by Leave No Trace. Students will learn and apply leadership skills through outdoor activities, gain awareness and sensitivity to the environment, and expand their knowledge and understanding of environmental challenges. Students will focus on building self-confidence and leadership qualities through various experiential and collaborative learning activities. Activities and skills will include risk management in the outdoors, learning to facilitate a low ropes challenge course, problem solving activities and team building activities. The class will include two, half-day graded field labs to demonstrate these skills.

Repeatability: This course may not be repeated for additional credits.

ACTV 1061. Introduction to Backpacking and Camping. 2 Credit Hours.

The Introduction to Backpacking and Camping course focuses on the physical, cognitive and social skills necessary to safely participate and enjoy outdoor wilderness experiences as a lifelong activity. This introductory course acquaints the student with the concepts of Leave No Trace, all-weather and low impact backpacking and camping, the selection and care of equipment, expedition planning and behavior, outdoor navigation, cooking methods, engaging the environment, safety in the outdoors, and basic survival techniques. The course includes at least two (2) overnight campouts and one (1) day hike along with instructional and planning meetings on campus. Physical and psychological preparation and values of the activity is included. Students will apply skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

ACTV 1063. Outdoor Activity Workshop. 1 Credit Hour.

The Outdoor Activity Workshop is designed to introduce students to basic outdoor knowledge and skills needed to participate in outdoor adventure activities. Students will engage in outdoor fitness activities such as day hiking, basic wilderness first aid practices, and basic survival skills. Students will also be introduced to the Leave No Trace principles, mindfulness in nature, various outdoor activities, and basic navigational skills. The Outdoor Activity Workshop will require students to participate in two weekend lab(s) off-campus to experience nature and to practice learned skills. Students will apply skills in a safe, effective and responsible manner.

Repeatability: This course may not be repeated for additional credits.

Physics (PHYS)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

PHYS 0834. Exploring the Cosmos. 3 Credit Hours.

This course is typically offered in Fall, Spring, and Summer I.

This GenEd course will use the fascinating science surrounding the makeup, origin, and future of our Universe to teach the methods by which scientists study nature. The course will also explore the (sometimes controversial) history of the subject, including the intersections of ethics and science as well as the role of different cultures. Note: Students may not receive credit for both PHYS 0846 (The Universe As We Know It) and PHYS 0834 (Exploring the Cosmos).

Course Attributes: GS

Repeatability: This course may not be repeated for additional credits.

PHYS 0839. Powering the Future. 3 Credit Hours.

This course is typically offered in Fall and Spring.

How can we provide inexpensive, safe, environmentally clean energy supplies for the United States and the world as a whole despite rising population and increasing affluence? Study problems of our conventional fossil and nuclear fuel use, and how they might be relieved; explore the physical and technological possibilities for using energy much more efficiently; investigate various renewable-energy sources (such as solar, hydrogen cells, hydropower, and biofuels) that significantly reduce effects on the environment. In the course lab projects, you will research and develop a sustainable energy proposal for your own home, campus, or community. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot get credit for this course if they have successfully completed Physics 0939.

Course Attributes: GS, SE, SF, SP

Repeatability: This course may not be repeated for additional credits.

PHYS 0847. How Things Work: The Physics of Everyday Life. 3 Credit Hours.

This course is typically offered in Fall, Spring, and Summer I.

How does a computer store information? Do humans and other animals see color the same way? What is stopping terrorists from developing nuclear weapons? What makes certain musical notes sound good together? What are the facts about global warming? Does the radiation from cell phones cause cancer? A basic knowledge of science is essential to being a smart consumer, an informed voter, and a full participant in society. How Things Work will survey a variety of important, topical questions relevant to technology, the natural world, and current events using lectures combined with illustrative in-class demonstrations such as a rocket powered by water, a magnet made to levitate using superconductors and liquid nitrogen, a crank-operated electric generator, a CT scan machine, and an engine fueled by ice. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core.

Course Attributes: GS

Repeatability: This course may not be repeated for additional credits.

PHYS 0872. The Science of Sound. 3 Credit Hours.

This course is typically offered in Fall, Spring, and Summer I.

For living things the ability to hear sounds is an essential tool for survival, and sound is central to speech and languages. In the arts sound also plays a fundamental role, above all in music. The close connection between music, mathematics, and physics has long fascinated scientists. Advances in electronics and computing are revolutionizing the composition, production, and recording of sound. Science of Sound is an interdisciplinary course involving elements of physics, physiology, psychology, music, and engineering. After a four-week introduction to the fundamental physics of sound waves, we will consider human hearing and the human voice; scales, harmony, and sound production by musical instruments; architectural acoustics; and the electronic reproduction of sound. The course includes many in-class demonstrations. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot get credit for this course if they have completed Physics 1003: Acoustics.

Course Attributes: GS

Repeatability: This course may not be repeated for additional credits.

PHYS 0939. Honors Powering the Future. 3 Credit Hours.

This course is typically offered in Spring.

How can we provide inexpensive, safe, environmentally clean energy supplies for the United States and the world as a whole despite rising population and increasing affluence? Study problems of our conventional fossil and nuclear fuel use, and how they might be relieved; explore the physical and technological possibilities for using energy much more efficiently; investigate various renewable-energy sources (such as solar, hydrogen cells, hydropower, and biofuels) that significantly reduce effects on the environment. In the course lab projects, you will research and develop a sustainable energy proposal for your own home, campus, or community. (This is an Honors course.) NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot get credit for this course if they have successfully completed Physics 0839.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GS, HO, SE, SF, SP

Repeatability: This course may not be repeated for additional credits.

PHYS 1001. Physics: Matter and Motion. 4 Credit Hours.

This course is typically offered in Fall and Spring.

An introduction to the ideas and techniques used in the study of motion. Application to a wide variety of physical systems ranging from air molecules to footballs to black holes. Mostly descriptive using photographic techniques, films, and demonstrations. NOTE: (1) No laboratory. (2) This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor. (3) Students who have taken a higher number introductory physics sequence cannot take this course for credit.

Course Attributes: SA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 0701 to 0702, any MATH course numbered 0800 to 4999 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC3A, 'Y' in MC6A, STAT 1001 (may be taken concurrently), 'Y' in STT2, STAT 1102 (may be taken concurrently), STAT 1902 (may be taken concurrently), 'Y' in MATW, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

PHYS 1004. Introduction to Astronomy. 3 Credit Hours.

This course is typically offered in Fall.

After a description of local space which includes the universe of galaxies, red shift, and the big bang will be discussed. White dwarfs, red giants, pulsars, black holes, and quasars will be covered. The treatment will be mostly descriptive, utilizing slides, NASA films, and several trips to our planetarium. NOTE: (1) No laboratory. (2) This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.

Course Attributes: SB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1021, any MATH course numbered 1022 to 3080 (may be taken concurrently), 'Y' in MC5, 'Y' in MC6, 'Y' in MC6A, STAT 1001, 'Y' in STT2, STAT 1102, STAT 1902, 'Y' in MATW, or 'Y' in MC6T)

PHYS 1005. Light, Art, and Nature. 4 Credit Hours.

This course is typically offered in Spring.

An introduction to the properties of light, whether interpreted as rays, waves, or photons. Discussion of the basic ideas of geometric and wave optics, with application to the analysis of photography, color, vision, and modern physics. Emphasis is on factors that permit the artist and observer to understand and more fully control the design and interpretation of images of all kinds. Demonstrations, experiments, and video and computer simulations to analyze signals received by the eyes or instruments. NOTE: (1) Course is primarily designed for students interested in the visual arts, but is open to anyone. Minimal mathematics. (2) This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement.

Course Attributes: SA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 0701 to 0702, any MATH course numbered 0800 to 4999 (may be taken concurrently), 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC3A, 'Y' in MC6A, STAT 1001 (may be taken concurrently), 'Y' in STT2, STAT 1102 (may be taken concurrently), STAT 1902 (may be taken concurrently), 'Y' in MATW, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

PHYS 1006. Medical Physics. 3 Credit Hours.

This course is not offered every year.

Medical Physics is an introductory science elective course that is open to students with little exposure to science or mathematics. With nominal (high school level) mathematics preparation, students can learn how basic principles of physics are utilized in medical processes. Topics to be examined include: the nature of radiation, radiation exposure, nuclear medicine, CT and MR imaging, and ultrasound techniques.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1021, any MATH course numbered 1022 to 3080 (may be taken concurrently), 'Y' in MC5, 'Y' in MC6, 'Y' in MC6A, STAT 1001, 'Y' in STT2, STAT 1102, STAT 1902, 'Y' in MATW, or 'Y' in MC6T)

PHYS 1007. Science & Science Fiction in Film. 3 Credit Hours.

This course is typically offered in Spring.

This course takes a captivating look at physical phenomena depicted in a collection of popular science fiction films. These include Deep Impact (1998) in which Earth is threatened by a giant comet, The Peacemaker (1998) where a terrorist's atomic bomb is planted in New York City, I Robot (2007) with a detective fighting to prevent a takeover of the human race by robots, and Contact (1997) featuring an astronomer who discovers the first real message from an alien civilization. Other films deal with global warming, astronomy, electricity and magnetism.

There are no in-person meetings of this class. Students discuss films on the course web site and submit answers to weekly questions via the Internet at times that are individually convenient for each student. E-Mail the course instructor, Dr. Dubeck, at ldubeck@temple.edu for access to the course web site.

Repeatability: This course may not be repeated for additional credits.

PHYS 1008. Physics Seminar I. 1 Credit Hour.

This course is typically offered in Fall.

Physics Seminar I serves as a survey introduction to physics of the 21st century and the numerous, diverse career paths followed by those with a physics degree. The intent of this course is to build a community of physics majors while they are at the beginning of their typical course of study, with the introductory physics courses providing common points of discussion. Students will attend talks, lab tours and open-ended question-and-answer roundtable discussions given by physics degree holders. One section of the class will focus on speakers from across the spectrum of physics related research at Temple University, including solid state, optical, nuclear, medical and chemical physics. The course will also provide a venue for those from non-academic sectors where the physics degree is highly valued, such as national laboratories, industrial research, patent law, finance and others. This is a required course for BS and BA in Physics and BS in Physics with Teaching majors and is recommended for other physics related majors.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PHYS 1021 (may be taken concurrently), PHYS 1061 (may be taken concurrently), PHYS 1961 (may be taken concurrently), PHYS 2021 (may be taken concurrently), or PHYS 2921 (may be taken concurrently))

PHYS 1021. Introduction to General Physics I. 0 or 4 Credit Hours.

This course is typically offered in Fall, Spring, and Summer I.

This course is an algebra-based introduction to physics. Topics covered in this course include mechanics, waves and oscillations, and elements of thermodynamics. Biological applications discussed where appropriate.

NOTE:

(1) Completing a 2 semester physics sequence will satisfy your Science and Technology (GS) GenEd requirements. (2) Two sections are required for this course: a 0.0 credit Laboratory section and the 4.0 credit Lecture & Recitation section. The course number for the Lecture & Recitation are the same for the Laboratory, but have unique section numbers. (3) Some pre-professional health programs require a calculus-based course such as Physics 1061.

Course Attributes: SA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1021, any MATH course numbered 1022 to 3080 (may be taken concurrently), 'Y' in MC5, 'Y' in MC6, 'Y' in MC6A, STAT 1001, 'Y' in STT2, STAT 1102, STAT 1902, 'Y' in MATW, or 'Y' in MC6T)

PHYS 1022. Introduction to General Physics II. 0 or 4 Credit Hours.

This course is typically offered in the Fall, Spring, and Summer II.

This second semester algebra-based introductory physics course is a follow-up to Physics 1021. Topics covered in this course include electricity and magnetism, optics, atomic, molecular, and nuclear physics. Biological applications discussed where appropriate.

NOTE:

(1) Completing a 2 semester physics sequence will satisfy your Science and Technology (GS) GenEd requirements. (2) Two sections are required for this course: a 0.0 credit Laboratory section and the 4.0 credit Lecture & Recitation section. The course numbers for the Lecture & Recitation are the same for the Laboratory, but have unique section numbers. (3) Some pre-professional health programs require a calculus-based course such as Physics 1062.

Course Attributes: SB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PHYS 1011, PHYS 1021, PHYS 1061, PHYS 2021, or PHYS 2921)

PHYS 1031. Physics I for Pre-Health Postbaccalaureates. 0 or 4 Credit Hours.

This course is typically offered in Fall.

This is the first semester of general physics for post-baccalaureate students. It includes a quantitative introduction to kinematics, dynamics, work, energy, momentum, static equilibrium, fluids, vibrations, waves, sound, temperature, kinetic theory, heat, and the laws of thermodynamics. Special emphasis is given to applications of these topics to health sciences.

Repeatability: This course may not be repeated for additional credits.

PHYS 1032. Physics II for Pre-Health Postbaccalaureates. 0 or 4 Credit Hours.

This course is typically offered in Spring.

This is the second semester of general physics for post-baccalaureate students. It includes a quantitative introduction to electricity and magnetism, optics, atomic, molecular, and nuclear physics. Special emphasis is given to applications of these topics to health sciences. Note: To register for this course, students must satisfy the prerequisite or obtain permission from the program director.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in PHYS 1031.

PHYS 1061. Elementary Classical Physics I. 0 or 4 Credit Hours.

This course is typically offered in Fall, Spring, and Summer I.

Calculus-based introductory physics focused on developing algorithmic problem-solving skills and intended as a preparation for advanced courses in physics as well as preparation for further study in upper division science and engineering. Topics include elementary vector algebra, one-dimensional motion, particle dynamics, work and energy, conservation of energy, conservation of linear momentum, collisions, rotational kinematics and dynamics, conservation of angular momentum, oscillations, waves, and gravitation.

NOTE:

(1) By completing a 2 semester physics sequence you will satisfy your Science and Technology (GS) GenEd requirements. (2) Students cannot receive credits for both Physics 1061 and 2021. (3) Two sections are required for this course: a 0.0 credit Laboratory section and the 4.0 credit Lecture & Recitation section. The course numbers for the Lecture & Recitation are the same for the Laboratory, but have unique section numbers. (4) Some pre-health programs require a calculus-based course such as this course, Physics 1061.

Course Attributes: SA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (MATH 1041 (C or higher; may be taken concurrently), MATH 1941 (C or higher; may be taken concurrently), MATH 1038 (C or higher; may be taken concurrently), MATH 1042 (may be taken concurrently), MATH 1044 (may be taken concurrently), MATH 1942 (may be taken concurrently), MATH 1951 (may be taken concurrently), any MATH course numbered 2043 to 3080 (may be taken concurrently), 'Y' in MA06, 'Y' in MATW, 'Y' in CRMA08, or 'Y' in CRMA21)

PHYS 1062. Elementary Classical Physics II. 0 or 4 Credit Hours.

This course is typically offered in Fall, Spring, and Summer II.

This second semester calculus-based introductory physics course is a follow-up to Physics 1061. The course focuses on developing algorithmic problem-solving skills and is intended as a preparation for advanced courses in physics as well as preparation for further study in upper division science and engineering. Topics include temperature, heat and the first law of thermodynamics, kinetic theory of gases, entropy and the second law of thermodynamics, electrical charges, the electric field, Gauss's Law, electrostatic potential, capacitors and dielectrics, current, resistance, Kirchhoff's laws, the magnetic field, Ampere's Law, Faraday's Law, inductance, geometrical optics, and interference and diffraction of light.

NOTE:

(1) By completing a 2 semester physics sequence you will satisfy your Science and Technology (GS) GenEd requirements. (2) Students cannot receive credit for both Physics 1062 and 2022. (3) Two sections are required for this course: a 0.0 credit Laboratory section and the 4.0 credit Lecture & Recitation section. The course numbers for the Lecture & Recitation are the same for the Laboratory, but have unique section numbers. (4) Some pre-health programs require a calculus-based course such as this course, Physics 1062.

Course Attributes: SB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PHYS 1061, PHYS 2021, or PHYS 2921) and (MATH 1042 (may be taken concurrently), MATH 1044 (may be taken concurrently), MATH 1942 (may be taken concurrently), MATH 1951 (may be taken concurrently), any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW)

PHYS 1083. Directed Reading/Study. 1 to 4 Credit Hour.

This course is typically offered in Fall, Spring, and Summer I.

Independent study in physics. NOTE: This course may be repeated for credit.

Repeatability: This course may be repeated for additional credit.

PHYS 1454. Observational Astronomy Through Design. 4 Credit Hours.

This course studies astronomy through direct measurements made by students through devices they design and produce through the Temple University Lorretta C. Duckworth makerspace. Weekly classroom meetings will verse students in basic astronomy, use of the makerspace, and transition to active discussions as observations accumulate. Students will become familiar with basic instrument design, data acquisition, and data analysis as they observe the Sun, Moon, bright stars, planets (when visible) and time-sensitive targets of opportunity. Students will be able to propose their own observational targets as well. Note: This course is 2 semesters long to allow for enough observations to make conclusions about astronomical motions, and regular observations will need to be made at regular intervals outside of class time.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1021, any MATH course numbered 1022 to 3080 (may be taken concurrently), 'Y' in MC5, 'Y' in MC6, 'Y' in MC6A, STAT 1001, 'Y' in STT2, STAT 1102, STAT 1902, 'Y' in MATW, or 'Y' in MC6T)

PHYS 1961. Honors Elementary Classical Physics I. 0 or 4 Credit Hours.

This course is typically offered in Fall.

This undergraduate level course is intended for Honors students majoring in physics and related fields. Physics 1961 is the first part of a two-semester course in classical physics starting with classical mechanics for Physics 1961 and electricity and magnetism for Physics 1962. Topics for Physics 1961 include one- and two-dimensional motion; forces and particle dynamics, work and energy, conservation of energy, linear momentum, and angular momentum; collisions, rotational kinematics and dynamics, gravitation, oscillations, waves, and fluid dynamics. This course differs from the Physics 1061 course in the number of topics and a more mathematical treatment and discussion. A strong background in algebra and trigonometry and some understanding of vector algebra is required. A math review will take place during the first week of classes including basic elements of algebra, trigonometry, vector algebra and some calculus. This course is taught in the Studio Physics format combining elements of lecturing and recitation supplemented with a separate, but integrated lab. Each student is assigned to a certain lecture section (Lecture plus Recitation) and lab section. This course requires registration for a 0.0 credit Laboratory section in addition to the 4.0 credit Lecture and Recitation section. The Laboratory sections corresponding to a course are listed under the same course number as the Lecture and Recitation sections, but have unique section numbers.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (MATH 1941 (C or higher; may be taken concurrently), MATH 1041 (C or higher; may be taken concurrently), MATH 1038 (C or higher; may be taken concurrently), MATH 1942 (may be taken concurrently), MATH 1042 (may be taken concurrently), MATH 1951 (may be taken concurrently), any MATH course numbered 2043 to 3080 (may be taken concurrently), 'Y' in MA06, 'Y' in MATW, 'Y' in CRMA08, or 'Y' in CRMA21)

PHYS 1962. Honors Elementary Classical Physics II. 0 or 4 Credit Hours.

This course is typically offered in Spring.

This undergraduate level course is intended for Honors students majoring in physics and related fields. Physics 1962 is the second part of a two semester course in classical physics starting with classical mechanics for Physics 1961 and electricity and magnetism for Physics 1962. Topics for Physics 1962 include temperature, heat and the first law of thermodynamics, kinetic theory of gases, entropy and the second law of thermodynamics, electrical charges, the electric field, Gauss's Law, electrostatic potential, capacitors and dielectrics, current, resistance, the magnetic field, Ampere's Law, Faraday's Law, inductance, geometrical optics, and interference and diffraction of light. This course differs from Physics 1062 in the number of topics and a more mathematical treatment and discussion. A strong background in algebra and trigonometry along with elementary understanding of vector algebra is required. Basic understanding of calculus is helpful. A math review will take place during the first week of classes including basic elements of vector algebra and calculus, in particular vector calculus. This course is taught in the Studio Physics format combining elements of lecturing and recitation supplemented with a separate, but integrated lab. Each student is assigned to a certain lecture section (Lecture plus Recitation) and lab section. This course requires registration for a 0.0 credit Laboratory section in addition to the 4.0 credit Lecture and Recitation section.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1942 (may be taken concurrently), MATH 1042 (may be taken concurrently), MATH 1951 (may be taken concurrently), any MATH course numbered 2043 to 3080 (may be taken concurrently), or 'Y' in MATW) and (PHYS 1961, PHYS 1061, PHYS 2921, or PHYS 2922)

PHYS 2021. General Physics I. 0 or 4 Credit Hours.

This course is typically offered in Fall, Spring, and Summer I.

Calculus-based introductory physics. Topics include mechanics, gravitation, energy conservation, fluids and waves. Biological applications discussed where appropriate. NOTE: By completing a 2 semester physics sequence you will satisfy your Science and Technology (GS) GenEd requirements. Students cannot receive credits for both Physics 1061 and 2021. This course is an option for pre-health, neuroscience and genomic medicine majors.

Two sections are required for this course. This course requires registration for a 0.0 credit Laboratory section in addition to the 4.0 credit Lecture & Recitation section. The Laboratory sections corresponding to a course are listed under the same course number as the Lecture & Recitation sections, but have unique section numbers.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (MATH 1042 (may be taken concurrently), MATH 1044 (C or higher; may be taken concurrently), MATH 1942 (may be taken concurrently), MATH 1951 (may be taken concurrently), any MATH course numbered 2043 to 3080 (may be taken concurrently), 'Y' in MATW, or 'Y' in CRMA10)

PHYS 2022. General Physics II. 0 or 4 Credit Hours.

This course is typically offered in Fall, Spring, and Summer II.

Normally follows Physics 2021. Calculus-based introductory physics. Topics include electricity and magnetism, optics, atomic, molecular, and nuclear physics. Biological applications discussed where appropriate. NOTE: By completing a 2 semester physics sequence you will satisfy your Science and Technology (GS) GenEd requirements. Students cannot receive credits for both Physics 1062 and 2022. This course is an option for pre-health, neuroscience and genomic medicine majors.

Two sections are required for this course. This course requires registration for a 0.0 credit Laboratory section in addition to the 4.0 credit Lecture & Recitation section. The Laboratory sections corresponding to a course are listed under the same course number as the Lecture & Recitation sections, but have unique section numbers.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (PHYS 1061, PHYS 2021, or PHYS 2921) and (MATH 1042 (may be taken concurrently), MATH 1044 (C or higher; may be taken concurrently), MATH 1942 (may be taken concurrently), MATH 1951 (may be taken concurrently), any MATH course numbered 2043 to 3080 (may be taken concurrently), 'Y' in MATW, or 'Y' in CRMA10)

PHYS 2063. Wave Physics. 3 Credit Hours.

This course is typically offered in Fall.

This course uses oscillatory phenomena to form a bridge from first year physics and mathematics to more complex physics topics. A thorough mathematical treatment of mechanical vibrations and alternating current circuits is followed by a description of waves propagating in one dimension. This treatment will include techniques for solving linear ordinary and partial differential equations. Strings and sound waves are used to illustrate transverse and longitudinal wave phenomena. Next, this is extended into electromagnetic waves in three dimensions, as well as transmission lines. Fourier methods are introduced, followed by waves and interference phenomena in optical systems. Applications to geometrical and physical optics are described and analyzed. The end of the course contains introductions to quantum mechanical waves and also to nonlinear phenomena.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (PHYS 1062, PHYS 1962, PHYS 2022, PHYS 2922 (C or higher), or 'Y' in CRPH01) and (MATH 1042 (C or higher), MATH 1942 (C or higher), MATH 1951 (C or higher), any MATH course numbered 2043 to 3080 (may be taken concurrently), 'Y' in MATW, 'Y' in CRMA09, or 'Y' in CRMA11)

PHYS 2083. Directed Reading/Study. 2 to 4 Credit Hours.

This course is typically offered in Fall, Spring, Summer I and Summer II.

Undergraduate independent study in physics. NOTE: This course may be repeated for credit.

Repeatability: This course may be repeated for additional credit.

PHYS 2101. Classical Mechanics. 3 Credit Hours.

This course is typically offered in Spring.

Newton's laws of motion, one-dimensional motion, second order differential equations, harmonic oscillators (damped, forced), vector analysis, conservation laws, three-dimensional motion, central forces, motion in electromagnetic fields, collisions, center-of-mass transformations, two-body problem, numerical/computer solutions, coupled oscillators. Rigid body rotation, statics, elasticity, fluid equilibrium, gravitation.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PHYS 1062, PHYS 1962, PHYS 2022, or PHYS 2922) and (MATH 2043 or MATH 2943)

PHYS 2502. Mathematical Physics. 4 Credit Hours.

This course is typically offered in Spring.

Infinite series, determinants and matrices, ordinary differential equations, vector analysis, curvilinear coordinate systems, Fourier series, properties of Legendre and Bessel functions, partial differential equations. Laboratory portion of course provides training in use of Mathematica, an integrated environment for technical computing, to solve problems in mathematical physics. NOTE: No prior computer experience is necessary.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PHYS 1062, PHYS 1962, PHYS 2022, or PHYS 2922) and (MATH 2043 or MATH 2943)

PHYS 2511. Scientific Computing I. 1.5 Credit Hour.

This course is typically offered in Spring.

An introduction to computing as a tool for solving scientific problems. No previous programming experience is assumed. Students completing this course will be able to write their own computer programs to solve introductory science problems, and will be prepared to understand more advanced techniques. Topics include the basic computer science needed to understand hardware and software processes, program organization and debugging, spreadsheet programs (Excel), interpreted programming languages (Python), compiled programming languages (C++), basic numerical methods for solving physics problems, basic error analysis, and information visualization techniques.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PHYS 1021, PHYS 1061, PHYS 1961, PHYS 2021, or PHYS 2921) and (MATH 1021, any MATH course numbered 1022 to 3080, 'Y' in MC5, 'Y' in MC6, 'Y' in MC6A, 'Y' in MA03, 'Y' in MATW, or 'Y' in MC6T)

PHYS 2796. Introduction to Modern Physics. 4 Credit Hours.

This course is typically offered in Spring.

The course will provide an introduction to the special theory of relativity and quantum mechanics, with emphasis of their applications to atomic, molecular and solid state physics. The course is calculus based and writing intensive; it relies heavily on problem solving and technical writing.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PHYS 1062, PHYS 1962, PHYS 2022, or PHYS 2922) and (MATH 2043 (may be taken concurrently) or MATH 2943 (may be taken concurrently))

PHYS 2921. Honors General Physics I. 0 or 4 Credit Hours.

This course is typically offered in Fall.

This is the honors version of Physics 2021. Topics include mechanics, gravitation, energy conservation, fluids and waves. Biological applications discussed where appropriate.

Two sections are required for this course. This course requires registration for a 0.0 credit Laboratory section in addition to the 4.0 credit Lecture & Recitation section. The Laboratory sections corresponding to a course are listed under the same course number as the Lecture & Recitation sections, but have unique section numbers.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (MATH 1042 (may be taken concurrently), MATH 1044 (C or higher; may be taken concurrently), MATH 1942 (may be taken concurrently), MATH 1951 (may be taken concurrently), any MATH course numbered 2043 to 3080 (may be taken concurrently), 'Y' in MATW, or 'Y' in CRMA10)

PHYS 2922. Honors General Physics II. 0 or 4 Credit Hours.

This course is typically offered in Spring.

This is the honors version of Physics 2022 and normally follows Physics 2921. Topics include electricity and magnetism, optics, atomic, molecular, and nuclear physics. Biological applications discussed where appropriate.

Two sections are required for this course. This course requires registration for a 0.0 credit Laboratory section in addition to the 4.0 credit Lecture & Recitation section. The Laboratory sections corresponding to a course are listed under the same course number as the Lecture & Recitation sections, but have unique section numbers.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (PHYS 1061, PHYS 2021, or PHYS 2921) and (MATH 1042 (may be taken concurrently), MATH 1044 (C or higher; may be taken concurrently), MATH 1942 (may be taken concurrently), MATH 1951 (may be taken concurrently), any MATH course numbered 2043 to 3080 (may be taken concurrently), 'Y' in MATW, or 'Y' in CRMA10)

PHYS 3000. Contemporary Physics. 1 or 2 Credit Hour.

This course is not offered every year.

This introduces students to an active research area in Physics, in particular an area currently represented in the Temple Physics Department. This includes both theoretical and experimental physics topics. Examples would include computationally intensive techniques, research connected with national facilities used by the faculty, and emerging new fields based on the recent discoveries. The format will reflect the specific outcomes of the course syllabus as offered. As this is a low-credit course, the course may NOT be used to fulfill a Physics or Science elective in any major. Students must have completed PHYS 2511 and PHYS 2796. Other prerequisites will depend on the particular topic.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in PHYS 2511 and PHYS 2796.

PHYS 3083. Directed Reading/Study. 3 Credit Hours.

This course is typically offered in Fall, Spring, Summer I and Summer II.

This course offers the opportunity for more advanced independent study. NOTE: This course may be repeated for credit.

Repeatability: This course may be repeated for additional credit.

PHYS 3091. Research Methods. 3 Credit Hours.

This course is typically offered in Spring.

Research Methods is required for all of the TUteach with Teaching majors. It is one of several content courses specially designed to meet the needs of future teachers. Sections meet two hours per week for non-traditional, interactive lectures and two hours per week for lab. The course is cross-listed in Biology, Chemistry, Earth and Environmental Science, and Physics. The goals of the course are (1) to provide students with the tools that scientists use to solve scientific problems; (2) to give students the opportunity to use these tools in a laboratory setting; (3) to make students aware of how scientists communicate with each other through peer-reviewed scientific literature; and (4) to enable students to understand how scientists develop new knowledge and insights, the most important of which are eventually presented in textbooks and taught in conventional science classes. Students design and carry out four independent inquiries, which they write up and present in the manner that is common in the scientific community. The inquiries incorporate mathematics and the various science disciplines, thus the team of instructors teaching this course have expertise in different disciplines and are available to supervise all students as they work on their inquiries in the lab. The combination of Research Methods and the TUteach course "Perspectives on Science and Mathematics" (Philosophy 2196) provides prospective science and mathematics teachers with an in-depth understanding of how the scientific enterprise works. NOTE: Physics 3091 is only available for major credit in the Physics with Teaching BS program.

College Restrictions: Must be enrolled in one of the following Colleges: Science & Technology.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (SCTC 1289 or SCTC 1389)

PHYS 3101. Analytical Mechanics. 3 Credit Hours.

This course is typically offered in Fall.

Moving coordinate systems, three-body problems, partial differential equations, wave propagation (strings, membranes, fluids), boundary value problems, normal modes, fluid equations of motion, viscosity; virtual work, Lagrange's equations, Hamilton's equations; angular momentum of a rigid body, inertia tensor, Euler's equations, Euler angles, tops and gyroscopes, small vibrations.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in PHYS 2101.

PHYS 3301. Electricity and Magnetism. 4 Credit Hours.

This course is typically offered in Fall.

Electrostatics, magnetostatics, microscopic interpretation of polarization P and magnetization M , electrostatic and magnetostatic energy, Faraday's Law, self and mutual inductance, magnetic circuits; integral and differential forms of Gauss, Ampere, and Faraday laws; AC circuits; introduction to the displacement current and Maxwell's equations. Laboratory portion of the course provides investigation on DC and AC circuits, bridge circuits, sources of emf, Hall effect, and operational amplifier circuits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PHYS 1062, PHYS 1962, PHYS 2022, or PHYS 2922) and (MATH 2043 or MATH 2943)

PHYS 3302. Classical Electromagnetism. 3 Credit Hours.

This course is typically offered in Spring.

Solutions to the equations of Poisson and Laplace; multipole expansions; electrostatic and magnetostatic energy, forces, and torques; Maxwell's equations; the wave equation; radiation fields, Poynting's Theorem, microwave and optical waveguides.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in PHYS 3301 and (PHYS 2502 or MATH 4041)

PHYS 3424. Introduction to Astrophysics. 3 Credit Hours.

This course will cover details of basic astronomy, introductory stellar physics (including stellar structure, fusion processes, stellar evolution, and stellar remnants), the properties of galaxies and dark matter, introductory cosmology and general relativity.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in PHYS 2796 and (MATH 2043, MATH 2943, 'Y' in MA08, or 'Y' in CRMA12)

PHYS 3511. Scientific Computing II. 1.5 Credit Hour.

This course is typically offered in Fall.

This course in computational techniques for solving physical problems is for students who have taken PHYS 2511 Scientific Computing I or had previous programming experience. Topics include iterative solutions such as Runge-Kutta, solutions to coupled differential equations, common problems and algorithms in physics, Monte Carlo techniques, Stochastic methods, and Object Oriented Programming (C++).

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (PHYS 1022, PHYS 1062, PHYS 1962, PHYS 2022, or PHYS 2922) and (MATH 1042, MATH 1044 (C or higher), MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080, 'Y' in MATW, or 'Y' in CRMA10)

PHYS 3701. Introduction to Quantum Mechanics I. 3 Credit Hours.

This course is typically offered in Spring.

Introduction to the formalism of Quantum Mechanics. Schrodinger equation and its solutions in one-, two-, and three-dimensions. Hermitian operators, eigenfunctions and eigenvalues. Angular momentum and Spin. Approximation methods including the variational principle and perturbation theory. Time-dependent potentials and transition rate. Theory of scattering.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PHYS 2701 or PHYS 2796) and (PHYS 2502 or MATH 4041)

PHYS 3702. Optical and Electronic Properties of Materials, Including Thin Films and Nanomaterials. 4 Credit Hours.

This course is typically offered in the Fall.

Primarily for B.S. in Materials Science and Physics students, but open to others.

This course will introduce the basic theory behind and examine the process/ structure/property/performance relationships that dictate the optical and electronic properties of materials with an emphasis on nanoparticles, thin films and materials for energy production. The classroom component will also describe the techniques commonly used in research and industrial settings to characterize these material properties, as well as their relationship to mechanical and thermal properties. Students will gain significant hands-on experience with these materials characterization techniques in the laboratory component of the course.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 2043 or MATH 2943) and PHYS 2796.

PHYS 3703. Quantum Materials: Properties, Characterization and Application. 4 Credit Hours.

This course is typically offered in the Spring.

Primarily for B.S. in Materials Science and Physics students, but open to others.

This course introduces exotic properties occurring in so-called quantum materials that can offer opportunities for applications in information and clean energy technology. The materials that host such properties are therefore at the forefront of solid state research. The goal is building a phenomenological understanding of topics including the origin of magnetism and superconductivity, interactions and long range order, graphene and two-dimensional systems and heterostructures and their applications. The course will have a lab component aimed at providing hands-on experience with fabrication and characterization of quantum materials.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in PHYS 3702.

PHYS 4000. Special Topics in Physics. 3 or 4 Credit Hours.

This course is not offered every year.

This course covers an active research area in Physics, in particular an area currently represented in the Temple Physics Department. This includes both theoretical and experimental physics topics. Examples would include computationally intensive techniques, research connected with national facilities used by the faculty, and emerging new fields based on the recent discoveries. The format will reflect the specific outcomes of the course syllabus as offered. Students must have completed PHYS 2502 and PHYS 2796. Other prerequisites will depend on the particular topic.

Repeatability: This course may be repeated for additional credit.

PHYS 4091. Undergraduate Research. 2 to 3 Credit Hours.

This course is typically offered in Fall, Spring, Summer I and Summer II.

This course offers the opportunity for undergraduate research in physics.

Repeatability: This course may be repeated for additional credit.

PHYS 4101. Thermal Physics. 3 Credit Hours.

This course is typically offered in Fall.

The three laws of thermodynamics; thermodynamic potentials; ideal and non-ideal gases; phase transitions; chemical equilibrium. Introduction to equilibrium statistical mechanics; statistical definition of entropy; applications to fluids, magnetic systems, the ideal quantum gas. Prior to Fall 2017, this course was named "Thermodynamics and Kinetic Theory". Students may only earn credit once for PHYS 4101.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PHYS 1062, PHYS 1962, PHYS 2022, or PHYS 2922) and (MATH 2043 or MATH 2943)

PHYS 4301. Electronics. 3 Credit Hours.

This course is typically offered in Spring of odd years.

Basic circuit ideas, Thevenin/Norton theorems, input/output impedance, diodes, transistors, feedback, operational amplifiers, elements of digital electronics, transducers for physical measurements. NOTE: Course offered on odd-numbered years.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in PHYS 3301.

PHYS 4302. Optics. 3 Credit Hours.

This course is typically offered in Fall.

The emphasis of this course is on physical and laser optics. Topics include review of geometric optics, matrix methods in paraxial optics, fiber optics, wave equations, superposition and interference of light, diffraction, polarization of light, coherence, laser operation, characteristics of laser beams and selected modern optics applications.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PHYS 2701, PHYS 2796, CHEM 3301, or CHEM 3302)

PHYS 4501. Computational Design of Novel and Quantum Materials. 3 Credit Hours.

This course is typically offered in the Fall.

Primarily for B.S. in Materials Science and Physics students, but open to others.

The course provides state-of-the-art computational and data-driven approaches for accelerating the discovery, synthesis, and development of novel functional materials and solid-state materials with exotic quantum phases. It begins with a brief overview of current practical computational tools for materials design in the field. Data-driven approaches, such as machine learning and materials database, will be introduced as complementary tools to discover and design novel materials. The course will describe ways to utilize both computational and data-centric approaches to enable the "virtual design" of functional materials. Applications based on both molecule systems and solid-state materials will be discussed. Machine learning and computational practices will be provided through Python-based weekly projects. Topics that will be covered in the course: computational methods for molecules and solid-state materials, data-driven material design approaches (database query, simulation input/output management, workflows), shallow and deep machine learning models for material property predictions, design of quantum materials for quantum information science and technologies.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in SCTC 1013 and PHYS 3703.

PHYS 4502. Theoretical/Computational Materials Science. 3 Credit Hours.

This course is typically offered in the Spring.

Primarily for B.S. in Materials Science and Physics students, but open to others.

The course explains how quantum mechanics can predict what materials can exist, and with what properties, and thus can be used to design useful new materials on the computer. It begins with a summary of the quantum mechanics of one-electron and of interacting many-electron systems. This leads up to the Kohn-Sham density functional theory, which describes the ground-state energy and density of a many-electron system in a way that is formally exact, by solving a set of self-consistent one-electron Schrodinger equations. The computational efficiency and predictive accuracy of approximations to the exact density functional for the exchange-correlation energy have made this approach the most widely used method in physics or chemistry. Simple approximations are explained, and their successes and failures for materials prediction are summarized. Briefly described are methods that can be more accurate but more computationally expensive, including correlated wavefunction methods like quantum Monte Carlo and quasi-particle methods like GW.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in PHYS 3703.

PHYS 4511. Scientific Computing III. 1.5 Credit Hour.

This course is typically offered in Spring.

This course in computational techniques for solving physical problems is for students who have taken PHYS 3511 Scientific Computing II or had extensive previous programming experience. This course covers advanced topics in computational problem solving such as machine learning, probability density function optimization, and Bayesian statistical methods, GPU programming. The instructor may add additional topics of interest.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (PHYS 1022, PHYS 1062, PHYS 1962, PHYS 2022, or PHYS 2922) and (MATH 1042, MATH 1044 (C or higher), MATH 1942, MATH 1951, any MATH course numbered 2043 to 3080, 'Y' in MATW, or 'Y' in CRMA10)

PHYS 4701. Introduction to Solid State Physics. 3 Credit Hours.

This course is typically offered in Spring of even years.

Elementary theory of the solid state. Survey of mechanical, thermal, optical, electrical, and magnetic properties of solids. NOTE: Course offered on even-numbered years.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in PHYS 3701.

PHYS 4702. Introduction to Quantum Mechanics II. 3 Credit Hours.

This course is typically offered in Fall.

Applications of Quantum Mechanics to physical systems. Atomic and molecular structure, spectra, and selection rules. Condensed matter systems including periodic solids. Quantum statistical phenomena. Properties of atomic nuclei, radioactive decays, and nuclear reactions. Elementary particles and their interactions.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in PHYS 3701.

PHYS 4796. Experimental Physics. 3 Credit Hours.

This course is typically offered in Spring.

An intermediate laboratory course with an introduction to data analysis and error estimation. Students independently perform two or three experiments, with suitable reports. NOTE: Capstone writing course.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PHYS 2701 or PHYS 2796)

PHYS 4801. Atomic, Molecular and Optical Physics. 4 Credit Hours.

This course on Atomic, Molecular and Optical (AMO) Physics will provide upper level undergraduate students a preparation for research in AMO science through building a solid foundation for interaction of light with atoms and molecules. The course includes a review of atomic structure, interaction of atoms and molecules with external fields, semiclassical theory of light-matter interaction, introduction to dressed quantum states by laser radiation, experimental techniques of laser spectroscopy, cooling and trapping of atoms, Bose-Einstein condensation, nonlinear phenomena with light and ultrafast laser science. The computational component of the course involves using molecular potential energy functions to solve the radial Schroedinger equation for diatomic molecules. This component of the course is introduced in the context of labs in the laser laboratory of the AMO Physics group in SERC. The resulting wavefunctions can be used with theoretical electronic transition dipole moments to calculate fundamental parameters in the interaction of light with matter such as Einstein's coefficients for absorption of light, stimulated and spontaneous emission of light as well as Rabi frequencies. Note: Graduate students taking this course should have completed PHYS 5301 instead of PHYS 3301. Similarly Graduate students should have completed PHYS 5701 or CHEM 5301 instead of PHYS 3701.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PHYS 2796, CHEM 3301, or CHEM 3302), (PHYS 3301 or PHYS 4302), and PHYS 3701 (may be taken concurrently)

Political Science (POLS)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

POLS 0825. Quantitative Methods in the Social Sciences. 4 Credit Hours.

Psychological, political, social, and economic arguments and knowledge frequently depend on the use of numerical data. A psychologist might hypothesize that I.Q. is attributable to environmental or genetic factors; a politician might claim that hand gun control legislation will reduce crime; a sociologist might assert that social mobility is more limited in the United States than in other countries, and an economist might declare that globalization lowers the incomes of U.S. workers. How can we evaluate these arguments? Using examples from psychology, sociology, political science, and economics, students will examine how social science methods and statistics help us understand the social world. The goal is to become critical consumers of quantitative material that appears in scholarship, the media, and everyday life. NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed SOC 0825, SOC 0925, POLS 0925, PSY 0825, or ANTH 0825.

Course Attributes: GQ

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 0701, MATH 0702, 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC3A, 'Y' in MC6A, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

POLS 0829. The History & Significance of Race in America. 3 Credit Hours.

Why were relations between Native Americans and whites violent almost from the beginning of European settlement? How could slavery thrive in a society founded on the principle that "all men are created equal"? How comparable were the experiences of Irish, Jewish, and Italian immigrants, and why did people in the early 20th century think of them as separate "races"? What were the causes and consequences of Japanese Americans' internment in military camps during World War II? Are today's Mexican immigrants unique, or do they have something in common with earlier immigrants? Using a variety of written sources and outstanding documentaries, this course examines the racial diversity of America and its enduring consequences. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: African American Studies 0829, Africology and African American Studies 0829, Anthropology 0829, Geography and Urban Studies 0829, History 0829, Political Science 0829/0929, Sociology 0829, 0929, 1376, 1396, R059, or X059.

Course Attributes: GD, SI

Repeatability: This course may not be repeated for additional credits.

POLS 0832. Politics of Identity in America. 3 Credit Hours.

Gay or straight. Black or white. Male or female. What do these different group identities mean to Americans? How do they influence our politics? Should we celebrate or downplay our diversity? This course explores how we think about others and ourselves as members of different groups and what consequences it has for how we treat one another. Our fundamental social identities can be a source of power or of powerlessness, a justification for inequality or for bold social reform. Students learn about the importance of race, class, gender and sexual orientation across a variety of important contexts, such as the family, workplace, schools, and popular culture and the implications these identities have on our daily lives. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed Gender, Sexuality & Women's Studies 0832/0932, History 0832, Political Science 0932, Sociology 0832 or Women's Studies 0832/0932.

Course Attributes: GD, SI

Repeatability: This course may not be repeated for additional credits.

POLS 0859. The Making of American Society: Melting Pot or Culture Wars?. 3 Credit Hours.

Terrorism, illegal immigration, gay marriage, religious conflict, political in-fighting, corporate corruption, racial animosities, civil liberties assaults, media conglomeration, Wal-Mart goes to China and the rich get richer. America in the 21st century is a contentious society. How did we get to this place in time? Examine what makes American society distinctive from other advanced industrial democracies as we study the philosophical origins of America, the development of social and economic relationships over time, and the political disputes dominating contemporary American life. The course relies heavily on perspectives from History, Sociology and Political Science to explain the challenges facing contemporary American society. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: AMST 0859, History 0859, PHIL 0859, or SOC 0859.

Course Attributes: GU, SI

Repeatability: This course may not be repeated for additional credits.

POLS 0862. Development & Globalization. 3 Credit Hours.

Use historical and case study methods to study the differences between rich and poor nations and the varied strategies available for development in a globalizing world. Examine the challenges facing developing countries in historical and contemporary context and analyze the main social, cultural, and political factors that interact with the dynamic forces of the world economy. These include imperialism/colonialism, state formation, labor migration, demographic trends, gender issues in development, religious movements and nationalism, the challenges to national sovereignty, waves of democratization, culture and mass media, struggles for human rights, environmental sustainability, the advantages and disadvantages of globalization, and movements of resistance. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: History 0862, GUS 0862, POLS 0962, or SOC 0862/0962.

Course Attributes: GG, SI

Repeatability: This course may not be repeated for additional credits.

POLS 0864. War and Peace. 3 Credit Hours.

Total war, weapons of mass destruction, genocide. These were not solely inventions of the 20th century nor are they the natural consequences of a violent human nature. Leaders, armies, and the strategies they pursue are rooted in their social and political context. Weapons are the products of not merely technological but also historical and cultural development. Battles occur on a political and historical terrain. Learn how ancient ideology, medieval technology, modern propaganda, and more have changed how humans wage war and make peace. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed History 0864/0964.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

POLS 0866. World Affairs. 3 Credit Hours.

We live in a global age when events beyond our borders significantly affect our lives. Sharpen your understanding of international developments, including wars, economic globalization, wealth and poverty, the spread of democracy, environmental degradation, and global pandemics. This course offers an introduction to the study of world affairs that gives you the conceptual tools to deepen your understanding of how major historical and current trends in the world affect your life and that of others around the globe. Readings include historical documents, classic texts in the study of international relations, and current perspectives on the state of the world from multiple disciplinary perspectives. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: History 0866, GUS 0866 or POLS 0966.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

POLS 0868. World Society in Literature and Film. 3 Credit Hours.

Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindi, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0968, Russian 0868/0968, or Spanish 0868/0968.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

POLS 0878. Asians, Asian Americans, and Pacific Islanders in the United States: Race, Diversity, and Identity. 3 Credit Hours.

Who are Asians, Asian Americans, and Pacific Islanders (AAPIs) in the American context? How have AAPIs shaped the making of state and society in the United States in terms of culture, law, economics, and politics? What major crises and historical events have generated racism and racialized stereotyping against AAPI communities? How have AAPI minorities mobilized against exclusion, racism, and marginalization to advance new interests and goals, especially when juxtaposed with other minority groups and social forces? What is the future of AAPIs in America? This course introduces students to the tapestry of AAPI experiences in America. It recovers their importance through lectures and discussions, based upon careful analysis of written texts and creative materials.

Course Attributes: GD

Repeatability: This course may not be repeated for additional credits.

POLS 0925. Honors Quantitative Methods in the Social Sciences. 4 Credit Hours.

Psychological, political, social, and economic arguments and knowledge frequently depend on the use of numerical data. A psychologist might hypothesize that I.Q. is attributable to environmental or genetic factors; a politician might claim that hand gun control legislation will reduce crime; a sociologist might assert that social mobility is more limited in the United States than in other countries, and an economist might declare that globalization lowers the incomes of U.S. workers. How can we evaluate these arguments? Using examples from psychology, sociology, political science, and economics, students will examine how social science methods and statistics help us understand the social world. The goal is to become critical consumers of quantitative material that appears in scholarship, the media, and in everyday life. NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed SOC 0825, SOC 0925, POLS 0825, PSY 0825, or ANTH 0825.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GQ, HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 0701, MATH 0702, 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC3A, 'Y' in MC6A, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

POLS 0929. Honors: The History & Significance of Race in America. 3 Credit Hours.

Why were relations between Native Americans and whites violent almost from the beginning of European settlement? How could slavery thrive in a society founded on the principle that "all men are created equal"? How comparable were the experiences of Irish, Jewish, and Italian immigrants, and why did people in the early 20th century think of them as separate "races"? What were the causes and consequences of Japanese Americans' internment in military camps during World War II? Are today's Mexican immigrants unique, or do they have something in common with earlier immigrants? Using a variety of written sources and outstanding documentaries, this course examines the racial diversity of America and its enduring consequences. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: African American Studies 0829, Africology and African American Studies 0829, Anthropology 0829, Geography and Urban Studies 0829, History 0829, Political Science 0829, Sociology 0829, 0929, 1376, 1396, R059, or X059.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GD, HO, SI

Repeatability: This course may not be repeated for additional credits.

POLS 0932. Honors Politics of Identity in America. 3 Credit Hours.

Gay or straight. Black or white. Male or female. What do these different group identities mean to Americans? How do they influence our politics? Should we celebrate or downplay our diversity? This course explores how we think about others and ourselves as members of different groups and what consequences it has for how we treat one another. Our fundamental social identities can be a source of power or powerlessness, a justification for inequality or for bold social reform. Students learn about the importance of race, class, gender and sexual orientation across a variety of important contexts, such as the family, workplace, schools, and popular culture and the implications these identities have on our daily lives. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed Gender, Sexuality & Women's Studies 0832/0932, History 0832, Political Science 0832, Sociology 0832, or Women's Studies 0832/0932.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GD, HO, SI

Repeatability: This course may not be repeated for additional credits.

POLS 0962. Honors Fate, Hope, and Action: Globalization Today. 3 Credit Hours.

Use historical and case study methods to study the differences between rich and poor nations and the varied strategies available for development in a globalizing world. Examine the challenges facing developing countries in historical and contemporary context and analyze the main social, cultural, and political factors that interact with the dynamic forces of the world economy. These include imperialism/colonialism, state formation, labor migration, demographic trends, gender issues in development, religious movements and nationalism, the challenges to national sovereignty, waves of democratization, culture and mass media, struggles for human rights, environmental sustainability, the advantages and disadvantages of globalization, and movements of resistance. (This is an Honors course.) NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: SOC 0862/0962, History 0862, POLS 0862, or GUS 0862.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GG, HO, SI

Repeatability: This course may not be repeated for additional credits.

POLS 0966. Honors World Affairs. 3 Credit Hours.

We live in a global age when events beyond our borders significantly affect our lives. Sharpen your understanding of international developments, including wars, economic globalization, wealth and poverty, the spread of democracy, environmental degradation, and global pandemics. This course offers an introduction to the study of world affairs that gives you the conceptual tools to deepen your understanding of how major historical and current trends in the world affect your life and that of others around the globe. Readings include historical documents, classic texts in the study of international relations, and current perspectives on the state of the world from multiple disciplinary perspectives. (This is an Honors course.) NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: GUS 0866, History 0866 or POLS 0866.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GG, HO

Repeatability: This course may not be repeated for additional credits.

POLS 1002. Careers in Political Science. 1 Credit Hour.

This course is designed to introduce Political Science students to the wide range of career options available to them, as well as to provide them the information, tools, and resources needed to help them succeed after graduation. Students will be introduced to both the skillsets every student needs to succeed (resumes, interviewing, networking and the job hunt), as well as introduction to the various post-graduation paths available to the political science major. Because there is significant overlap in course content, students will receive credit for only one of these courses: CLA 1002, CJ 1002, ENG 1801, HIST 1012, NSCI 1002, POLS 1002, PSY 1002, SOC 1002.

Repeatability: This course may not be repeated for additional credits.

POLS 1101. The American Political System. 3 Credit Hours.

An introduction to American politics. Focuses on the values, institutions, and processes of politics and government in the United States. Introduces the concepts and techniques of political science. NOTE: (1) This course is required of all Political Science majors. (2) This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AC

Repeatability: This course may not be repeated for additional credits.

POLS 1201. Foreign Governments and Politics. 3 Credit Hours.

This course considers the values, institutions and processes of politics and government in selected developing and developed countries in Europe, Asia, Africa, and Latin America. NOTE: (1) For both non-majors and majors. (2) This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: IS

Repeatability: This course may not be repeated for additional credits.

POLS 1301. International Politics. 3 Credit Hours.

This course is an introduction to the nature of the international system, the determinants and instruments of foreign policy, and the problems of international conflict and cooperation. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: IS

Repeatability: This course may not be repeated for additional credits.

POLS 1911. Honors Introduction to American Politics. 3 Credit Hours.

An introduction to American politics. Focuses on the values, institutions, and processes of politics and government in the United States. Introduces the concepts and techniques of political science. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: AC, HO

Repeatability: This course may not be repeated for additional credits.

POLS 1921. Honors Foreign Governments and Politics. 3 Credit Hours.

This course considers the values, institutions and processes of politics and government in selected developing and developed countries in Europe, Asia, Africa, and Latin America. NOTE: (1) For both non-majors and majors. (2) This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, IS

Repeatability: This course may not be repeated for additional credits.

POLS 1931. Honors International Politics. 3 Credit Hours.

This course is an introduction to the nature of the international system, the determinants and instruments of foreign policy, and the problems of international conflict and cooperation. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, IS

Repeatability: This course may not be repeated for additional credits.

POLS 1996. Honors Introduction to Political Philosophy. 3 Credit Hours.

Honors seminar focusing on an introduction to the ideas and arguments of several political philosophers, such as Aristotle, Plato, Hobbes, and Marx, as well as an exploration of how such ideas relate to the contemporary world.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, WI

Repeatability: This course may not be repeated for additional credits.

POLS 2000. Special Topics. 3 Credit Hours.

Topics vary from semester to semester. Please check with the faculty advisor for a course description and topic.

Repeatability: This course may be repeated for additional credit.

POLS 2101. American Federalism. 3 Credit Hours.

Federalism in its modern form is perhaps the single most important theoretical contribution the American system of government has made to the history of political thought. This course will examine this concept, its manifestation, and the effect this federal practice has had on the American political system.

Repeatability: This course may not be repeated for additional credits.

POLS 2102. American State and Local Politics. 3 Credit Hours.

This course considers government and politics of subnational units including states, counties, cities, towns, and townships in urban, suburban, and rural areas. Further topics include the relationship of state and local policy to citizens, other governmental units, and the American political system.

Repeatability: This course may not be repeated for additional credits.

POLS 2103. Making Public Policy. 3 Credit Hours.

This course examines selected policy areas in a variety of national settings and the relationship of political cultures and policymaking structures to policy outputs. NOTE: Students will receive credit only once for either POLS 2103 or PLCY 2103. This course was previously titled "U.S. Public Policy Making"; students who received credit under the former title will not earn additional credit.

Repeatability: This course may not be repeated for additional credits.

POLS 2107. Capital Internship Seminar. 3 Credit Hours.

This is a required course for students accepted into the Pennsylvania Capital Semester program. Class lectures and readings will focus on the larger private and governmental context for organizations where interns are placed, specifically the interaction between the state executive branch; legislature and the legislative process; news media, nonprofits, advocacy organizations, lobbying or trade associations; and local economic development organizations. Guest lecturers, who are experts in their fields, will be invited to speak on course topics.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in POLS 1101.

POLS 2108. Local Government and Community Advocacy. 3 Credit Hours.

Philadelphia is utilized as a case study to understand the nature of government and community advocacy and conflict. The class opens with an introduction to the different issues of local government, transitions to a discussion of the organization of Philadelphia local government and its politics, and ends with an analysis of the legislative and budget processes. At the conclusion of the semester, students will engage in an active learning project that illustrates Philadelphia's public policy process.

Repeatability: This course may not be repeated for additional credits.

POLS 2140. Special Topics in Urban Politics. 3 Credit Hours.

Specific topics rotate from semester to semester. See Political Science faculty advisor (and notation on the Course Schedule) for specific information.

Repeatability: This course may be repeated for additional credit.

POLS 2201. Comparative Politics: Developing Nations. 3 Credit Hours.

This course describes and analyzes political patterns in the Third World. It provides a descriptive overview, analyzes domestic political trends within the context of the global system, and reviews current trends.

Repeatability: This course may not be repeated for additional credits.

POLS 2211. Contemporary Politics of Europe. 3 Credit Hours.

This course explores the institutions established in West European nations intended to preserve social stability, produce economic prosperity, and guarantee democracy, asking whether these goals are complementary or contradictory. A country-by-country examination of post-war political development in Britain, France, Germany, Italy, and Sweden. Emphasis on the political problems of the present. Accordingly, the course closes with an examination of the European integration process and the sweeping changes of East Europe affecting all of Europe.

Repeatability: This course may not be repeated for additional credits.

POLS 2212. Eastern Europe, Russia and the West. 3 Credit Hours.

Study of the relationships between western nations and the changing politics of Eastern European nations.

Repeatability: This course may not be repeated for additional credits.

POLS 2231. Comparative Political Systems in Latin America. 3 Credit Hours.

A comparative consideration of selected Latin American political systems. Note: Students will receive credit only once for either POLS 2231 or LAS 2231.

Repeatability: This course may not be repeated for additional credits.

POLS 2232. Cyberpolitics. 3 Credit Hours.

New information and communication technologies allow for unlimited and unprecedented access to people and information all over the world. In this course we will study whether or not these new technologies (Internet, mobile social media, etc.) are also a tool for: 1) the revitalization or weakening of democracy in the developed world; 2) regime change, namely, transitions to or from democracy; 3) economic development; and 4) waging wars. We will be studying Internet and mobile technology usage in the U.S., Mexico, Egypt, Russia, the EU and Kenya, among others. Formerly known as "The Politics of New Information Technologies"; students who took this course under that title will not earn additional credit for "Cyberpolitics."

Repeatability: This course may not be repeated for additional credits.

POLS 2255. Comparative Public Policy. 3 Credit Hours.

The seminar will focus on the factors that explain political outcomes and their consequences in comparative perspective. Three basic issues we explore are: 1) How do policies differ?; 2) Why do policies differ?; and 3) What impact do the different policies have? Scholars have divergent views regarding which factors account for different policies and analyses of their impact is regularly colored by ideological position that may or may not have anything to do with the real policy goals. The topics that we will study include: What is the role of political leaders during transitions to democracy or during the passage of difficult legislation in democratic polities? Under what circumstances can a corrupt polity be prosperous and an honest one poor? Is there a relationship between religion and a country's economic success? Are diamonds and oil a blessing or a curse for a country's economy? Why did some mature economies respond differently to the global financial crisis of 2007-2009? Some of the countries we will be studying include: Chile, England, France, Spain, Singapore, United States, and Venezuela.

Repeatability: This course may not be repeated for additional credits.

POLS 2301. Theories of War and Peace. 3 Credit Hours.

This course explores the problem of war and peace from both empirical and theoretical perspectives. Sources of war and peace studied include: the balance of power, deterrence, arms races, misperception, hegemony, nationalism, international institutions, democracy, law, and economic interdependence.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (POLS 1301 or POLS 1931)

POLS 2311. Post-Cold War Security. 3 Credit Hours.

This course examines the debate over the changing meaning of security and the contemporary international security environment. Topics include: the nature of security, the international environment, postmodern terrorism, information warfare, global economic instability, the persistence of American hegemony, quasi-states, and the possible demise of the nation-state.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (POLS 1301 or POLS 1931)

POLS 2314. Politics of International Law. 3 Credit Hours.

Formerly known as POLS 3396, International Legal Order. Students who have received credit for POLS 3396 will not earn additional credits for this course.

The historical development of international law in its relation to the evolution of the world political system, with analysis of issues of the contemporary world order such as warfare, political and economic development, human rights, and the environment.

Repeatability: This course may not be repeated for additional credits.

POLS 2321. Politics of the Global Economy. 3 Credit Hours.

This course studies competing explanations for the evolution and operations of the international political economy from the origins of the industrial era in the late 18th century through the "information economy" of the 21st. It focuses on four functional areas: international trade in goods and services, the management of currency exchange and international monetary policy, the pattern and flow of investment capital, and the pattern and structure of global production.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (POLS 1301 or POLS 1931)

POLS 2331. International Organization. 3 Credit Hours.

This course considers the development and current roles of regional and universal international organizations with an emphasis on the United Nations. The major international conflicts of recent decades in the organizational context will also be examined.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (POLS 1301 or POLS 1931)

POLS 2341. U.S. Foreign Policy. 3 Credit Hours.

Analysis of U.S. foreign policy from three perspectives: (1) competing explanations for patterns, tendencies and events in U.S. foreign policy; (2) history of U.S. foreign policy from independence to the end of the Cold War, (3) issues in contemporary U.S. foreign policy in light of the first and second-hand perspectives.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (POLS 1301 or POLS 1931)

POLS 2351. Japan and the Changing World Order. 3 Credit Hours.

This course looks at Japanese politics from a variety of perspectives within the comparative framework of other nations and their political development within a changing global order. Note: This course is cross-listed with Asian Studies 2351. Students may only receive credit once for these courses: ASST 2351 or POLS 2351.

Repeatability: This course may not be repeated for additional credits.

POLS 2431. Modern Political Philosophy. 3 Credit Hours.

Close study of works by one or more modern political philosophers, stressing their relevance to an understanding of contemporary politics.

Repeatability: This course may not be repeated for additional credits.

POLS 2432. American Political Thought. 3 Credit Hours.

This course examines significant political ideas from the American colonial period to the present and the influences of these ideas on contemporary American political institutions.

Repeatability: This course may not be repeated for additional credits.

POLS 2441. Democracy, Capitalism, and Socialism. 3 Credit Hours.

An examination of some of the major political ideologies dominant in the 20th century and of the tensions and points of convergence between and among them.

Repeatability: This course may not be repeated for additional credits.

POLS 2496. Introduction to Political Philosophy. 3 Credit Hours.

Reading of selected works by several classical and modern political philosophers, such as Aristotle, Hobbes, and Marx; study of their relevance to contemporary political issues. NOTE: Capstone writing course in the major.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

POLS 2503. Evidence and Knowledge. 3 Credit Hours.

This course introduces students to the fundamental concepts that underlie the evaluation of empirical evidence. The focus will be on the design of research, rather than the analysis of data. Major themes covered in the course include: measurement, causality, uncertainty, the scientific method, and the methodological debates that animate political science research.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (POLS 1101, POLS 1911, POLS 1201, POLS 1921, POLS 1301, POLS 1931, or POLS 1102)

POLS 2996. Honors: Introduction to Political Philosophy. 3 Credit Hours.

Honors seminar focusing on an introduction to the ideas and arguments of several political philosophers, such as Aristotle, Plato, Hobbes, and Marx, as well as an exploration of how such ideas relate to the contemporary world.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, WI

Repeatability: This course may not be repeated for additional credits.

POLS 3082. Independent Study. 3 Credit Hours.

Students must make arrangements to work with a political science faculty member, and seek the approval of the undergraduate chair before enrolling under this course number.

Repeatability: This course may be repeated for additional credit.

POLS 3101. The American Presidency. 3 Credit Hours.

The role of the chief executive, the American presidency, in the political process.

Repeatability: This course may not be repeated for additional credits.

POLS 3102. The Legislative Process. 3 Credit Hours.

Covers the legislative process of both the U.S. Congress and state legislatures. Includes the lawmaking process, legislative organization, leadership and policymaking, lobbying and elections, and the careers and characteristics of legislators.

Repeatability: This course may not be repeated for additional credits.

POLS 3103. The American Supreme Court. 3 Credit Hours.

An examination of judicial decision making and the interrelationships between the Court and other aspects of the political process.

Repeatability: This course may not be repeated for additional credits.

POLS 3105. American Party System. 3 Credit Hours.

The evolution and organization of political parties in the United States, including nominating systems, campaigns, election laws, types of ballots, and electoral reform techniques.

Repeatability: This course may not be repeated for additional credits.

POLS 3107. State Politics and Policy. 3 Credit Hours.

This course examines the American states from a comparative and historical perspective. The role of the states in relation to the federal government will also be an important theme. The class will consider the central institutions of the states, including governors, legislatures and courts, as well as political parties, interest groups and the media. The course will also focus on several areas of public policy in which the states play a pivotal role.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in POLS 1101.

POLS 3111. Media and the Political Process. 3 Credit Hours.

This course considers the relationship between the mass media and American politics, government regulation of the mass media, media coverage of public affairs, political effects of entertainment programming, and the uses and influence of the media in the election process. Both print and broadcast media will be considered.

Repeatability: This course may not be repeated for additional credits.

POLS 3112. American Public Opinion. 3 Credit Hours.

Topics for study include: development of public opinion and political ideology in the U.S.; the social psychology of political attitudes; the role of the mass media and the news in the formation of political opinion; and the influence of public opinion upon government policy.

Repeatability: This course may not be repeated for additional credits.

POLS 3113. Campaigns, Elections, and the Media. 3 Credit Hours.

Role of elections in contemporary American society. Special attention to parties and mass media as participants in campaigns and to factors affecting voting behavior of the mass public and the linkages voting provides between the public and policy formation.

Repeatability: This course may not be repeated for additional credits.

POLS 3121. American Constitutional Principles I. 3 Credit Hours.

Constitutional bases of American system of government as interpreted primarily by reading and analyzing Supreme Court opinions and understanding them in their political, economic, and historic context. Course focuses largely on how constitutional meaning is determined, and judicial development of national powers of judicial review, the power to regulate commerce, separation of powers, federalism, taxation, powers of the President, and foreign affairs and war powers.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in POLS 1101.

POLS 3123. American Constitutional Principles II: Civil Rights in America. 3 Credit Hours.

Civil rights in America, including the Constitutional protections of freedom of speech, press, assembly, and religion.

Repeatability: This course may not be repeated for additional credits.

POLS 3124. Politics of Sexual Orientation and Gender Identity. 3 Credit Hours.

This course examines the emergence and development of the movement to secure rights for gays, lesbians and bisexuals; how gays, lesbians and bisexuals are socially constructed and the influence this has on political discourse; how political issues that are relevant to the lives of gays and lesbians reach the political agenda; and the patterns of conflict and cooperation that exist among actors in and outside of government over issues such as employment discrimination, marriage, child adoption, and military service. Note: Prior to Summer 2019, this course was offered as "Politics, Rights, and Sexual Orientation." Students who earned credit for this course number under that title will not earn additional credits under the new title "Politics of Sexual Orientation and Gender Identity."

Repeatability: This course may not be repeated for additional credits.

POLS 3125. Interest Group Politics. 3 Credit Hours.

Over the past 30 years, the system of interest group representation in Washington has witnessed a rapid expansion. Conventional wisdom views these groups as obstructions to American democracy, but limiting their freedoms threatens "government by the people." Cases to be studied may include: senior citizen groups, the farm lobby, the Christian Coalition, the unemployment workers movement, and the power of business in America.

Repeatability: This course may not be repeated for additional credits.

POLS 3131. Urban Politics and Problems. 3 Credit Hours.

This course presents an overview of the politics of urban areas: electoral politics, government structure, race, finance, education, housing, neighborhoods, and economic and historical forces on politics in urban areas.

Repeatability: This course may not be repeated for additional credits.

POLS 3133. Popular Culture and the City. 3 Credit Hours.

This course will examine how the city is depicted in films and literature, exploring such prominent political topics as anti-urbanism; political machines, corruption, and reform; industrialization and immigrant life; post-industrialism and urban decline. Attention will also be given to the physical city and spatial use as expressions of dominant political and cultural values.

Repeatability: This course may not be repeated for additional credits.

POLS 3134. The Politics of Inequality. 3 Credit Hours.

Who are the poor? Should they be helped? Who should help them? These questions are complicated because people are more aware of the individual costs of taxation than they are of the collective benefits of an educated work force. This course will evaluate how the U.S. government has traditionally divided the poor between the deserving and the undeserving poor and which groups have been left out and why.

Repeatability: This course may not be repeated for additional credits.

POLS 3151. Public Policy Analysis. 3 Credit Hours.

This course considers selected contemporary public policy issues. The course begins with an examination of the national political-economic context within which major policy issues arise and then turns to the analysis of the roots and policy alternatives on several major issues. Issues may concern health, energy, education, employment, welfare, and the regulation of business. NOTE: Students will receive credit only once for either POLS 3151 or PLCY 3151.

Repeatability: This course may not be repeated for additional credits.

POLS 3152. U.S. Environmental Policy. 3 Credit Hours.

An analytical examination of the development and execution of governmental policies in such areas as air and water pollution control, control of atomic energy, and planning of space exploration program.

Course Attributes: SF, SS

Repeatability: This course may not be repeated for additional credits.

POLS 3153. The Politics of Poverty. 3 Credit Hours.

This course examines the nature and causes of poverty, the impact of public opinion and racial attitudes on poverty and welfare, the role of government officials in shaping anti-poverty and welfare reform policies, and welfare claiming as a form of political participation. The course evaluates the effectiveness of existing policies to combat poverty and whether proposed policies might be effective.

Repeatability: This course may not be repeated for additional credits.

POLS 3154. Health Policy. 3 Credit Hours.

Surveys major public health problems and policy interventions in the United States with an emphasis on their normative, political and economic dimensions. Examines the interplay of governmental institutions, business, and organized interests in formulating and implementing health policy.

Repeatability: This course may not be repeated for additional credits.

POLS 3155. Business and Public Policy. 3 Credit Hours.

Reviews history of U.S. government and business, and the major governmental institutions dealing with business, with special attention paid to monetary policy and the Federal Reserve, fiscal policy, the federal budget, and particular issues connected with it such as deficits, Social Security, the tax structure, overall inequality, and other current issues. Also looks at the World Trade Organization and NAFTA, their structure and overall advantages and disadvantages to the U.S.

Repeatability: This course may not be repeated for additional credits.

POLS 3161. Public Administration. 3 Credit Hours.

This course studies basic concepts and approaches to public management and public policymaking in public administration.

Repeatability: This course may not be repeated for additional credits.

POLS 3197. Political Fiction. 3 Credit Hours.

Moral dilemmas and unintended burlesques, flawed heroes and vainglorious fools, ambitious men and seductive women are the stuff of both literature and politics. These elements are brought to life in novels about American politics and political thought. Students in this writing intensive course will write brief essays and a course paper on novels by authors that include Henry Adams, Mark Twain, Herman Melville, Henry James, Robert Penn Warren, Graham Greene, Ward Just, and William Kennedy.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

POLS 3201. Nationalism, Ethnicity, and Politics. 3 Credit Hours.

When the U.S. was founded as the first modern nation-state, it set in motion a global transformation of the state system that has still to run its course. The class will study, with the aid of film, the causes, theories, and projections of this development.

Repeatability: This course may not be repeated for additional credits.

POLS 3202. Politics & Religion. 3 Credit Hours.

What sorts of relationships exist between the world of politics and that of religious beliefs and practices that co-exist and often compete for dominance in various political systems?

Repeatability: This course may not be repeated for additional credits.

POLS 3203. Comparative Politics of Democratization. 3 Credit Hours.

Democracy is among the oldest concepts in politics, yet it is also one of the most elusive. This course surveys some of the classic debates over the meanings of democracy, and explores the contemporary processes of democratization that have swept the globe since the 1970s. While particular geographical emphasis will be placed on Europe, Latin America, and Africa, no prior familiarity with these regions is necessary to successfully complete this course.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (POLS 1201 or POLS 1921)

POLS 3206. Politics of Modern Capitalism. 3 Credit Hours.

Since the early 1970s, all advanced industrial democracies have faced challenges in adjusting to a changing international economy. We will examine how different countries, including the United States, Japan, Britain, France, and Germany, have tried to meet these challenges. The main question guiding the course is: why do countries respond to roughly similar problems in different ways, and what do these responses reveal about politics in these countries? Topics covered will include macroeconomic policy, trade and industrial policies, industrial relations, business-government relations, and the welfare state. This course was formerly taught as POLS 3296. Students who have earned credit for POLS 3296 may not register for this class.

Repeatability: This course may not be repeated for additional credits.

POLS 3211. Politics & Society in Modern Italy. 3 Credit Hours.

An examination of Italy's political development in a historical framework, and in comparison to other nations, especially those of Europe.

Repeatability: This course may not be repeated for additional credits.

POLS 3212. British Government and Politics. 3 Credit Hours.

This course combines historical and thematic approaches to British politics. We begin with an overview of the post-imperial, capitalist state before discussing key institutions: constitution, Parliament, executive, parties, and European Union. To help understand change in popular politics we compare the 1983 and 2005 general election campaigns. Finally, we consider key issues: economic inequality, ethnic conflict, social order, and democratic accountability.

Repeatability: This course may not be repeated for additional credits.

POLS 3213. Post-Communist Politics. 3 Credit Hours.

This course examines core themes in the study of post-Communist politics in Russia and Eastern Europe. The course begins by exploring the nature of socialism, why it fell, and the various legacies of this system. The rest of the course covers issues of democratic transformation, economic reform, state and nation building, and the role of international influences.

Repeatability: This course may not be repeated for additional credits.

POLS 3231. Politics of India. 3 Credit Hours.

This course introduces the politics of India, a country that is large, complex, and full of contradictions. Nearly one out of every six people in the world resides in India. The country is one of the oldest democracies in the developing world, yet corruption is rife and the number of accused criminals elected to office is staggering. Despite India's growing economic and political clout, riots, insurgencies, and terrorism persist. The country is also one of the world's most ethnically diverse, divided along linguistic, regional, caste, tribal, and religious lines. The course begins by briefly discussing India's contemporary political institutions. Next, the course provides a historical overview of India's modern history, before turning to a variety of issues of contemporary relevance: ethnicity, violence, corruption, elections, and democracy.

Repeatability: This course may not be repeated for additional credits.

POLS 3241. Mideast Politics. 3 Credit Hours.

This course will introduce students to the various political systems in the region we now call the Middle East. Of particular concern will be historical roots of the political tensions that exist in our contemporary world.

Repeatability: This course may not be repeated for additional credits.

POLS 3251. China: State and Society. 3 Credit Hours.

This course surveys contemporary Chinese politics and political economy, recognizing the roots in China's long history. The emphasis is on the process of converting the Maoist socialist system into a modern market system, integrated into the global system, and the political implications of these changes. Note: Prior to fall 2010, the course title was "China: Politics and Revolution." This course is typically cross-listed with ASST 3251. Students may only earn credit for one course from ASST 3251 and POLS 3251.

Repeatability: This course may not be repeated for additional credits.

POLS 3252. East Asia and the United States. 3 Credit Hours.

This course introduces Japan and its distinctive model of political economy. The course then reviews how this model has been copied by many other countries in Asia. The course also includes an analysis of Asia's international economic and political relations, especially with the United States. This course is typically cross-listed with ASST 3252. Students may only earn credit for one course from ASST 3252 and POLS 3252.

Repeatability: This course may not be repeated for additional credits.

POLS 3265. International Environmental Policy. 3 Credit Hours.

International negotiations and agreements on environmental problems, and comparisons of domestic environmental policymaking among selected countries. Special attention to negotiations on atmospheric and oceanic policies, international regulation of nuclear materials, and environmental aspects of international trade agreements. NOTE: Students will receive credit only once for either POLS 3265 or ENST 3265.

Course Attributes: SE, SF, SS

Repeatability: This course may not be repeated for additional credits.

POLS 3331. Politics of the European Union. 3 Credit Hours.

The European Union is perhaps the most remarkable experiment in international governance of the past century. This course examines the EU in its dual aspects: as a process of international or regional integration, tying existing nation-states into an "ever-closer Union of peoples"; and as a polity or political system with its own institutions, policies, and policy processes.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (POLS 1201 or POLS 1921) and (POLS 1301 or POLS 1931)

POLS 3332. Globalization: Politics and Political Economy. 3 Credit Hours.

The course examines the origins and consequences of the modern period (1990-present) of globalization, including its political, economic, social, and cultural dimensions. Central issues to be examined will be the status of the sovereign state, global governance, and patterns of global mobility in production, people, and information.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (POLS 1301 or POLS 1931)

POLS 3363. Russia: Revolution, State, and Empire. 3 Credit Hours.

This course focuses on the rise and fall of the Soviet Union, from the Russian Revolution of 1917 until the collapse of the Soviet Union in 1991. It deals with major factors and events, including Communism, two world wars, and the Cold War, that shaped Soviet history. The course explores Soviet impact on European and world developments, and Soviet motives in confrontation with the United States. Reading and lectures are complimented with multi-media and Internet sources, discussions and individual presentations. Cross-Listed with HIST 3363. Students will receive credit for one course from: HIST 3363 or POLS 3363.

Repeatability: This course may not be repeated for additional credits.

POLS 3411. Classical Political Philosophy. 3 Credit Hours.

Close study of works by one or more political philosophers, stressing their relevance to an understanding of contemporary politics.

Repeatability: This course may not be repeated for additional credits.

POLS 3421. Theories of Justice. 3 Credit Hours.

This course examines both analytical and historical perspectives of some of the major theories of justice that have been propounded throughout the course of Western history.

Repeatability: This course may not be repeated for additional credits.

POLS 3422. Marxism and Politics. 3 Credit Hours.

A theoretical and historical examination of the role of Marxism in the development of 20th and 21st century political regimes, including West European social democracy, former and present Communist states, and post-colonial societies. Particular focus will be placed on debates within the Marxist tradition and between Marxism and its critics in regard to issues of equality, liberty, and democracy. An attempt will be made to see what aspects (if any) of Marxism remain relevant to the prospect of radical democratic change and to an analysis of the crisis of contemporary global capitalism.

Repeatability: This course may not be repeated for additional credits.

POLS 3441. African American Political Theory. 3 Credit Hours.

This course is an intensive introduction to African American Political Theory. Our goal will be to explicate and evaluate the theoretical claims that have shaped, and continue to shape, black political practice in the United States. The structure of the course is both historical and thematic.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (POLS 2496 or POLS 2996)

POLS 3451. Personality and Politics. 3 Credit Hours.

The democratic and authoritarian personalities and their impact on political behavior.

Repeatability: This course may not be repeated for additional credits.

POLS 3452. Theory and Uses of Power. 3 Credit Hours.

This course considers concepts and major models of power and their applications to American politics.

Repeatability: This course may not be repeated for additional credits.

POLS 3500. Special Topics: Research Preparation Seminar. 3 Credit Hours.

Research preparation courses develop research skills and prepare students for the capstone seminar. The course topics vary depending on the instructor's expertise.

Repeatability: This course may be repeated for additional credit.

POLS 3510. Special Topics: Research Preparation Seminar. 3 Credit Hours.

Research preparation courses develop research skills and prepare students for the capstone seminar. The course topics vary depending on the instructor's expertise.

Repeatability: This course may be repeated for additional credit.

POLS 3520. Special Topics: Research Preparation Seminar. 3 Credit Hours.

Research preparation courses develop research skills and prepare students for the capstone seminar. The course topics vary depending on the instructor's expertise.

Repeatability: This course may be repeated for additional credit.

POLS 3530. Special Topics: Research Preparation Seminar. 3 Credit Hours.

Research preparation courses develop research skills and prepare students for the capstone seminar. The course topics vary depending on the instructor's expertise.

Repeatability: This course may be repeated for additional credit.

POLS 3540. Special Topics: Research Preparation Seminar. 3 Credit Hours.

Research preparation courses develop research skills and prepare students for the capstone seminar. The course topics vary depending on the instructor's expertise.

Repeatability: This course may be repeated for additional credit.

POLS 3550. Special Topics: Research Preparation Seminar. 3 Credit Hours.

Research preparation courses develop research skills and prepare students for the capstone seminar. The course topics vary depending on the instructor's expertise.

Repeatability: This course may be repeated for additional credit.

POLS 3910. Honors Special Topics. 3 Credit Hours.

The focus of this Honors course varies from semester to semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

POLS 3911. Honors Politics in Film and Literature. 3 Credit Hours.

This course examines diverse topics in world politics using three forms of political commentary - film, literature, and academic writings - on each topic. Topics covered may include war, terrorism, development, globalization and workers, political corruption, immigration, racial politics, revolution, and ethnic violence.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

POLS 3996. Honors Capstone Seminar I. 3 Credit Hours.

Only students enrolled in the Honors Certificate or Honors Scholars Programs may register for this seminar. Please check the Political Science Department web site for information about how to apply for the Honors Scholar Program in Political Science (<https://www.cla.temple.edu/political-science/undergraduate/>). This seminar (taught as a combined semester with Political Science 4996) will rotate among selected advanced topics in one of the major fields of Political Science (international relations, American government, political theory, comparative politics, and public policy). The seminar will focus on a close analysis and discussion of assigned readings and a final research paper (as well as other short written assignments). NOTE: Check with the course schedule for the topic and instructor for a specific semester. Please be advised that students who took this course under the old name, "Junior Honors Capstone Seminar" will receive credit only one time for POLS 3996.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, WI

Repeatability: This course may not be repeated for additional credits.

POLS 3997. Junior Honors Capstone Seminar. 3 Credit Hours.

Only students enrolled in the Honors Certificate or Honors Scholars Programs may register for this seminar. Please check the Political Science Department web site for information about how to apply for the Honors Scholar Program in Political Science (www.temple.edu/polsci/undergraduate/honors/index.htm). This seminar (taught as a combined semester with Political Science 4997) will rotate among selected advanced topics in one of the major fields of Political Science (international relations, American government, political theory, comparative politics, and public policy). The seminar will focus on a close analysis and discussion of assigned readings and a final research paper (as well as other short written assignments). NOTE: Check with the course schedule for the topic and instructor for a specific semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, WI

Repeatability: This course may not be repeated for additional credits.

POLS 4110. Seminar in American Government. 3 Credit Hours.

The focus of this seminar varies from semester to semester, but always considers some aspect of U.S. politics in depth.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (POLS 1101 or POLS 1911)

POLS 4121. Women and Politics. 3 Credit Hours.

The goal of this course is to broaden with a comparative perspective our understanding of women's political experiences. We examine a variety of issues concerning the lives of women worldwide, including their economic, political and social contributions, familial roles and status in society. Initially, the course focuses on the evolution of the political, economic, and social status of American women paying particular attention to issues of race, ethnicity, and class that inform but also complicate women's political behavior. We then search for similarities and differences in women's lives that are usually obscured by the status of their countries as either industrialized or non-industrialized, either democratic or non-democratic.

Repeatability: This course may not be repeated for additional credits.

POLS 4131. Seminar in Campaign Politics. 3 Credit Hours.

This special seminar is the academic component for experiential learning and is usually offered in the fall of an election year. Students learn about the structure and organization of campaigns, the motivations of candidates, and the consequences of campaign activities by other political actors such as interest groups and political parties. Students will use their internships to identify a thematic subject for research projects.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in POLS 1101.

POLS 4140. Seminar in Urban, State & Local Politics. 3 Credit Hours.

A seminar focusing on various aspects of the political relationships that exist between state and local levels of government.

Repeatability: This course may be repeated for additional credit.

POLS 4150. Seminar in Law & Society. 3 Credit Hours.

Experiential Learning. Students must also register for 4581 (0371). Permission of Instructor or Experiential Learning Coordinator required.

Repeatability: This course may be repeated for additional credit.

POLS 4160. Seminar in Public Administration. 3 Credit Hours.

Examines a topic of contemporary interest in public administration.

Repeatability: This course may be repeated for additional credit.

POLS 4185. Internship I. 1 to 12 Credit Hour.

This internship course offers students the opportunity to gain practical experience in an area of interest. The course is designed to combine general academic experience with practical experience in fields such as public policy, local, state and federal government agencies, interest advocacy, campaigns and elections, law firms, government affairs, and NGOs, among others. The course does not have formal meeting times, but will meet several times during the semester of registration in a classroom/small setting. Students are responsible for working on their own to complete the required assignments.

Repeatability: This course may not be repeated for additional credits.

POLS 4210. Seminar in Comparative Politics. 3 Credit Hours.

Examines a topic of contemporary interest in comparative politics.

Repeatability: This course may be repeated for additional credit.

POLS 4220. Seminar in Comparative Politics. 3 Credit Hours.

Seminar focusing on comparative politics. Topic determined by the instructor.

Repeatability: This course may be repeated for additional credit.

POLS 4285. Internship II. 1 to 12 Credit Hour.

This internship course offers students the opportunity to gain practical experience in an area of interest. The course is designed to combine general academic experience with practical experience in fields such as public policy, local, state and federal government agencies, interest advocacy, campaigns and elections, law firms, government affairs, and NGOs, among others. The course does not have formal meeting times, but will meet several times during the semester of registration in a classroom/small setting. Students are responsible for working on their own to complete the required assignments.

Repeatability: This course may not be repeated for additional credits.

POLS 4310. Seminar in International Politics. 3 Credit Hours.

Seminar focusing on the politics of international relations. Topic determined by the instructor.

Repeatability: This course may be repeated for additional credit.

POLS 4320. Seminar in International Politics. 3 Credit Hours.

Examines a topic of contemporary interest in international politics.

Repeatability: This course may be repeated for additional credit.

POLS 4385. Internship III. 1 to 12 Credit Hour.

This internship course offers students the opportunity to gain practical experience in an area of interest. The course is designed to combine general academic experience with practical experience in fields such as public policy, local, state and federal government agencies, interest advocacy, campaigns and elections, law firms, government affairs, and NGOs, among others. The course does not have formal meeting times, but will meet several times during the semester of registration in a classroom/small setting. Students are responsible for working on their own to complete the required assignments.

Repeatability: This course may not be repeated for additional credits.

POLS 4410. Seminar in Political Philosophy. 3 Credit Hours.

Examines a topic of contemporary interest in political philosophy.

Repeatability: This course may be repeated for additional credit.

POLS 4485. Campaign Internship. 1 to 12 Credit Hour.

This internship course offers students the opportunity to gain practical experience in political campaigns. Campaign placements may be for any type of campaign at any level of government. The course does not have formal meeting times, but students will meet with the instructor several times during the semester of registration in a classroom setting for discussions. Students are responsible for working on their own to complete the required written and work assignments.

Repeatability: This course may not be repeated for additional credits.

POLS 4591. Directed Research and Field Study. 1 Credit Hour.

Supervised individual readings, research projects, and field work. NOTE: Students may not enroll for more than one Directed Research & Field Study course in a single semester. Students are to arrange study with a faculty member in the department of Political Science.

Repeatability: This course may be repeated for additional credit.

POLS 4691. Directed Research and Field Study. 2 Credit Hours.

Supervised individual readings, research projects, and field work. NOTE: Students may not enroll for more than one Directed Research & Field Study course in a single semester. Students are to arrange study with a faculty member in the department of Political Science.

Repeatability: This course may be repeated for additional credit.

POLS 4896. Capstone Seminar in Political Science. 3 Credit Hours.

This topical seminar focuses on a broad theme of theoretical, substantive, or practical interest within a subfield of political science. The specific content will vary with individual instructors. This is a writing-intensive course designed to integrate all the skills learned in the major. Each seminar will focus upon close oral and written analysis of major readings in a particular area of political science. Such analyses will take students beyond basic exegesis of analytic arguments towards critical evaluation of contrasting forms of social science investigation and argument. A research project is required. Required of all majors. To be taken during the senior year.

Course Attributes: WI

Repeatability: This course may be repeated for additional credit.

POLS 4904. Honors Seminar in Campaign Politics. 3 Credit Hours.

Permission of political science Honors Director required. A seminar focusing on political election campaigns in the United States.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

POLS 4920. University Honors Seminar in Comparative Politics. 3 Credit Hours.

Honors version of Political Science 4210 (0310). Open only to University Honors students.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

POLS 4940. University Honors Seminar in Political Philosophy. 3 Credit Hours.

Honors version of Political Science 4410 (0321). Open only to University Honors students.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

POLS 4996. Senior Honors Capstone Seminar. 3 Credit Hours.

Only students enrolled in the Honors Certificate or Honors Scholars Programs may register for this seminar. Please check the Political Science Department web site for information about how to apply for the Honors Scholar Program in Political Science (www.temple.edu/polsci/undergraduate/honors/index.htm). This seminar (taught as a combined semester with Political Science 3996) will rotate among selected advanced topics in one of the major fields of Political Science (international relations, American government, political theory, comparative politics, and public policy). The seminar will focus on a close analysis and discussion of assigned readings and a final research paper (as well as other short written assignments). This course satisfies the capstone requirement for the major. NOTE: Check with the course schedule for the topic and instructor for a specific semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, WI

Repeatability: This course may not be repeated for additional credits.

POLS 4997. Senior Honors Capstone Seminar. 3 Credit Hours.

Only students enrolled in the Honors Certificate or Honors Scholars Programs may register for this seminar. Please check the Political Science Department web site for information about how to apply for the Honors Scholar Program in Political Science (www.temple.edu/polsci/undergraduate/honors/index.htm). This seminar (taught as a combined semester with Political Science 3997) will rotate among selected advanced topics in one of the major fields of Political Science (international relations, American government, political theory, comparative politics, and public policy). The seminar will focus on a close analysis and discussion of assigned readings and a final research paper (as well as other short written assignments). NOTE: Check with the course schedule for the topic and instructor for a specific semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, WI

Repeatability: This course may not be repeated for additional credits.

Portuguese (PORT)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

PORT 1001. Basic I. 4 Credit Hours.

Basic Portuguese I is an introductory Portuguese course for students with little or no previous Portuguese experience. The course will develop basic skills for speaking, listening, reading, and writing as well as introduce students to the richness and diversity of Luso-Brazilian cultures. It combines regular classroom instruction and practice with Language Lab sessions dedicated to the use of instructional technology. NOTE: Prior to fall 2009, course title was "Elements I."

Repeatability: This course may not be repeated for additional credits.

PORT 1002. Basic II. 4 Credit Hours.

Basic Portuguese II is a continuation of the work begun in Basic I. The course further develops basic skills for speaking, listening, reading, and writing, and it continues the introduction to the richness and diversity of Luso-Brazilian cultures. It combines regular classroom instruction and practice with Language Lab sessions dedicated to the use of instructional technology. NOTE: Prior to fall 2009, course title was "Elements II."

Course Attributes: LA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in PORT 1001.

PORT 1003. Intermediate. 3 Credit Hours.

This is a communicative intermediate Portuguese course. More sophisticated grammar will be introduced and students will continue to develop speaking, listening, reading, and writing competencies. Class work will include discussions, videos, and writing. Students will take a more active role in their own learning process by using computer technology out of class to hone grammar skills and explore the multi-faceted world of Luso-Brazilian culture.

Course Attributes: LB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in PORT 1002.

PORT 1021. Portuguese for Spanish Speakers. 3 Credit Hours.

An intensive Portuguese course intended for students who have completed four semesters of instructional Spanish or have a native or native-like command of the language. There is emphasis on all basic skills for speaking, listening, reading, and writing, in addition to introducing the richness and diversity of Luso-Brazilian cultures. It combines regular classroom instruction and practice with Language Lab sessions dedicated to the use of instructional technology. This course meets the instructional objectives equivalent to Portuguese 1003. NOTE: Prior to fall 2009, course title was "Concentrated Elements."

Repeatability: This course may not be repeated for additional credits.

PORT 2001. Composition and Conversation. 3 Credit Hours.

The course devotes time to reading comprehension and oral expression, but the main thrust of the course is written expression using appropriate Portuguese grammar.

Repeatability: This course may not be repeated for additional credits.

PORT 2002. Readings in Portuguese. 3 Credit Hours.

This course devotes time to speaking and writing skills, but the main emphasis is reading comprehension and interpretation of texts in Portuguese.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in PORT 2001.

PORT 2101. Conversational Review. 3 Credit Hours.

Portuguese 2101 is an intermediate conversation and grammar course that strengthens listening, speaking, reading, and writing skills, and reviews important grammar points. The main objective is to enhance proficiency in Portuguese in the four basic language skills, and to foster cultural literacy of the Portuguese speaking world. To achieve these ends, there will be grammar review, assigned homework, readings, and daily oral participation, as well as interactive presentations, videos and dialogues. The majority of class time will be dedicated to conversation in Portuguese through pair work, individual and group presentations, and classroom discussion. Students will also read short chronicles, stories, newspaper articles and poems written in Portuguese.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PORT 1002 or PORT 1021)

PORT 2104. Portuguese for Business Professions. 3 Credit Hours.

Students will acquire the foundational knowledge of the language used in Portuguese-language business interactions, as well as business practices in the Portuguese-speaking world. Students will write business letters, participate in role-plays, and explore the nuances of doing business in Portuguese-speaking countries, in particular in Brazil.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PORT 1002 or PORT 1021)

PORT 3101. Readings in Luso-Brazilian Literature. 3 Credit Hours.

Themes in Luso-Brazilian culture in the context of short prose readings, including the short story and the short novel. Emphasis on tools for advanced reading: vocabulary recognition, comprehension of idiomatic expressions, and knowledge of advanced grammar. Includes writing and oral discussion.

Repeatability: This course may not be repeated for additional credits.

PORT 3201. Portuguese-Speaking Cultures. 3 Credit Hours.

Diverse subjects in Brazilian and Portuguese studies fall under this rubric. In addition to readings of original texts, this course incorporates discussions on the central history, politics, society, and cultural aspects related to the foundation and development of both Portugal and Brazil. NOTE: Prior to summer 2015, the course title was "Portuguese and Brazilian Culture and Civilization."

Repeatability: This course may not be repeated for additional credits.

PORT 4000. Special Topics in Portuguese. 3 Credit Hours.

This course examines specific topics in contemporary Brazilian and/or Portuguese culture, literature, or linguistics. Course content varies each semester to offer optimum exposure to new areas of study.

Repeatability: This course may be repeated for additional credit.

PORT 4083. Directed Reading. 1 to 3 Credit Hour.

Special readings of Portuguese by arrangement with a Portuguese faculty member.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in any 3000-level PORT course.

PORT 4101. Brazilian Short Story. 3 Credit Hours.

An overview of Brazilian short stories from 1900 to the present. Selected texts introduce students to the work of major Brazilian writers of the genre. While focusing primarily on literary texts, the course will also draw attention to literary movements and major themes.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in any 3000-level PORT course.

PORT 4102. Contemporary Portuguese and/or Brazilian Literature. 3 Credit Hours.

A survey of twentieth-century literary movements in Portuguese and/or Brazilian prose and poetry, such as pre-modernism, modernism, and regionalism with an emphasis on contemporary writers.

Repeatability: This course may not be repeated for additional credits.

ProRanger Program (PRAN)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

PRAN 1085. ProRanger Internship 1. 3 to 9 Credit Hours.

Field training is provided with law enforcement and other areas related to park service management as a seasonal National Park Service Park Ranger. Allows a student to clarify career interests, synthesize prior knowledge from the classroom with direct experience, critically examine the national park system in operation, and sharpen analytic and observational skills. NOTE: Students may register for 3, 6 or 9 credits. Permission required. See <http://www.temple.edu/provost/careercenter/proranger/ProrangerPhiladelphia.html>.

Repeatability: This course may be repeated for additional credit.

PRAN 1577. Introduction to the ProRanger Program. 2 Credit Hours.

The ProRanger Internship is designed to provide students with first-hand experience working in a national park. While the emphasis of the course is oriented towards gaining practical experience, students are expected to complete a number of academic assignments to complement their work experience and help provide them with a deeper understanding of the larger context regarding their employment. Permission required.

Repeatability: This course may not be repeated for additional credits.

PRAN 2085. ProRanger Internship 2. 3 to 9 Credit Hours.

Field training is provided with law enforcement and other areas related to park service management as a seasonal National Park Service Park Ranger. Allows a student to clarify career interests, synthesize prior knowledge from the classroom with direct experience, critically examine the national park system in operation, and sharpen analytic and observational skills. NOTE: Students may register for 3, 6 or 9 credits. Permission required. See <http://www.temple.edu/provost/careercenter/proranger/ProrangerPhiladelphia.html>.

Repeatability: This course may be repeated for additional credit.

PRAN 3001. Professional Preparation Seminar for the ProRanger. 1 Credit Hour.

This is a one-credit optional course that will provide students preparing for summer internships with the National Park Service the opportunity to learn and develop professional skills necessary for working in the National Park Service and other federal agencies. It will focus specifically on preparation for summer internships at national park sites and post-graduation employment with the National Park Service.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: ProRanger- Natl Park Svc Mgt.

Repeatability: This course may not be repeated for additional credits.

PRAN 3002. Leadership and Communication in Law Enforcement. 3 Credit Hours.

Law enforcement today faces many challenges which impact missions. Park rangers in the National Park Service (NPS) face encounters and challenges unique to their roles in protecting our national parks as well as dealing with the public. Oftentimes, park rangers are the first line of defense to protect these priceless assets. The role of a park ranger is ever changing and evolving as more parks face real-world crime problems. Students will participate in exercises and assessments to develop cognizance of land management agency policies and procedures while developing professional acumen as a federal law enforcement officer.

Repeatability: This course may not be repeated for additional credits.

PRAN 3085. ProRanger Internship 3. 1 to 3 Credit Hour.

Field training is provided with law enforcement and other areas related to park service management as a seasonal National Park Service Park Ranger. Allows a student to clarify career interests, synthesize prior knowledge from the classroom with direct experience, critically examine the national park system in operation, and sharpen analytic and observational skills. NOTE: Students may register for 1, 2 or 3 credits. Permission required. See <http://www.temple.edu/provost/careercenter/proranger/ProrangerPhiladelphia.html>.

Repeatability: This course may be repeated for additional credit.

Psychology (PSY)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

PSY 0816. Workings of the Mind. 3 Credit Hours.

In this course we will discuss conscious and unconscious mental processes. We will start by considering the nature of the unconscious mind and will examine evidence for the existence of unconscious processes in memory, problem solving, behavior in social settings, and our attitudes, beliefs, and opinions. We will then study the nature of consciousness from psychological and philosophical perspectives, with a focus on trying to answer the questions of: what is consciousness, what does consciousness do, and why does consciousness exist. For many of the issues we will discuss, there is no scientific consensus regarding the right answer or the most correct theory. Be prepared to think critically and to tolerate perplexity. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed Psychology 0916.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

PSY 0817. Brain Matters. 3 Credit Hours.

One of the last frontiers in science is the brain. We know a great deal about the structure and function of the brain and nervous system, but it is challenging to comprehend fully the complexity of a system made up of 100 billion components that are interacting with one another using tens of trillions of connections that can change and rewire during development and aging. Neuroscience is the multidisciplinary field in which brain research falls. Neuroscience is one of the fastest growing domains in all of science - and good bet for a future career path. Neuroscientists investigate brain function from the level of molecular genetics, to cellular dynamics, to brain anatomy and physiology, to relations between brain, behavior, and cognition, to brain development and aging, to diseases of the brain. In this course, we will touch on knowledge about the brain at all these levels, and more. We will also discuss case studies of brain impairment. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot receive credit for this course if they have successfully completed Neuroscience 0817.

Course Attributes: GS

Repeatability: This course may not be repeated for additional credits.

PSY 0818. Human Sexuality. 3 Credit Hours.

We often think about sexuality in terms of the physical and reproductive aspects of sex. But our sexuality is complex and dynamic. We will address this dynamic complexity as we explore the biological, psychological, relational, and cultural aspects of sexuality. The goal of this course is to broaden your perspective of human sexuality, and deepen your understanding and awareness of your own sexuality. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: SOC 0818/0918, PSY 0918.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

PSY 0825. Quantitative Methods in the Social Sciences. 4 Credit Hours.

Psychological, political, social, and economic arguments and knowledge frequently depend on the use of numerical data. A psychologist might hypothesize that I.Q. is attributable to environmental or genetic factors; a politician might claim that hand gun control legislation will reduce crime; a sociologist might assert that social mobility is more limited in the United States than in other countries, and an economist might declare that globalization lowers the incomes of U.S. workers. How can we evaluate these arguments? Using examples from psychology, sociology, political science, and economics, students will examine how social science methods and statistics help us understand the social world. The goal is to become critical consumers of quantitative material that appears in scholarship, the media, and everyday life. NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed SOC 0825, SOC 0925, POLS 0825, POLS 0825, or ANTH 0825.

Course Attributes: GQ

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 0701, MATH 0702, 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC3A, 'Y' in MC6A, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

PSY 0846. Cyberpsychology and Behavior. 3 Credit Hours.

So many of our social interactions take place online. How are our behaviors different online compared to offline? How do online interactions affect our sense of self? Our sense of community? Our mental health? This course will explore the field of Cyberpsychology, which attempts to answer questions about how digital technology affects human interaction, as well as how we think and behave. Through the course, students will also investigate how evolving technology, such as virtual reality, robots, and digital assistants, might influence human interactions going forward.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

PSY 0916. Honors Workings of the Mind. 3 Credit Hours.

In this course we will discuss conscious and unconscious mental processes. We will start by considering the nature of the unconscious mind and will examine evidence for the existence of unconscious processes in memory, problem solving, behavior in social settings, and our attitudes, beliefs, and opinions. We will then study the nature of consciousness from psychological and philosophical perspectives, with a focus on trying to answer the questions of: what is consciousness, what does consciousness do, and why does consciousness exist. For many of the issues we will discuss, there is no scientific consensus regarding the right answer or the most correct theory. Be prepared to think critically and to tolerate perplexity. (This is an Honors course.) NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed Psychology 0816.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GB, HO

Repeatability: This course may not be repeated for additional credits.

PSY 0918. Honors Human Sexuality. 3 Credit Hours.

We often think about sexuality in terms of the physical and reproductive aspects of sex. But our sexuality is complex and dynamic. We will address this dynamic complexity as we explore the biological, psychological, relational, and cultural aspects of sexuality. The goal of this course is to broaden your perspective of human sexuality, and deepen your understanding and awareness of your own sexuality. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: SOC 0818/0918, PSY 0818.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GB, HO

Repeatability: This course may not be repeated for additional credits.

PSY 1001. Introduction to Psychology. 3 Credit Hours.

How do scientists study human behavior? How do others influence our behavior? What is a psychological disorder? These questions and more are reviewed in this course, which covers the basic concepts, methods, theories, and findings in Psychology. Topics include research methods, the nervous system, human development, social psychology, personality, and psychopathology. Duplicate credit warning: Students who have earned credits for PSY 1061 will not earn additional credits for this course.

Repeatability: This course may not be repeated for additional credits.

PSY 1002. Careers in Psychology. 1 Credit Hour.

This course explores the numerous career pathways open to psychology graduates. Pathways that involve entering the workforce directly are discussed alongside more specialized career paths that typically require graduate study. Students will also identify and develop professional skills to help them meet their career goals, and will learn about resources within and outside Temple that they can use to meet these goals. After completing the course, students will have an application-ready resume (or curriculum vitae) and will have the knowledge and information to find and apply for internships, opportunities to gain research experience, and employment after graduation. Because there is significant overlap in course content, students will receive credit for only one of these courses: CLA 1002, CJ 1002, ENG 1801, HIST 1012, NSCI 1002, POLS 1002, PSY 1002, SOC 1002.

Repeatability: This course may not be repeated for additional credits.

PSY 1003. Statistics for Psychology. 3 Credit Hours.

The purpose of this course is to provide an introduction to statistics in psychology. We will spend the semester learning the concepts and corresponding methods that will allow us to ask the question, "But how do you know that is true?" Statistics are essential in allowing us to assess whether or not an observed phenomenon might have occurred by chance alone. Additionally, we will read psychological journal articles that utilize the statistics we are learning so that we can see how psychologists use and write about statistics.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 0701, MATH 0702, 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC3A, 'Y' in MC6A, any course with attribute "QA", any course with attribute "QB", 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

PSY 1004. Critical Thinking in Psychology. 3 Credit Hours.

How do you evaluate the strength of a claim made in a magazine, news program, or research article? This course will provide you with basic skills and information to systematically critique claims and research in the popular press and research literature. You will be introduced to basic research concepts, such as correlation vs. causation, common biases, hypotheses, dependent/independent variables, validity, and reliability. You will apply this knowledge to evaluating a wide range of ideas and research in psychology.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1001, PSY 1901, PSY 1061, or PSY 1996)

PSY 1110. Topics in Psychology I. 3 Credit Hours.

Individual treatment of issues regarding the inner workings of human behavior. Each offering deals with a specific aspect of behavior and motivation pertaining to life in today's society. Previous topics: women and therapy, exploring human nature, and drugs and the mind. NOTE: Check class schedule for semesters offered.

Repeatability: This course may be repeated for additional credit.

PSY 1901. Honors: Introduction to Psychology. 3 Credit Hours.

How do scientists study human behavior? How do others influence our behavior? What is a psychological disorder? These questions and more are reviewed in this course, which covers the basic concepts, methods, theories, and findings in Psychology. Topics include research methods, the nervous system, human development, social psychology, personality, and psychopathology.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

PSY 2101. Foundations of Cognitive Psychology. 3 Credit Hours.

Survey of recent research and theory in the areas of verbal learning and cognitive processes. Learning and retention of verbal materials, thinking and problem solving, and the relationship between language and thought.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1001, PSY 1071, PSY 1901, PSY 1996, or PSY 1061)

PSY 2103. Foundations of Learning and Behavior Analysis. 3 Credit Hours.

This course begins with introduction to a system of principles that account for the acquisition and maintenance of both normal and problematic behavior. Building upon this, applied behavior analysis will be illustrated with examples such as useful parenting techniques, the combining of simple into complex skills, interventions for severely problematic behavior, and early interventions for autism. The basics of Pavlovian conditioning will also be included, emphasizing their role in clinical phenomena and in drug addiction. The concluding phase of the course will be concerned with functional analyses of verbal behavior in typical human interactions, as well as in the origins of awareness and self-control.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1001, PSY 1071, PSY 1901, PSY 1996, PSY 1061, or ABA 3302)

PSY 2104. Foundations of Sensation and Perception. 3 Credit Hours.

This course will describe how we experience the world. It will describe the biological sensors we use to gather information about the world and the psychological processes involved in interpreting that information. By the end of the course, students should be able to give an answer to the question: How do we see the world? The class will be lecture format with frequent opportunities to ask questions of the immediate material as well as broader questions about how the material may apply to other areas of psychology.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1001, PSY 1071, PSY 1901, PSY 1996, or PSY 1061)

PSY 2201. Foundations of Psychopathology. 3 Credit Hours.

A survey of the principal forms of emotional and behavioral disorders; their causes, symptoms, course, assessment, and treatment. Topics include childhood disturbances, schizophrenia, depression, anxiety, and substance use disorders.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1001, PSY 1061, PSY 1901, PSY 1996, or PSY 1071)

PSY 2301. Foundations of Developmental Psychology. 3 Credit Hours.

Human development across the life span. The role of genetic factors, maturation, learning and socio-cultural factors on the development of motivation, cognitive functions, social and emotional adjustment.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1001, PSY 1061, PSY 1901, PSY 1996, or PSY 1071)

PSY 2401. Foundations of Social Psychology. 3 Credit Hours.

This course will introduce you to the theoretical perspectives, research methods, and empirical findings of social psychology. Social psychology is the scientific study of how people's thoughts, feelings, and behaviors are affected by the real or imagined presence of others. More specifically, the four main goals of this course are for you to learn: the major concepts, research findings, and issues in the field of social psychology; how social psychologists derive and test their theories and hypotheses through research; how subtle situational factors affect behavior; and how social psychology applies to your own life.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1001, PSY 1061, PSY 1901, PSY 1996, or PSY 1071)

PSY 2402. Foundations of Industrial and Organizational Psychology. 3 Credit Hours.

A survey of the application of psychological theory, techniques, and research to industry. Selection, training, motivation, job satisfaction, job evaluation, performance measurements, leadership, and other topics.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1001, PSY 1061, PSY 1901, PSY 1996, or PSY 1071)

PSY 2501. Foundations of Behavioral Neuroscience. 3 Credit Hours.

This course examines the neurobiology of behavior from the level of neuron to complex neural system interactions. Topics range from the neurobiology of sensory perception and movement to the neurobiology of learning and mental illness.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1001, PSY 1071, PSY 1901, PSY 1061, or PSY 1996)

PSY 2502. Foundations of Cognitive Neuroscience. 3 Credit Hours.

The role of the brain in cognition. Neural basis of perception, language, learning, memory, thinking, and creativity. Neural pathology and the consequences for behavior. Neuropsychological assessment techniques.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1001, PSY 1071, PSY 1901, PSY 1061, or PSY 1996)

PSY 2601. Foundations of Health Psychology. 3 Credit Hours.

This course is an overview of the field of health psychology, which focuses on the links between behavior and mental processes and health status and health behaviors. Health psychology is concerned with the promotion and maintenance of health, the prevention of illness, as well as the treatment of illness. Emphasis will be placed on theoretical analysis of health psychology (e.g., theory of planned behavior/reasoned action, health belief model, general adaptation syndrome, locus of control). Clinical applications may include smoking cessation programs, alcohol use interventions, weight control and eating disorders treatment, management of chronic pain and terminal illnesses, improvement of health care utilization and adherence, stress management, and the increasing social support to improve health outcomes.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1001, PSY 1061, PSY 1901, PSY 1996, or PSY 1071)

PSY 2901. Honors: Foundations of Cognitive Psychology. 3 Credit Hours.

Survey of recent research and theory in the areas of verbal learning and cognitive processes. Learning and retention of verbal materials, thinking and problem solving, and the relationship between language and thought.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

PSY 2931. Honors: Foundations of Developmental Psychology. 3 Credit Hours.

Human development across the life span. The role of genetic factors, maturation, learning and socio-cultural factors on the development of motivation, cognitive functions, social and emotional adjustment.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

PSY 2991. Honors Research I. 4 Credit Hours.

Topics arranged by student and instructor.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

PSY 3002. Evolutionary and Comparative Psychology. 3 Credit Hours.

The course introduces the student to cognition and social behavior from an evolutionary and comparative perspective. The comparative psychology (i.e., animal cognition) portion of the course presents the methods employed and results obtained during field observations and laboratory experiments on animal cognitive processes. Evolutionary theory, especially as it applies to social behavior, will be presented. The social behavior portion of the course will focus on social behaviors found in wild animals with special attention to those also seen in humans. The course will survey the methods and findings of the field called evolutionary psychology, which investigates selected aspects of human cognition and social behavior. The student can expect to obtain basic familiarity with the concepts and findings of those closely-related fields. Duplicate credit warning: Students who have earned credits for PSY 2102 will not earn additional credits for this course.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101), (PSY 1003, PSY 2168, STAT 2102, or STAT 2103), and any 2000-level PSY course.

PSY 3003. Advanced Undergraduate Statistics. 3 Credit Hours.

This course is meant to give psychology majors who have already taken a basic course in inferential statistics (e.g., Statistics for Psychology; PSY 1003) exposure to more advanced techniques commonly used in psychological research and to bridge the gap between basic and graduate level statistics for those considering a post-graduate degree in psychology. Topics will include linear regression, repeated-measures ANOVA, multi-factorial ANOVA, and several nonparametric alternatives to "standard" inferential tests. In addition to significance testing, this course will focus on the measurement and interpretation of effect size and power. Students will also learn how to perform data analysis using the SPSS statistical software package.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1003, PSY 2168, STAT 2102, or STAT 2103), (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101), and any 2000-level PSY course.

PSY 3004. Positive Psychology. 3 Credit Hours.

Positive psychology encompasses the study of positive experiences, positive character strengths, positive relationships, and the institutions and practices that facilitate their development. Positive experiences include the mental states of flow and mindfulness and emotions about the present (pleasure, contentment, laughter), past (e.g., nostalgia, satisfaction, pride), and future (e.g., hope, optimism). The distinction among the pleasant life, the good life, and the meaningful life will be drawn. The positive character traits include wisdom, courage, compassion, love, humanity, justice, temperance, self-efficacy, resilience, grit, imagination, creativity, and spirituality/transcendence. The classification of these virtues is explored. Positive relationships include the factors that enhance meaning and well-being among couples, family, friends, co-workers, and the community. Positive institutions are exemplified by positive education, positive work environments, healthy families, human leadership, and the development of civic virtues. This course also reviews the history of positive psychology and the contributions this new field has made to several traditional research areas in psychology. Consideration will be given to conflicting viewpoints, and their respective empirical support, including the benefits of balancing positive with negative emotions, the measurement and development of happiness, and the attempting to increase it. Throughout the course we will also engage in experiential learning and practical exercises to increase well-being, which will inform our theoretical and empirical understanding of important questions in positive psychology.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1003, PSY 2168, STAT 2102, or STAT 2103), (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101), and any 2000-level PSY course.

PSY 3005. Affective Neuroscience. 3 Credit Hours.

The brain is not just a thinking machine; it is also a feeling machine. This course explores the neural substrates behind emotions such as love, trust, fear, and pleasure. We will also discuss the relationship between emotions and cognition, the effect of emotions on animal and human behavior, and the biological basis of affective disorders such as anxiety and depression.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 2501, PSY 2502, or NSCI 2001) and (PSY 1003, PSY 2168, STAT 2102, or STAT 2103)

PSY 3006. Stress and the Brain. 3 Credit Hours.

Stress, in some form or other, is part of our everyday lives. How we respond to stress can either ensure our immediate survival or threaten long-term physical and mental well-being. This course will survey the clinical and preclinical research to understand how the brain initiates stress responses, and how stress, in turn, impacts the brain to alter behavior. The role that stress plays in the development of disorders, such as depression and post-traumatic stress disorder, will also be explored.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 2501, PSY 2502, or NSCI 2001) and (PSY 1003, PSY 2168, STAT 2102, or STAT 2103)

PSY 3007. Neuropharmacology of Drugs of Abuse. 3 Credit Hours.

This course will explore how drugs of abuse act within the brain. We will discuss the acute and longterm effects of selected drugs of abuse on behavior, mood, cognition and neuronal function and material from studies with humans is integrated with basic studies on the neurobiological basis of drug action and drug abuse -- including detailed coverage of synaptic transmission and the distribution, regulation and integration of brain neurotransmitter systems. The focus is on addictive or illicit drugs, and all the major classes are discussed, including: opiates (heroin, morphine, opium), sedative - hypnotics (alcohol, barbiturates, chloral hydrate), anxiolytics (benzodiazepines), psychomotor stimulants (amphetamine, cocaine), marijuana, hallucinogens (LSD, mescaline), hallucinogenic-stimulants (MDA, MDMA), and dissociative anesthetics (PCP).

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 2501, PSY 2502, or NSCI 2001) and PSY 1003.

PSY 3008. Decision Neuroscience. 3 Credit Hours.

How do we make decisions in social and economic contexts? What factors influence our decisions? How can neuroscience be used to better understand our decisions? To answer these questions, this course focuses on how new research in neuroscience, psychology, and behavioral economics shapes our broader understanding of decision making. The topics covered in the course include functional organization of key brain systems, approaches to measuring and interpreting neuroscience data, methods for measuring decision-making behavior, economic and cognitive modeling, and impact of neuroscience on real-world decision-making. Emerging topics will include applications in policy, marketing, and finance.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in PSY 1003 and (PSY 2104, PSY 2501, PSY 2502, or NSCI 2001)

PSY 3009. Current Perspectives on Parenting. 3 Credit Hours.

This course will provide an overview of the field's current understanding of parenting and the role of parenting in child development. The course focuses on understanding theoretical and research approaches to the study of parenting. Topics covered will include historical perspectives on parenting, the importance influence of parents on their children's development, parenting throughout developmental periods (e.g., infancy, toddlerhood, middle childhood, adolescence), and contemporary issues in parenting (e.g., parenting in non-traditional families, parents at risk, child maltreatment, public policy issues, multicultural perspectives on parenting). Students will also be exposed to the multiple research methods available to study parenting and parental influence, and be able to review and critically evaluate current research related to parenting and youth development.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1003, PSY 2168, STAT 2102, or STAT 2103), (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101), and any 2000-level PSY course.

PSY 3012. Self-Regulation in Health Behaviors. 3 Credit Hours.

This course will discuss self-regulation as a potent predictor of healthful behaviors such as exercise and vegetable consumption. We will also explore why non-addicted people compromise healthy long-term goals for less valued, health-risk behaviors such as alcohol use, overeating, and cigarette smoking. We will examine how certain risk behaviors can evolve into addictions if they persist over time. Multiple psychological theories that integrate cognitive, emotional, and social predictors underlying self-regulation in health behaviors will also be discussed.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in PSY 1003, PSY 1004, and any 2000-level PSY course.

PSY 3013. Psychological Resilience. 3 Credit Hours.

Stress, adversities and trauma are ordinary parts of life. We naturally adapt to a remarkable variety of challenges throughout our lives, yet occasionally get stuck. Scientific psychology offers evidence-based methods to help us prepare for and adjust to challenging circumstances. This course will examine the theories and science of psychological resilience; the biology of stress; cognitive mediation; and social and community factors that contribute to risk and resilience. You will sample experiential coping skills and techniques, and investigate the role of social and electronic media in the maintenance of stress.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1003, PSY 2168, STAT 2102, or STAT 2103), (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101), and any 2000-level PSY course.

PSY 3096. Conducting Psychological Research. 3 Credit Hours.

This writing intensive course offers a practical introduction to research methods and the process of conducting research in psychology. Students will perform all of the steps involved in a research study, from formulating an idea and hypothesis to presenting results in a paper and presentation. Ethical considerations relevant to research will be emphasized in the course.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1001, PSY 1901, PSY 1061, PSY 1071, or PSY 1996), (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101), (PSY 1003, PSY 2168, STAT 2102, or STAT 2103), and any 2000-level PSY course.

PSY 3100. Topics: Brain, Behavior and Cognition. 3 Credit Hours.

Advanced level topics course; topics vary by instructor.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (PSY 2101, PSY 2103, PSY 2501, PSY 2502, PSY 2104, or PSY 2901), (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101), and (PSY 1003, PSY 2168, STAT 2102, or STAT 2103)

PSY 3121. Cognitive Enhancement and Superior Cognition. 3 Credit Hours.

This seminar-style course will evaluate "cognitive enhancement" techniques - the different ways in which people have tried to strengthen cognitive abilities. It will consider competing ideas about whether the human mind can be enhanced, and will discuss these ideas in relation to plasticity in the human brain. The course will delve into research on the development of "expertise", and on the potential to hone specific cognitive abilities through deliberate practice. Students in the course will learn about, and debate, claims regarding the improvement of cognitive capabilities in healthy young adults, through techniques like mental training, video game play, meditation, brain stimulation, physical exercise, and neuropharmacology ("smart drugs"). Along the way, students will consider what can be learned from individual cases of exceptional cognitive ability, which might represent the outer limits of what the human mind is capable of achieving.

Repeatability: This course may not be repeated for additional credits.

PSY 3131. Problem Solving and Creative Thinking. 3 Credit Hours.

This course will begin with a historical survey of approaches to the study of creativity, concentrating on questions of definition and issues concerning how creativity can be measured. The relationship between creative thinking and problem solving will be discussed. The next section will examine different perspectives that researchers have taken toward the study of creativity. Examples are: (1) genius and madness; (2) developing tests of creative thinking and studying the creative personality; (3) the cognitive view, which considers creative thinking to be a straightforward extension of ordinary problem solving. We will then examine a number of case studies of creative advances, from the areas of invention (Edison, the Wright brothers), the arts (painting, sculpture, literature, poetry, and music), and science, to acquire a database to use to test the theories of the creative process developed earlier. The material in this course will go beyond that ordinarily covered in a psychology course - we will read research in art history, musicology, history and philosophy of science, and history of technology, as well as literature from the psychological study of giftedness, personality and mental testing, and cognitive processes. Course requirements will include written comments on each week's assigned readings, and a case study of a creative advance in any area of interest to the student. NOTE: Check class schedule for semesters offered.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 2101, PSY 2901, PSY 2501, or PSY 2502), (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101), and (PSY 1003, PSY 2168, STAT 2102, or STAT 2103)

PSY 3132. Human Memory. 3 Credit Hours.

This course provides an in-depth view of human memory. It focuses on the different approaches to research on human memory, including cognitive approaches, experimental approaches, neuroscientific approaches, and developmental (childhood to old age) approaches. Course topics include basic memory processes, the neuropsychology of memory and amnesia, and applied topics in memory research. NOTE: Check class schedule for semesters offered.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 2101, PSY 2501, PSY 2502, or PSY 2901), (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101), and (PSY 1003, PSY 2168, STAT 2102, or STAT 2103)

PSY 3151. Direct Applications of Behavioral Principles. 3 Credit Hours.

Direct hands-on experience, in the shaping and maintaining of novel behavior patterns in the laboratory, will be supplemented by related readings and field trips to educational and social-service agencies where behavioral principles are applied. These experiences will introduce students to functional analysis and its underlying principles, and to the graphical techniques that enable the tracking of skill acquisition of individuals, as well as evaluating their problematic behavior. In addition, each student will carry out an individual project by selecting, analyzing, and arranging for improvement in some behavior that impacts his or her own quality of life.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in PSY 2103, (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101), and (PSY 1003, PSY 2168, STAT 2102, or STAT 2103)

PSY 3172. The Science of Sleep. 3 Credit Hours.

Why do we sleep? How does sleep affect memory, learning, physical health, and emotional regulation? How much sleep do we need, and why? How does sleep change with age? How are sleeping, eating, and obesity related? How can we get more sleep? In this advanced undergraduate seminar, we examine all these questions, and more, from a neurological developmental perspective. This course is targeted to students interested in developmental neuroscience, health psychology, clinical psychology, developmental psychology, and learning and memory.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in ((PSY 1003 and PSY 2101), PSY 2501, or PSY 2502)

PSY 3200. Topics: Clinical. 3 Credit Hours.

Advanced level topics course; clinical topics vary by instructor.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101), (PSY 1003, PSY 2168, STAT 2102, or STAT 2103), and any 2000-level PSY course.

PSY 3221. Clinical Psychology: Research and Practice. 3 Credit Hours.

In this class the student will learn about one subspecialty within psychology, that of clinical psychology. The course will focus on how clinical psychology emerged as a field of mental health research and practice, what clinical psychologists do and the theory behind those activities. Special attention will be paid to psychological assessment and psychotherapy, two of the main activities that clinical psychologists undertake. Students will learn about the purpose of psychological assessment, some examples of the more commonly used psychological assessment instruments, and how psychological assessment guides service provision. Students will also learn about different theoretical orientations in the practice of psychotherapy. Additional topics covered include ethics in this clinical science, contemporary issues in clinical practice (e.g., innovative treatments for mental illness, the impact of managed care, working with special populations), and career opportunities in the field.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101), (PSY 1003, PSY 2168, STAT 2102, or STAT 2103), and PSY 2201.

PSY 3223. Child Psychopathology and Treatment. 3 Credit Hours.

This course provides an overview of the major psychological, behavioral, and emotional problems experienced in childhood and adolescence. Organized around - but not limited to - the diagnostic framework of the DSM, the course focuses on current views concerning the phenomenology, etiology (causes), and treatment and prevention of these problems. The major theoretical positions are covered, but the major emphasis is on current empirical findings relevant to the various disorders and problems. Covered issues include conduct problems and delinquency, attention deficit problems, depression and suicide, childhood anxiety problems, developmental disabilities, learning problems, child maltreatment and abuse, and children's adjustment to family problems.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101), (PSY 1003, PSY 2168, STAT 2102, or STAT 2103), and PSY 2201.

PSY 3301. Phases of Development: Infancy. 3 Credit Hours.

Within this course, students focus on a particular phase of development, infancy, for an entire semester. This phase of development presents unique changes and challenges for the developing person. For the scientist, the phase poses unique theoretical perspectives and special methodological challenges. Up-to-date information and directions for future study, application and research are emphasized.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101), (PSY 1003, PSY 2168, STAT 2102, or STAT 2103), and (PSY 2301 or PSY 2931)

PSY 3303. Psychological Testing: Measuring IQ, Thoughts, Feelings, and Attitudes. 3 Credit Hours.

How do we measure intelligence, thoughts, feelings, and attitudes? This course will provide an overview of psychometric theory, methods, and statistics. Test construction and the psychometric evaluation of tests (e.g., validity, reliability) will be covered in detail. Students also will learn the history of psychometrics, and legal, ethical, and cultural diversity issues related to this topic will be discussed. This course will introduce assessment concepts and methods that will be useful in a wide range of settings, including graduate school and careers in clinical settings, marketing, personnel selection, job performance evaluations, treatment evaluations, forensic applications, and others.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1003, PSY 2168, STAT 2102, or STAT 2103), (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101), and any 2000-level PSY course.

PSY 3304. Personality, Social and Emotional Development. 3 Credit Hours.

How do we develop as unique individuals? How do we come to relate to others and ourselves? How do we come to feel the way we do about the people we know and the many important things in our lives? Using contemporary research and theory, these core questions are examined. Among the topics to be studied are the development and significance of early attachment relationships, the development of a sense of self, changing family relations, the progression from external to internal self-control, the emergence of prosocial and anti-social behavior, moral development, the development of romantic relationships, and the nature of changing relationships with peers and loved ones. Students will acquire an understanding of the role of early experiences in development, the nature of emotional vulnerability and personality resilience, and the extent to which some behaviors are continuous or discontinuous over time. NOTE: Check class schedule for semesters offered.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101), (PSY 1003, PSY 2168, STAT 2102, or STAT 2103), and (PSY 2301 or PSY 2931)

PSY 3305. Cognitive and Language Development. 3 Credit Hours.

This class will discuss theory and evidence concerning how children acquire adult competence in thinking and language. Development is covered from infancy to adolescence. We will consider a wide array of domains and processes in cognitive development, including number, space, theory of mind, reasoning, perception, attention, and memory. Educational and applied implications may be touched on, as well as neuroscience approaches.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101), (PSY 1003, PSY 2168, STAT 2102, or STAT 2103), and (PSY 2101, PSY 2301, PSY 2901, or PSY 2931)

PSY 3306. Neuroscience of Development and Aging. 3 Credit Hours.

This course will integrate students' knowledge of behavioral and cognitive relationships between young adult neuroanatomy and behavior that they studied in prerequisite courses (Psychology 2501 (0260) - Foundations of Behavioral Neuroscience or Psychology 2502 (0265) - Foundations of Cognitive Neuroscience) with information about the development and aging of behavior, cognition and neuroanatomy and neurophysiology. The initial emphasis in the course will be on embryonic and fetal development of the central nervous system and emergent behavioral plasticity. Sensory and motor development in the fetus will be examined. Postnatal development of the cerebral cortex and developmental outcomes will be explored in the context of environmental phenomena that can amplify or inhibit the organism's adaptive capacity. Normal aging of the brain will be contrasted to neurodegenerative diseases of old age, and the cognitive and behavioral consequences of both normal and non-normal aging will be presented.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101), (PSY 1003, PSY 2168, STAT 2102, or STAT 2103), and (NSCI 2001, PSY 2501, or PSY 2502)

PSY 3411. Social Cognition. 3 Credit Hours.

This class provides an overview of social cognition, the study of the cognitive representations and processes that people use to try to make sense of the social world. Topics covered will include social attitudes, the social self, stereotypes, attributions, and social decision-making. Readings, lectures, and discussions will focus on the key research findings, the unique methods, and the implications and applications of social cognition research. NOTE: Check class schedule for semesters offered.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101), (PSY 1003, PSY 2168, STAT 2102, or STAT 2103), and PSY 2401.

PSY 3413. Psychology of Power, Oppression, and Privilege. 3 Credit Hours.

Psychology of Power, Oppression, and Privilege is designed to be a specialized course to focus on diversity, equity and inclusion within the Psychology major. This course provides an in-depth coverage of psychology topics, including stereotyping, prejudice and privilege, discrimination and advantage, oppression and the impact of oppression on the individual's mental health and well being. In addition, this course provides further opportunities for students to develop their writing, speaking, and presentation skills.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in any 2000-level PSY course.

PSY 3417. Personnel Psychology. 3 Credit Hours.

This course focuses on the application of psychological theories and principles to issues in personnel selection. Topics include job analysis, recruitment and selection techniques, selection fairness, utility analysis, affirmative action, training and development, and performance appraisal.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in PSY 2402, (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101), and (PSY 1003, PSY 2168, STAT 2102, or STAT 2103)

PSY 3418. Human Performance Improvement. 3 Credit Hours.

This course is an introduction to Human Performance Technology, a rapidly growing field that applies the principles, methods, and empirical generalizations of Behavior Analysis to improving human performance in organizations. Working from a theoretical basis, students will learn how to diagnose performance discrepancies in organizational settings, design and evaluate appropriate behavior-based solutions.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101), (PSY 1003, PSY 2168, STAT 2102, or STAT 2103), and PSY 2402.

PSY 3501. Investigation of Addiction Disorders. 3 Credit Hours.

What is addiction? How can it be defined? This course will explore the psychological, neurobiological, and pharmacological perspectives of addiction and addiction disorders. Students will learn the basic neurobiology of addiction, an overview of experimental techniques investigating addiction, and discuss the societal impacts. Several addiction disorders will be covered, ranging from gambling to drugs of abuse. Students will be encouraged to provide their viewpoints and participate in class discussions.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1003, PSY 2168, STAT 2102, or STAT 2103), PSY 1004, and any 2000-level PSY course.

PSY 3561. Psychopharmacology. 3 Credit Hours.

This course will focus on how the brain works on a chemical level. It examines how behavior and environment can change functions of the brain, and how medications and drugs alter brain function. NOTE: Check class schedule for semesters offered.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 2501, PSY 2502, or NSCI 2122) and (PSY 1003, PSY 2168, STAT 2102, or STAT 2103)

PSY 3566. Neurobiology of Learning and Memory. 3 Credit Hours.

This course examines the neuroanatomy and neurophysiology underlying the many diverse forms of learning and memory. The course begins with an overview of the structure and function of neural areas responsible for learning, before progressing to an examination of the different processes involved in the acquisition, consolidation, and forgetting of habits, skills, and cognition. Additional topics may include the relation between pharmacology and learning, the impact of disease or trauma, and the neurobiology of social behavior.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 2501, PSY 2502, or NSCI 2001) and (PSY 1003, PSY 2168, STAT 2102, or STAT 2103)

PSY 3600. Advanced Topics in Health Psychology. 3 Credit Hours.

Special Topics course - topic varies by semester and/or by instructor. Topics offered are all specifically related to Health Psychology. NOTE: Check class schedule for topics offered each semester.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (PSY 2601, HRPR 2103, or SBS 2103), (PSY 1003, PSY 2168, STAT 2102, or STAT 2103), and (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101)

PSY 3601. Social Health Psychology. 3 Credit Hours.

Health psychology is concerned with the promotion and maintenance of health, the prevention of illness, as well as the treatment of illness. This course will focus on how social psychological factors affect one's general health, health behaviors, and well-being. Emphasis will be placed on theoretical analysis of social psychological phenomena as they apply to health psychology (e.g., social support and intimate relationships; stigma, prejudice, and discrimination; issues of race, gender, class; health attitudes and persuasion; and the self).

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 2601, HRPR 2103, or SBS 2103), (PSY 1003, PSY 2168, STAT 2102, or STAT 2103), and (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101)

PSY 3602. Clinical Neuropsychology. 3 Credit Hours.

This course will provide background on basic functional anatomy of the central nervous system and neuropsychological theories and methods. The primary focus of the course will be the clinical assessment and treatment of neuropsychological disorders, such as aphasia, agnosia, dementia, and others. NOTE: This course is regularly cross-listed with NSCI 3602; students will receive credit for only one course.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1003, PSY 2168, STAT 2102, or STAT 2103), (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101), and any 2000-level PSY course.

PSY 3603. Clinical Applications of Health Psychology. 3 Credit Hours.

Health psychology is a subfield of psychology that applies psychological theories and techniques to health and wellness and the prevention and treatment of illness and disabling conditions. This advanced undergraduate course will provide an introduction to the clinical applications of health psychology using an interdisciplinary model. Readings, review of research, discussions and an interdisciplinary project will focus on integrating knowledge of the biological, behavioral, emotional, social and cognitive influences on health and health behaviors with the goal of understanding psychological approaches to the prevention and treatment of physical problems and enhancing overall wellness.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 2201, PSY 2601, HRPR 2103, or SBS 2103), (PSY 1003, PSY 2168, STAT 2102, or STAT 2103), and (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101)

PSY 3604. Food on the Brain. 3 Credit Hours.

This course is about food and eating from a variety of perspectives including from a neuroscience, developmental, and an individual differences perspective. We will review the neurobiology of tasting and consuming food; examine lifespan and gender differences. We will examine eating in healthy individuals but also will cover health and clinical psychology topics such as eating and weight disorders. We will review the current understanding of food as an addictive substance and consider food and eating occurs within a social and environmental context.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in PSY 1003 and (PSY 2501, PSY 2502, PSY 2601, HRPR 2103, or NSCI 2001)

PSY 3615. History and Systems of Psychology. 3 Credit Hours.

The development of psychology from its origins to present. The conceptual bases of the current major psychological systems.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101), (PSY 1003, PSY 2168, STAT 2102, or STAT 2103), and any 2000-level PSY course.

PSY 3620. Topics in Psychology. 3 Credit Hours.

Special Topics course - topic varies by semester and/or by instructor. Topics offered are all from the major divisions of psychology; clinical, developmental, social and BBC (Brain, Behavior & Cognition). NOTE: Check class schedule for topics offered each semester.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101), (PSY 1003, PSY 2168, STAT 2102, or STAT 2103), and any 2000-level PSY course.

PSY 3785. Psychology Internship. 1 to 12 Credit Hour.

Work experience in clinical and industrial settings where psychologists are employed eight hours a week under the guidance of an on-site supervisor. Students meet for seminars, and write a paper under the guidance of a Temple coordinator.

Repeatability: This course may be repeated for additional credit.

PSY 3787. Practicum. 1 to 12 Credit Hour.

Work experience in clinical and industrial settings where psychologists are employed eight hours a week under the guidance of an on-site supervisor. Students meet for seminars, and write a paper under the guidance of a Temple coordinator.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101), (PSY 1003, PSY 2168, STAT 2102, or STAT 2103), (PSY 1001, PSY 1061, PSY 1901, PSY 1996, or PSY 1071), and any 2000-level PSY course.

PSY 3791. Collaborative Research I. 1 to 4 Credit Hour.

Faculty advisor needed for research in a particular area. For projects outside Temple University, approval must be obtained through a faculty member who will handle the liaison with the outside institution and ensure uniformity of requirements.

Repeatability: This course may be repeated for additional credit.

PSY 3891. Collaborative Research II. 1 to 4 Credit Hour.

Faculty advisor needed for research in a particular area. For projects outside Temple University, approval must be obtained through a faculty member who will handle the liaison with the outside institution and ensure uniformity of requirements.

Repeatability: This course may be repeated for additional credit.

PSY 3920. Honors Topics in Psychology. 3 Credit Hours.

Topic varies by semester and/or by instructor. Check course schedule for topics offered each semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (PSY 2168, PSY 1003, STAT 2102, or STAT 2103), (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101), and (PSY 1001, PSY 1061, PSY 1901, PSY 1996, or PSY 1071)

PSY 3921. Honors Cognitive Enhancement and Superior Cognition. 3 Credit Hours.

This seminar-style course will evaluate "cognitive enhancement" techniques - the different ways in which people have tried to strengthen cognitive abilities. It will consider competing ideas about whether the human mind can be enhanced, and will discuss these ideas in relation to plasticity in the human brain. The course will delve into research on the development of "expertise", and on the potential to hone specific cognitive abilities through deliberate practice. Students in the course will learn about, and debate, claims regarding the improvement of cognitive capabilities in healthy young adults, through techniques like mental training, video game play, meditation, brain stimulation, physical exercise, and neuropharmacology ("smart drugs"). Along the way, students will consider what can be learned from individual cases of exceptional cognitive ability, which might represent the outer limits of what the human mind is capable of achieving.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

PSY 3961. Honors Psychopharmacology. 3 Credit Hours.

This course will focus on how the brain works on a chemical level. It examines how behavior and environment can change functions of the brain, and how medications and drugs alter brain function.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 2501, PSY 2502, or NSCI 2122) and (PSY 2168, PSY 1003, STAT 2102, or STAT 2103)

PSY 3991. Honors Research II. 3 Credit Hours.

Topics arranged by student and instructor.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in PSY 2991, (PSY 2168, PSY 1003, STAT 2102, or STAT 2103), and (PSY 1004, PSY 1167, SOC 1167, MATH 1013, or STAT 2101)

PSY 4182. Independent Study in Cognitive Neuroscience I. 3 Credit Hours.

Students do cognitive neuroscience research in the laboratory.

Repeatability: This course may be repeated for additional credit.

PSY 4282. Independent Study in Cognitive Neuroscience II. 3 Credit Hours.

Students do cognitive neuroscience research in the laboratory.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in PSY 4182.

PSY 4696. Capstone in Psychology. 3 Credit Hours.

The focus of this capstone is a topic important to many fields in psychology. Different topics will be covered in different semesters. The course will allow students to see the linkages between concepts and theories from very different fields and to see how psychology can be applied to problems in many spheres of life. The emphasis on synthesis and application makes this capstone particularly useful for students planning graduate work in psychology and those unsure of the direction they would like to take in psychology. NOTE: This course is limited to psychology majors in their senior year.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 3096 or PSY 2196)

PSY 4791. Collaborative Research III. 1 to 4 Credit Hour.

Faculty advisor needed for research in a particular area. For projects outside Temple University, approval must be obtained through a faculty member who will handle the liaison with the outside institution and ensure uniformity of requirements.

Repeatability: This course may be repeated for additional credit.

PSY 4891. Collaborative Research IV. 1 to 4 Credit Hour.

Faculty advisor needed for research in a particular area. For projects outside Temple University, approval must be obtained through a faculty member who will handle the liaison with the outside institution and ensure uniformity of requirements.

Repeatability: This course may be repeated for additional credit.

PSY 4991. Honors Research III. 3 Credit Hours.

Topics arranged by student and instructor.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

PSY 4996. Honors Capstone. 4 Credit Hours.

This capstone is the final class of a four semester honors program in psychology. At this point students have designed a research project and collected and analyzed their data. Here the students write their research in APA style and prepare to submit these manuscripts for publication. Each student participates in a poster session attended by the psychology faculty and other invited guests. NOTE: This course is limited to psychology majors in their senior year who have completed the first three semesters of the psychology honors program.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, WI

Repeatability: This course may not be repeated for additional credits.

Public Policy (PLCY)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

PLCY 2000. Special Topics I. 3 Credit Hours.

Topics vary from semester to semester. Please check with the faculty advisor for a course description and topic.

Repeatability: This course may be repeated for additional credit.

PLCY 2103. Making Public Policy. 3 Credit Hours.

This course examines selected policy areas in a variety of national settings and the relationship of political cultures and policymaking structures to policy outputs. NOTE: Students will receive credit only once for either POLS 2103 or PLCY 2103. This course was previously titled "U.S. Public Policy Making"; students who received credit under the former title will not earn additional credit.

Repeatability: This course may not be repeated for additional credits.

PLCY 3000. Special Topics II. 3 Credit Hours.

Topics vary from semester to semester. Please check with the faculty advisor for a course description and topic.

Repeatability: This course may be repeated for additional credit.

PLCY 3151. Public Policy Analysis. 3 Credit Hours.

This course considers selected contemporary public policy issues. The course begins with an examination of the national political-economic context within which major policy issues arise and then turns to the analysis of the roots and policy alternatives on several major issues. Issues may concern health, energy, education, employment, welfare, and the regulation of business.

Repeatability: This course may not be repeated for additional credits.

PLCY 3185. Internship I. 1 to 12 Credit Hour.

This internship course offers students the opportunity to gain practical experience in an area of interest. The course is designed to combine general academic experience with practical experience in fields such as public policy, local, state and federal government agencies, interest advocacy, campaigns and elections, law firms, government affairs, and NGOs, among others. The course does not have formal meeting times but will meet several times during the semester of registration in a classroom/small setting. Students are responsible for working on their own to complete the required assignments.

Repeatability: This course may be repeated for additional credit.

Public Relations (PR)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

PR 1101. PRactical Grammar for Public Communications. 3 Credit Hours.

In this course, students are taught the basics of grammar, sentence structure, punctuation and word usage; these basic skills are foundational to majoring in pursuits that involve extensive writing, such as public relations, journalism and other communications studies. By the end of this course, a proficiency in the mechanics of writing will provide students with the skills to perform well in the more advanced level writing required throughout their collegiate career.

Repeatability: This course may not be repeated for additional credits.

PR 1112. Communicating Leadership. 3 Credit Hours.

This course will introduce you to leadership studies from a communication perspective. Through all course activities (e.g., readings, discussion, and case studies) you will gain a broad understanding of how leadership emerges and is enacted on a daily basis through communication. NOTE: Students cannot receive credit for this course if they have successfully completed STRC 1112.

Repeatability: This course may not be repeated for additional credits.

PR 1496. News Writing and Media Relations. 3 Credit Hours.

This writing-intensive course focuses on the fundamentals of writing for various forms of news media, including print and electronic. Use of AP Style is taught and required. NOTE: Required course for all students in the Public Relations major. A grade of C or higher is required in order to take upper-level PR courses. WI designated.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

PR 1552. Introduction to Public Relations. 3 Credit Hours.

Overview of public relations careers, skills and responsibilities. Intended for both those who are considering a PR career and those planning to enter any field that deals with the public. NOTE: Students cannot receive credit for this course if they have successfully completed STRC 2552.

Repeatability: This course may not be repeated for additional credits.

PR 2440. Special Topics in Public Relations. 3 Credit Hours.

This course focuses on subject matter not covered by regular departmental courses. Topics announced in advance.

Repeatability: This course may be repeated for additional credit.

PR 2551. Research Methods. 3 Credit Hours.

This is a basic course in applied research for planning and evaluating communication campaigns.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in PR 1552.

PR 2661. Communicating Organizational Change. 3 Credit Hours.

In this course, we will analyze the forces that drive individuals, teams, and organizations to change. We will examine a range of theoretical concepts and practices of leading change in organizational, community, political and global contexts. We will examine impediments to change. NOTE: Students cannot receive credit for this course if they have successfully completed STRC 2661.

Repeatability: This course may not be repeated for additional credits.

PR 2662. Leading Groups and Team Building. 3 Credit Hours.

Teams, and small groups, are an essential element of work and social life; we are constantly asked to cooperate, coordinate, and collaborate. While teamwork can be a productive, immensely satisfying and rewarding experience, too often it falls short of meeting our expectations. This class introduces students to the small group communication theories and principles that provide the basis for both understanding team building and becoming a productive group member and leader. Through (1) the study of small group communication theory, (2) the evaluation of teams in practice (from mountain climbing to virtual work teams), and (3) analyzing students' own group experiences, students will develop the communication and analytic skills necessary to make teamwork work for you. NOTE: Students cannot receive credit for this course if they have successfully completed STRC 2662.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (Complete the following: (CSI 1111 or 'Y' in CRCO01), (PR 1112 or 'Y' in CRPR02), (PR 1101 or 'Y' in CRPR01), (PR 1496 or 'Y' in CRPR03), and (PR 1552 or 'Y' in CRPR04) or CMST 2111 (C- or higher))

PR 2672. Global Communication and Leadership. 3 Credit Hours.

This course focuses on communication processes and issues that arise in multinational and global organizations. This course explores the relationship among culture, communication, technology, and ways of organizing across national contexts and in different types of organizations (nonprofit, voluntary, civic, governmental, small business and corporate systems). The communicative and ethical dimensions of international organizing are addressed.

NOTE: Students cannot receive credit for this course if they have successfully completed STRC 2672.

Repeatability: This course may not be repeated for additional credits.

PR 2701. Public Relations Theory. 3 Credit Hours.

Using a critical lens, this course shall enable students to explore practical public relations problems and opportunities influencing the field through application of public relations theory.

Repeatability: This course may not be repeated for additional credits.

PR 3096. Public Relations Writing. 3 Credit Hours.

This designated Writing-Intensive course explores all aspects of writing for public relations, including news releases, newsletter and brochure copy, speech writing, writing for websites and digital media, writing for internal audiences, understanding campaign planning and evaluation, and more.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (PR 1496 or 'Y' in CRPR03), (PR 1552 or 'Y' in CRPR04), and (PR 1101 or 'Y' in CRPR01)

PR 3101. Digital Media, Social Media, Audience Analytics for Public Relations. 3 Credit Hours.

One of the most critical skills in modern public relations is a strong understanding of the tools measuring digital marketing performance, the key metrics and their meaning. You will need to know how to analyze the data, find the story in the data and present the data story in a compelling way. This course will provide students with the basics of digital tools and the key metrics analyzed for communication disciplines. Students will learn some of the most common digital tools in the industry, and become better prepared for the modern communication world.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CSI 1111 or 'Y' in CRCO01), (PR 1112 or 'Y' in CRPR02), (PR 1101 or 'Y' in CRPR01), (PR 1496 or 'Y' in CRPR03), (PR 1552 or 'Y' in CRPR04), and (PR 2551, STRC 2551, or 'Y' in CRPR05)

PR 3201. Law and Ethics in Public Relations. 3 Credit Hours.

Law and ethics are crucial components of public relations practice. This course explores and supplies you with critical knowledge of these areas through theoretical perspectives; examination of essential and relevant law impacting professional communicators; analyses of ethical issues public relations professionals and organizational and community leaders confront; exploration of guidelines for remaining in compliance with the law; discussions and case studies of ethical reasoning and practical, philosophical and theoretical concerns affecting everyday matters of moral choice and of moral judgment; and current trends on these topics in the media and public relations.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CSI 1111 or 'Y' in CRCO01), (PR 1112 or 'Y' in CRPR02), (PR 1101 or 'Y' in CRPR01), (PR 1496 or 'Y' in CRPR03), (PR 1552 or 'Y' in CRPR04), (PR 2551 (may be taken concurrently) or 'Y' in CRPR05), (PR 2662 (may be taken concurrently) or 'Y' in CRPR06), and (PR 2701 (may be taken concurrently) or 'Y' in CRPR07)

PR 3202. Diversity and Public Relations. 3 Credit Hours.

The growing importance of issues surrounding diversity and the ever-changing media landscape have become imperative in the practice of public relations. This course explores and supplies you with critical knowledge of these areas through analyses of diversity and media issues public relations professionals and firms confront; theoretical perspectives on the various dimensions of diversity and its value in public relations; practical application of strategies to manage the shifting media landscape; and both discussions and case studies of current trends on these topics.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CSI 1111 or 'Y' in CRCO01), (PR 1112 or 'Y' in CRPR02), (PR 1101 or 'Y' in CRPR01), (PR 1496 or 'Y' in CRPR03), (PR 1552 or 'Y' in CRPR04), (PR 2551 (may be taken concurrently) or 'Y' in CRPR05), (PR 2662 (may be taken concurrently) or 'Y' in CRPR06), and (PR 2701 (may be taken concurrently) or 'Y' in CRPR07)

PR 3301. Industry Essentials for Public Relations. 1.5 or 2 Credit Hour.

This intense seven-week course is designed to provide a foundational knowledge on essential business topics from a strategic public relations perspective including economics and economic indicators, financial statements, the law and corporate disclosure, corporate social responsibility, and corporate reputation, among others. Please note this is a required course. If students take it for 2 credits, they will need to take a 1 credit elective or add 1 credit to the Field Experience course to fulfill graduation requirements.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CSI 1111 or 'Y' in CRCO01), (PR 1112 or 'Y' in CRPR02), (PR 1101 or 'Y' in CRPR01), (PR 1496 or 'Y' in CRPR03), (PR 1552 or 'Y' in CRPR04), (PR 2551 or 'Y' in CRPR05), (PR 2662 (may be taken concurrently) or 'Y' in CRPR06), and (PR 2701 (may be taken concurrently) or 'Y' in CRPR07)

PR 3302. Crisis Communication. 1.5 or 3 Credit Hour.

This course is designed to provide a foundational knowledge on essential crisis communication practices and techniques from a strategic public relations perspective including understanding the differences between a crisis and an emergency, risk assessment, legal restrictions and implications, and how a crisis can affect operations, employee morale and productivity, business relationships, stock price and corporate reputation, among others. Both the perspectives of practitioners and academics will be presented.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CSI 1111 or 'Y' in CRCO01), (PR 1112 or 'Y' in CRPR02), (PR 1101 or 'Y' in CRPR01), (PR 1496 or 'Y' in CRPR03), (PR 1552 or 'Y' in CRPR04), (PR 2551 (may be taken concurrently) or 'Y' in CRPR05), (PR 2662 (may be taken concurrently) or 'Y' in CRPR06), (PR 2701 (may be taken concurrently) or 'Y' in CRPR07), and (PR 3096 or 'Y' in CRPR08)

PR 3401. Sports Media Relations. 3 Credit Hours.

This course teaches all aspects of media interaction, specifically public relations and advertising, in the sports industry. Students explore careers in sports media relations, learning the writing, statistical and communication skills needed to work for a sports agency, sports public relations agency, a sports organization or institution. The course focuses on the cultural, business, and audience issues involving professional representation and sports coverage, including race, gender, and ethics.

Repeatability: This course may not be repeated for additional credits.

PR 3440. Special Topics in Public Relations. 3 Credit Hours.

Subject matter not covered by regular departmental course offerings. Topics announced in advance.

Repeatability: This course may be repeated for additional credit.

PR 3483. Directed Readings in Public Relations. 3 Credit Hours.

Advanced reading in Public Relations topics. NOTE: Hours arranged.

Repeatability: This course may be repeated for additional credit.

PR 3582. Independent Study in Public Relations. 1 to 3 Credit Hour.

Arranged each semester. Arrange through the Director of the Public Relations major.

Repeatability: This course may be repeated for additional credit.

PR 3587. Public Relations Field Experience. 1 to 3 Credit Hour.

The Public Relations Field Experience complements the PR student's formal education. For many students, the Field Experience is the first opportunity to gain experience in a communication career path. The Field Experience should acquaint students with actual professional practices in their disciplines. The Field Experience offers students the first on-site opportunity to learn about some of the realities of working in the communications field they are planning to pursue as a possible career path. The Field Experience will occur before the internship (PR 4285).

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CSI 1111 or 'Y' in CRCO01), (PR 1112 or 'Y' in CRPR02), (PR 1101 or 'Y' in CRPR01), (PR 1496 or 'Y' in CRPR03), (PR 1552 or 'Y' in CRPR04), (PR 2551 or 'Y' in CRPR05), (PR 2662 or 'Y' in CRPR06), and (PR 2701 (may be taken concurrently) or 'Y' in CRPR07)

PR 4102. Public Relations Portfolio. 3 Credit Hours.

Public Relations Portfolio is a course in which students develop and complete their portfolios to position them for career opportunities following graduation. The course is intended to take all of the student's work in the public relations field (including previous internships, freelance work and relevant employment) to produce professional-level public relations portfolios that reflect mastery of public relations strategy and tactical execution. Work is prepared and evaluated against the highest industry standards. Professional presentation beyond the portfolio, such as the resume, job search, and interview, will also be addressed along with social media positioning strategies and developing a working knowledge of technical presentation tools.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

PR 4202. PR-Driven Corporate Sponsorship. 3 Credit Hours.

This course will examine elements of corporate sponsorship and sponsorship marketing, including understanding how sponsorship supports organizational and business goals, evaluating sponsorship proposals, leveraging sponsorships to internal and external audiences, and working with the media.

Repeatability: This course may not be repeated for additional credits.

PR 4285. Internship in Public Relations. 1 to 3 Credit Hour.

Organized professional work under supervision in public relations organization. NOTE: To register for this internship, you must be a major in Public Relations, have Junior or Senior status and permission of the PR Internship Director. Minimum GPA of 3.0 in the major. A grade of C or higher is required in order to count toward graduation.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Public Relations.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

PR 4440. Special Topics in Public Relations. 3 Credit Hours.

Subject matter not covered by regular departmental course offerings. Topics announced in advance.

Repeatability: This course may be repeated for additional credit.

PR 4501. Public Relations Capstone. 3 Credit Hours.

Public relations management principles are applied to solve organizational problems and maximize opportunities. Study of trends in public relations and issues management. An applied project will enable students to use the skills taught in this course in order to address a variety of audiences, including investors, employees, the community, government, and consumers. Use of AP Style is required. NOTE: Students cannot receive credit for this course if they have successfully completed STRC 4859.

Department Restrictions: Must be enrolled in one of the following Departments: KCMC:Adv and Public Relations.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Public Relations.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (PR 1496 or 'Y' in CRPR03), (PR 1552 or 'Y' in CRPR04), and (PR 3096 or 'Y' in CRPR08)

PR 4502. Innovations in Public Relations. 3 Credit Hours.

Innovations in Public Relations examines how technological advancements and issues associated with them are impacting the field and communication with publics. The course focuses on potential significant changes in the way public relations professionals create messages and use storytelling to influence attitudes and behaviors. These changes include areas such as artificial intelligence, deep fake technology, social media and disinformation. This course also addresses the ethical issues related to these changes.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (PR 3096 or 'Y' in CRPR08), (PR 3101 or 'Y' in CRPR09), (PR 3201 or 'Y' in CRPR10), (PR 3202 or 'Y' in CRPR11), PR 3301, (PR 3302 or 'Y' in CRPR12), and PR 3587 (may be taken concurrently)

PR 4571. International Studies in Media and Communication. 1 to 6 Credit Hour.

This course is an immersive study of media and communication institutions, practices, norms, societal, governmental, and legal structures in a culture outside of the U.S. that is conducted during a Klein GO! program. Klein faculty lead students, while living abroad, in media consumption, in comparative analysis and evaluation of media and non-mediated communication, in interaction with local media and communication leaders in the program location. The specific aspects of media and communication to be covered will vary from city to city, and semester to semester, depending on the events of the day. Available only to student participating in a Klein GO! Program.

Repeatability: This course may be repeated for additional credit.

Real Estate (RE)

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RE 3501. Real Estate Fundamentals. 3 Credit Hours.

A survey of real estate transactions, financing, marketing, land use control, and theories of urban development. Designed to acquaint the student with the language, principles, and laws that govern the real estate enterprise. The underlying concepts of land, property rights and the means, methods, and laws that govern the conveyance of these rights. NOTE: This course is required for the Real Estate Licensing examination.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Facilities Management, Actuarial Science, Business Management, Community Development, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

RE 3502. Real Estate Practice. 3 Credit Hours.

Required for the Real Estate Licensing examination, this course will explore the laws relating to the creation and transfer of interests in land including the Agreement of Sale, deeds and leases. It will also discuss the recording system for deeds, mortgages, title searches and title insurance, financing, the appraisal process, closing procedures for residential and commercial real estate, the Real Estate Settlement Procedures Act, listing agreements, and the licensing law for real estate brokers and salespersons. NOTE: This course is required for the Real Estate Licensing examination.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Facilities Management, Actuarial Science, Business Management, Community Development, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

RE 3524. Residential Property Management. 3 Credit Hours.

Residential real estate management refers to the process and procedures that are designed to generate income for its owners and preserve and increase the value of the owner's investment. This process requires a plethora of activities that includes drafting and implementing a Property Management Plan, and securing and interacting with tenants. The value of the investment is protected not only by insurance, maintenance procedures and high occupancy rates but by avoiding legal controversies and costly litigation. Engaging in these activities requires a working knowledge of the law relating to advertising the property, a knowledge of the many rights and duties of the owner, manager, and tenants that are found in landlord-tenant law and various anti-discrimination statutes, regulations and judicial opinions that are found at the federal, state and local levels. A significant percentage of Americans today reside in common interest communities, homeowner and condominium owner associations, and every association is ordinarily managed by a residential property manager.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FIN 3101, FIN 3901, 'Y' in CRFI01, or 'Y' in CRFI07)

RE 3525. Management of Corporate Real Estate Assets. 3 Credit Hours.

Corporate real estate refers to the real property facilities that house the business activities of corporate and other business organizations. Business organizations may own or lease such real property facilities. These facilities support the business function of the organization, whether those functions be industrial production, warehousing, retail, or other functions that form the nature of the organization. The management of corporate real estate assets involves not only acquiring, maintaining, and disposing of the facilities, but also adding value to the business through efficient planning and utilization of worksites, control of operating expenses, enactment of sustainability measures, and compliance with local, state, and federal statutes and regulations including, for example, the Americans with Disabilities Act, the Fair Housing Act, the Clean Water Act, and the Clean Air Act. The management of corporate real estate assets should also include appropriate planning for natural disasters such as fire, earthquake, tornado, and flood. Corporate real estate is an investment on its own, and it needs to be understood as a distinct part of a business enterprise the management of which requires an independent management function.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (FIN 3101, FIN 3901, 'Y' in CRFI01, or 'Y' in CRFI07)

Recreational Therapy (RCTH)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

RCTH 0813. Disability Identity in Contemporary Society. 3 Credit Hours.

The purpose of the course is to examine the individual, social, and environmental structures (e.g., family, school, government, community) that help to shape the identity of persons with various types of disability in contemporary society. Concomitantly, the course will explore how the behavior of persons with a disability influences these structures through individual contributions or participation in self-advocacy and activism (e.g., disability rights legislation, technology development, media portrayal). By considering disability identity as a function of continuous (and changing) interactions among various individual, social, and environmental forces, the course will encourage students to question stereotypes, to develop a critical understanding of the factors that influence the experiences of disability, to acknowledge the rich contributions of the disability community, and to identify the mechanisms that empower rather than confine people. This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

RCTH 1102. Inclusive Recreation and Sports Services. 3 Credit Hours.

This course focuses on the organization and delivery of recreation and sport services to individuals with disabilities. Content includes principles and procedures for promoting inclusive community leisure services. Hands-on learning through volunteer experience is required. NOTE: Required of all students majoring in Recreational Therapy (recommended for other majors involved in human services; in particular, services to persons with disabilities or health limitations).

Repeatability: This course may not be repeated for additional credits.

RCTH 1902. Honors Inclusive Recreation and Sports Services. 3 Credit Hours.

This course focuses on the organization and delivery of recreation and sport services to individuals with disabilities. Content includes principles and procedures for promoting inclusive community recreation services. In addition to class expectations, students must complete 15 professional development hours supporting people with disabilities in recreation/sports events. Opportunities will be posted on Canvas and announced in class. Five hours are required before midpoint and the additional ten are required during the second half of the semester. This course is required of all students majoring in recreational therapy and open for students who are not majoring in recreational therapy. This course may not be repeated for additional credits.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

RCTH 2103. Foundations of Recreational Therapy Practice. 3 Credit Hours.

This course is an introduction to the historical and conceptual roots of recreational therapy (RT) and its contemporary status as a profession. Content includes the understanding and application of recreation and leisure to improve health and well-being, introduction to recreational therapy service delivery models and theories, knowledge of where recreational therapy is practiced, RT standards of practice, ethics and professional organizations, fieldwork requirements, and credentialing procedures.

Repeatability: This course may not be repeated for additional credits.

RCTH 2104. Recreational Therapy Modalities. 3 Credit Hours.

In this experiential course, students are exposed to an assortment of activity-based interventions used in recreational therapy practice. Modalities to which students are introduced include but are not limited to animal-assisted therapy, reminiscence, humor, sports, expressive arts, anger management, social skills, and stress management.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (HRPR 1001 or 'Y' in CRHR01), (SBS 2103 or 'Y' in CRSB05), and (PSY 1061, PSY 1001, 'Y' in PSY1, or 'Y' in CRPS01)

RCTH 2201. Recreational Therapy and Developmental Disabilities. 3 Credit Hours.

This course allows students to explore the role of recreation in the habilitation, rehabilitation and inclusive community life of individuals with developmental disabilities. Students are introduced to the principles and methods of service delivery based on person-centered planning, transitional life skills, community reintegration and inclusion.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (RCTH 1102, THRC 1102, or 'Y' in CRRC01) and (RCTH 3096, THRC 3096, or 'Y' in CRRC02)

RCTH 2203. Assistive Technology in Recreation. 3 Credit Hours.

This course introduces students to the range of assistive devices used by persons with disabilities to support active involvement in preferred recreation and leisure pursuits. The course reviews the physical, cognitive, social and environmental barriers to participation and how AT devices and services can empower participation. Students learn to create and adapt activity materials to accommodate varying functional abilities and how to use assistive devices, including adaptive sports equipment, tools that support daily living, devices for computer access, hearing and vision loss devices and communication strategies. The course is hands-on, and project based. NOTE: Course is open to all majors and is appropriate for those students interested in working with individuals with disabilities.

Repeatability: This course may not be repeated for additional credits.

RCTH 2205. Adventure Challenge/Programming. 3 Credit Hours.

This course will benefit all students interested in developing experiential leadership skills and is open to all majors. The course introduces students to theoretical and practical approaches to using experiential learning and adventure therapy techniques in various professional settings. Students move through a progression of team-building activities and are taught core leadership skills required when facilitating adventure-based activities for persons of all abilities. Instruction will take place at indoor and outdoor facilities, including the Ambler Challenge Course Lab. Upon successful completion of the course, students will receive 20 training hours and 10 facilitation hours that they may use towards advanced training/certification. More details regarding the development and maintenance of a facilitator portfolio will be provided in the course.

Repeatability: This course may not be repeated for additional credits.

RCTH 3096. Assessment and Documentation in Recreational Therapy. 3 Credit Hours.

In this course, students learn the clinical process used by healthcare professionals when working in health and human service agencies with particular emphasis on assessment and documentation as it relates to the discipline of recreational therapy. Students learn clinical skills related to client intake and assessment, treatment planning, and documentation. NOTE: Special authorization is required for non-majors.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Recreational Therapy, Therapeutic Recreation.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (KINS 1223, 'Y' in KIN1, or 'Y' in CRKI02) and (RCTH 2103 or THRC 2103)

RCTH 3111. Health Promotion through Leisure Education. 3 Credit Hours.

In this course, students examine the relationship between health promotion and leisure behavior for individuals with disabilities. Students learn to design programs for health promotion and leisure education. The use of technology to develop health promotion teaching materials is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (RCTH 2103 or THRC 2103) and (RCTH 2104, THRC 2104, or 'Y' in CRRC03)

RCTH 3185. Internship I in Recreational Therapy. 3 Credit Hours.

This course involves a 150-hour field placement experience at a health and/or human service agency in which students are involved with ongoing recreational and therapeutic programs and services. NOTE: Students are required to obtain child abuse and criminal clearance background checks and complete the College of Public Health's health screenings by the deadline date set by the level I internship fieldwork coordinator PRIOR to beginning field placement experience.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Recreational Therapy.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (HRPR 1001 or 'Y' in CRHR01), HRPR 2103, (KINS 1223 or 'Y' in CRKI02), (PSY 1001 or 'Y' in CRPS01), (SOC 1167 or 'Y' in CRSO02), (PSY 2201 or 'Y' in CRPS03), and (PSY 2301 or 'Y' in CRPS04)

RCTH 3201. Health, Activity, and Aging. 3 Credit Hours.

This course examines the concept of healthy aging and how to utilize a variety of physical, cognitive, social and emotion-based activities to maintain health throughout the lifetime. Students will also take a deep look at current issues and trends in senior care settings, with an emphasis placed on community-based care and the concept of "aging in place."

Field of Study Restrictions: Must be enrolled in one of the following Majors: Recreational Therapy, Therapeutic Recreation.

Repeatability: This course may not be repeated for additional credits.

RCTH 3202. Recreational Therapy and Mental Health. 3 Credit Hours.

Students examine the role of recreational therapy in behavioral healthcare in this course. Content includes terminology, etiology, and care of individuals with acute and chronic mental illnesses and the importance of recreation as a coping resource and component of life quality. Issues associated with relapse prevention and the role and function of recreational therapists within the healthcare team are discussed.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (RCTH 3096, THRC 3096, THRC 3101, or 'Y' in CRRC02)

RCTH 3282. Independent Study. 1 to 3 Credit Hour.

In this course, students undertake supervised independent projects on issues related to health, leisure, and disabilities.

Repeatability: This course may be repeated for additional credit.

RCTH 3801. Physical and Neurological Health Conditions Across the Lifespan. 3 Credit Hours.

This course examines the prevalence, etiology, pathology, prognosis, characteristics, and complications of various physical and neurological health conditions across the lifespan. Common assessment findings and approaches to recreational therapy client-centered evidence-based treatment for each health condition will be reviewed within an application format.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in RCTH 2103.

RCTH 3802. Developmental Disabilities and Mental Health Conditions Across the Lifespan. 3 Credit Hours.

This 3-credit course allows students to explore the prevalence, etiology, prognosis, characteristics and complications of various developmental disabilities and mental health conditions. In addition, students will analyze the role of habilitation, rehabilitation and inclusive community life of individuals with developmental disabilities and mental health challenges. Students are introduced to the principles and methods of services delivery based on person-centered planning, transitional life skills, and community integration/reintegration, and inclusion. Knowledge and skills acquired will prepare students to deliver recreational therapy to these populations in in-patient and community-based settings.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in RCTH 2103.

RCTH 4000. Special Topics in Disabilities, Recreation and Leisure. 3 Credit Hours.

The Recreational Therapy Special Topics course is designed for students studying any major and is designed to emphasize current trends and contemporary topics of interest regarding individuals with varying disabilities and their engagement in recreation and leisure. Topics will vary by semester.

Repeatability: This course may be repeated for additional credit.

RCTH 4102. Research and Evaluation in Recreational Therapy. 3 Credit Hours.

This is the capstone course for Recreational Therapy majors. It is designed to enable students to evaluate and interpret research and to apply the results of these interpretations to recreational therapy practice in the form of evidence-based practice. Students learn fundamental research terminology and procedures including the strengths and limitation of both naturalistic and positivistic research methods utilized in field-based settings. Extensive reading and critiquing of empirical research is required for successful completion.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Recreational Therapy, Therapeutic Recreation.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in RCTH 3185 and (RCTH 3096, THRC 3096, THRC 3101, or 'Y' in CRRC02)

RCTH 4103. Professional Issues in Recreational Therapy. 3 Credit Hours.

This is a seminar course designed to allow students to explore personal and professional issues related to completing their academic experience. Students evaluate their readiness to begin practicing as recreational therapists. Topics include certification, professional ethics, liability and law, finance and fiscal accountability, safety and risk management issues, professional involvement and responsibilities, and client advocacy. Students review and refine their professional portfolios, practice interviewing skills, and discuss issues related to continuing education and growth as a healthcare provider.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in RCTH 3185.

RCTH 4111. Administration of Recreational Therapy. 3 Credit Hours.

This course provides students in recreational therapy an opportunity to explore the dimensions of managing recreational therapy services within health care and human services agencies. Students will investigate basic theories of management and organizational behavior and relate them to the criteria established by different regulating agencies. The processes of recruitment, hiring, and retention will be addressed with emphasis on interviewing skills and orientation planning. Students will explore issues related to operational management including fiscal concerns and marketing. In addition, consumer management concerns and clinical supervision tasks will be identified and connected to all other aspects of management. Finally, ethics and evaluation processes will be discussed. NOTE: This course is for majors only.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Co-requisites: RCTH 4185.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (RCTH 3196 or THRC 3196) and (RCTH 4196 or THRC 4196)

RCTH 4185. Internship II in Recreational Therapy. 12 Credit Hours.

This course is a semester-long, 600-hour field placement where students apply academic learning to demonstrate competencies associated with entry-level practice in recreational therapy. NOTE: Requires current certification in first aid and CPR. Pre-placement health screening, child abuse and criminal clearances are also required prior to the start of the internship experience by the deadline date set by the senior internship coordinator. See the senior internship coordinator for details.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Co-requisites: RCTH 4111.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (RCTH 3196 or THRC 3196) and (RCTH 4196 or THRC 4196)

RCTH 4196. Recreational Therapy Clinical Procedures. 3 Credit Hours.

This course allows students to further their understanding of clinical practice in recreational therapy through an examination of how recreation therapists use activity-based interventions, the environment, and therapeutic relationships to facilitate individual and group behavioral change. Students design protocols for intervention groups and simulate leadership techniques used by recreational therapists in clinical practice. Field-based application of group planning and leadership is required.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (RCTH 3096, THRC 3096, or 'Y' in CRRC02)

RCTH 4205. Recreational Therapy in Geriatric Service Settings. 3 Credit Hours.

This course is designed to provide an overview of settings that provide services for the geriatric population. The course examines current techniques and philosophies toward recreational therapy programming for individuals utilizing such services. The students are required to visit, observe, and complete assignments with elders in geriatric service settings throughout the semester. The observation and hands-on experience support student learning and create opportunities to interact with elders. The course examines techniques, issues, and best practices related to conducting innovative and effective programs for elders in a variety of settings, as well as discussing the current trends and obstacles for delivery of services.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (RCTH 3096, THRC 3096, THRC 3101, or 'Y' in CRRC02)

RCTH 4211. Recreational Therapy and Physical Disabilities. 3 Credit Hours.

This course provides the student with an opportunity to become familiar with the etiology, characteristics, and complications of various disabling conditions. Common assessment findings and approaches to treatment for each disability will be reviewed, as well as the role of the recreational therapist within the rehabilitation and health promotion process. Issues associated with independent living and the implications for the role and function of recreational therapists within the rehabilitation team are addressed.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (RCTH 3096, THRC 3096, THRC 3101, or 'Y' in CRRC02)

RCTH 4213. Therapeutic Play, Recreation and Children's Health. 3 Credit Hours.

This course examines the range of organized and structured play and recreation services used by multidisciplinary professionals to promote the health, holistic well-being, and social inclusion of children. Using the social model of disability (ICF) as the conceptual framework, students will examine the influence of the physical and social environment (family, peers) on health and well-being, as well as varied therapeutic uses of play and recreation that foster resilience and recovery and promote social-emotional development and community inclusion. The course is used to link developmental needs of children with services provided in varied service delivery settings, including hospitals, residential treatment centers, schools, camps, public parks, and recreation departments. The psychosocial needs and experiences of children resulting from trauma, abuse, and varied chronic illnesses and disabling conditions (e.g., cerebral palsy, autism spectrum disorders, conduct disorders, and ADHD) are reviewed. Note: Prior to Spring 2024, the course title was "Recreational Therapy and Pediatric Healthcare."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (PSY 2301, 'Y' in PSY3, EDUC 1322, or 'Y' in CRPS04)

Religion (REL)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

REL 0802. Race & Identity in Judaism. 3 Credit Hours.

Investigate the relationship between race and Judaism from Judaism's early period through today, looking both at how Jews have understood their own racial identity and how others have understood Jews' racial identity. You will explore the idea of racial identity in Judaism in order to examine the complex network of connections between racism and anti-Semitism, as you read primary and secondary texts in Jewish philosophy and history and in the study of race and racism. We hope to illuminate these complex issues as well as to engage with them on a personal and political level, examining the relationship between issues of race, religion, identity, and social justice and injustice, and inquiring into how we, as informed citizens in a global society, can affect change for the better. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Jewish Studies 0802/0902 or Religion 0902.

Course Attributes: GD, SF

Repeatability: This course may not be repeated for additional credits.

REL 0811. Asian Behavior & Thought. 3 Credit Hours.

This course is an introduction to some of the major philosophical and religious traditions of Asia, and their roles in Asia and the world today. You will learn about some of the dominant features of these traditions and be exposed to several important ideas, institutions, and practices. How do these ideas influence the behavior of individuals and communities? How do individual and communal behaviors and beliefs differ regionally and historically? We will read and discuss selections from primary works as well as secondary scholarship, while surveying key doctrines and historical developments. Note: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ASST 0811, CRIT 0811, PHIL 0811, CHI 0811, JPNS 0811 or REL 0911.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

REL 0833. Race & Poverty in the Americas. 3 Credit Hours.

The transatlantic slave trade was one of the most brutal and momentous experiences in human history. Attitudes toward Latino, Caribbean, African, and Asian immigrants in the United States today can only be fully understood in the contexts of slavery and the "structural racism," "symbolic violence" (not to mention outright physical violence), and social inequalities that slavery has spawned throughout the region. Although focusing primarily on the United States, we will also study the present entanglements of poverty and race in Brazil, Haiti, and other selected nations of "The New World," placing the U.S. (and Philadelphia in particular) experience in this historical context. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed REL 0933, LAS 0833/0933, ANTH 0833, or SOC 0833.

Course Attributes: GD, SI

Repeatability: This course may not be repeated for additional credits.

REL 0863. Religion in the World. 3 Credit Hours.

Learn about the major religious traditions found worldwide today: Hinduism, Buddhism, Judaism, Christianity, Islam, and several indigenous traditions. Examine the beliefs, practices, and values of these groups in order to understand the worldviews and ways of life of the people who practice them. Our interdisciplinary analysis and interpretation of specific examples of religious experience will help shed light on the overall meaning of religion and human existence. We will carefully consider examples while also focusing on particular thematic issues, like cosmology and ritual. Develop appreciation for the religious vibrancy and diversity that exist in human cultures while you actively engage in the learning process through class presentation, class participation, paper-writing, and a self-selected field trip. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: Religion 0863, 0963, 1101, C053, Asian Studies 0863, Critical Languages 0863, or Philosophy 0863.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

REL 0876. Religion in Philadelphia. 3 Credit Hours.

The argument is sometimes made that religion in dense urban spaces is characteristically very different from religion as it appears elsewhere. A study of religion in Philadelphia provides numerous ways to explore that idea, especially since the city encompasses a variety of ethnic and immigrant groups, encouraging the generation of new and hybrid forms of religious life that are less possible in smaller populations. Learn how ideas of toleration and freedom, the urban environment, and immigration helped to define the role of religion in the life of this city. Study various religious traditions as they are manifested in the greater Philadelphia area and look at the influences religion has had on the fabric of Philadelphia's history and cultural life including politics, art, education, journalism and popular culture. You will visit and write about various religious sites and institutions. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Duplicate Credit Warning: Students cannot receive credit for Religion 0876 if they have successfully completed Religion 0976, 1003, 1903, C052, H092, History 0876 or 0976.

Course Attributes: GU

Repeatability: This course may not be repeated for additional credits.

REL 0902. Honors Race & Identity in Judaism. 3 Credit Hours.

Investigate the relationship between race and Judaism from Judaism's early period through today, looking both at how Jews have understood their own racial identity and how others have understood Jews' racial identity. You will explore the idea of racial identity in Judaism in order to examine the complex network of connections between racism and anti-Semitism, as you read primary and secondary texts in Jewish philosophy and history and in the study of race and racism. We hope to illuminate these complex issues as well as to engage with them on a personal and political level, examining the relationship between issues of race, religion, identity, and social justice and injustice, and inquiring into how we, as informed citizens in a global society, can affect change for the better. (This is an Honors course.) NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Jewish Studies 0802/0902 or Religion 0802.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GD, HO, SF

Repeatability: This course may not be repeated for additional credits.

REL 0911. Honors Asian Behavior & Thought: Four Asian Models Shaping Your Action. 3 Credit Hours.

We incessantly engage ourselves in doing things. We are beings-at-doing. We define ourselves by the kind of actions we perform. How we act or conduct ourselves is shaped by the kind of self we construct for ourselves. And that self is shaped by the society into which we happen to be born. Self-identity, which is socially and culturally constructed by our experiences and interactions with others, carries a personal as well as an interpersonal meaning. Learn the four Asian paradigmatic cases of self-identity and examine your self in light of them. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ASST 0811, CRIT 0811, PHIL 0811, Chinese 0811, Japanese 0811 or Religion 0811.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GB, HO

Repeatability: This course may not be repeated for additional credits.

REL 0933. Honors Race & Poverty in the Americas. 3 Credit Hours.

The transatlantic slave trade was one of the most brutal and momentous experiences in human history. Attitudes toward Latino, Caribbean, African, and Asian immigrants in the United States today can only be fully understood in the contexts of slavery and the "structural racism," "symbolic violence" (not to mention outright physical violence), and social inequalities that slavery has spawned throughout the region. Although focusing primarily on the United States, we will also study the present entanglements of poverty and race in Brazil, Haiti, and other selected nations of "The New World," placing the U.S. (and Philadelphia in particular) experience in this historical context. (This is an Honors course.) NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed REL 0833, LAS 0833/0933, ANTH 0833, or SOC 0833.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GD, HO, SI

Repeatability: This course may not be repeated for additional credits.

REL 0957. Honors Sport & Leisure in American Society. 3 Credit Hours.

In this course, we explore the complexity and diversity of American society through the study of sport and leisure. How does the way we play or watch sports reflect, and contribute to, American values? We will also pay careful attention to the globalization of sport and the role of U.S. sports in the world today. Issues of religion, race, ethnicity, gender, age, disability, and socio-economic class will be prominently featured. There will also be a primary focus on raising ethical questions through a discussion of case studies based on real events. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed AAAS 0857, AAS 0857, SOC 0857 or STHM 0857.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GU, HO

Repeatability: This course may not be repeated for additional credits.

REL 0963. Honors Religion in the World. 3 Credit Hours.

Learn about the major religious traditions found worldwide today: Hinduism, Buddhism, Judaism, Christianity, Islam, and several indigenous traditions. Examine the beliefs, practices, and values of these groups in order to understand the worldviews and ways of life of the people who practice them. Our interdisciplinary analysis and interpretation of specific examples of religious experience will help shed light on the overall meaning of religion and human existence. We will carefully consider examples while also focusing on particular thematic issues, like cosmology and ritual. Develop appreciation for the religious vibrancy and diversity that exist in human cultures while you actively engage in the learning process through class presentation, class participation, paper-writing, and a self-selected field trip. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: Religion 0863, 0963, 1101, C053, Asian Studies 0863, Critical Languages 0863, or Philosophy 0863.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GG, HO

Repeatability: This course may not be repeated for additional credits.

REL 0976. Honors Religion in Philadelphia. 3 Credit Hours.

The argument is sometimes made that religion in dense urban spaces is characteristically very different from religion as it appears elsewhere. A study of religion in Philadelphia provides numerous ways to explore that idea, especially since the city encompasses a variety of ethnic and immigrant groups, encouraging the generation of new and hybrid forms of religious life that are less possible in smaller populations. Learn how ideas of toleration and freedom, the urban environment, and immigration helped to define the role of religion in the life of this city. Study various religious traditions as they are manifested in the greater Philadelphia area and look at the influences religion has had on the fabric of Philadelphia's history and cultural life including politics, art, education, journalism and popular culture. You will visit and write about various religious sites and institutions. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Duplicate Credit Warning: Students cannot receive credit for Religion 0976 if they have successfully completed Religion 0876, 1003, 1903, C052 or H092, History 0876 or 0976.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GU, HO

Repeatability: This course may not be repeated for additional credits.

REL 1001. Religion and Society. 3 Credit Hours.

Religion and Society serves as the introductory course that all majors and minors in Religion must take. This course deals with such issues as: What is the nature of religion? What impact does it have on personal identity, social life, and political structures? What ethical issues arise out of the tensions between religion and society? Emphasis on contemporary Western society and forms of religion. Some historical background provided. NOTE: This course can be used to satisfy the university Core Individual & Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: IN

Repeatability: This course may not be repeated for additional credits.

REL 1002. Racial Justice: A Religious Mandate for Obedience and Revolt. 3 Credit Hours.

This introductory course on race and religion examines the emergence and development of religious faith and social protest thought, in order to propose critical options that foster emancipatory practices in the contemporary struggle for racial justice. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: RS

Repeatability: This course may not be repeated for additional credits.

REL 1003. Religion in America. 3 Credit Hours.

A historical and sociological study of practices and beliefs of various religious groups that have shaped American culture, with special attention to ethnic and racial minorities, and to women, as well as to traditional main-line groups and newer movements. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AC

Repeatability: This course may not be repeated for additional credits.

REL 1101. Introduction to World Religions. 3 Credit Hours.

Introduction to the major world religions (Hinduism, Buddhism, Taoism, Confucianism, Judaism, Christianity, Islam) as a way of coming to know and appreciate the world-views of other cultures. Attention to beliefs, values, and practices of these religions as ways of dealing with the issues basic to human life. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: IS

Repeatability: This course may not be repeated for additional credits.

REL 1102. Introduction to Asian Religions. 3 Credit Hours.

Introduction to the major Asian religious, philosophical, and cultural traditions (Hinduism, Buddhism, Confucianism, Taoism, Shinto) with emphasis on the cultural roots of each religious tradition, the analysis of its principal teachings and practices, and the major cultural expressions in religious art, ritual, poetry, music, and scriptures. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors.

Course Attributes: IS

Repeatability: This course may not be repeated for additional credits.

REL 1902. Honors Introduction to Asian Religions. 3 Credit Hours.

Introduction to the major Asian religious, philosophical, and cultural traditions (Hinduism, Buddhism, Confucianism, Taoism, Shinto) with emphasis on the cultural roots of each religious tradition, the analysis of its principal teachings and practices, and the major cultural expressions in religious art, ritual, poetry, music, and scriptures. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, IS

Repeatability: This course may not be repeated for additional credits.

REL 1903. Honors Religion in America. 3 Credit Hours.

A historical and sociological study of practices and beliefs of various religious groups that have shaped American culture, with special attention to ethnic and racial minorities, and to women, as well as to traditional main-line groups and newer movements. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: AC, HO

Repeatability: This course may not be repeated for additional credits.

REL 2000. Topics in Religious Studies I. 3 Credit Hours.

The topic for this course changes each semester. Consult the instructor or an advisor in the Religion Department for specific details.

Repeatability: This course may be repeated for additional credit.

REL 2001. Women in Religion and Society. 3 Credit Hours.

A study of both the roles and understanding of women in major premodern and modern religious traditions, particularly of the West, including an investigation of the authoritative writings and practices of the various traditions.

Repeatability: This course may not be repeated for additional credits.

REL 2002. Religion and Human Sexuality. 3 Credit Hours.

The goal of this course is to examine the attitudes and practices of the major world religions regarding human sexuality. Topics to be covered will include marriage and procreation, and such controversial issues as abortion, homosexuality and sexual activity outside of marriage. Note: Religion and Human Sexuality is taught as a cross-listed course in Religion; Gender, Sexuality & Women's Studies; and LGBT Studies. Students may receive credit for only one of the following courses: REL 2002, LGBT 2002, GSWS 2202, WMST 2202.

Repeatability: This course may not be repeated for additional credits.

REL 2003. Religion and the Arts. 3 Credit Hours.

This course is designed to explore the nexus of Religion and Art both philosophically and aesthetically. Various theories of aesthetics will be analyzed and compared. Focuses on the artistic expression of theological themes in a given religious tradition. Students explore the varieties of art in that tradition, learning to recognize the plastic (architecture, sculpture, metal), visual (painting, glass, fabric), and musical art forms. Analyzing how these forms function in prayer, liturgy, and theology is of primary importance. In addition, the fundamental questions of how the religion deals with the tension between iconic/aniconic, eternal/finite, and divine/human are covered. Course also deals with what religious art "means" in a secular context. [Duplicate Credit Warning: The prior number for this course was Religion 4002; students who successfully completed that version of the course will not earn additional credit for this version.]

Repeatability: This course may not be repeated for additional credits.

REL 2005. Religion and Sports. 3 Credit Hours.

This course is an introduction to religion and sport that explores whether sport is a kind of religion, how different religious traditions have both connected to and conflicted with sports, and religious responses to ethical dilemmas in sports. It approaches these questions through an examination of case studies. Students will be expected to attend and participate in class, do weekly readings and activities based on the cases, and research and create cases of their own. There will be a final take-home examination. Note: Students who have already taken REL 2905 will not receive duplicate credit for REL 2005.

Repeatability: This course may not be repeated for additional credits.

REL 2006. Death and Dying. 3 Credit Hours.

This course focuses upon dying and bereavement in today's cultural and medical environment, and then on death, mourning and immortality from the perspectives of the world's religious traditions. We will examine psychological, ethical and philosophical perspectives on the process of dying, care for the dying, and issues of mourning. What are the principle beliefs and practices about personal identity, the nature of God or ultimate reality, death and post-death existence?

Repeatability: This course may not be repeated for additional credits.

REL 2007. Religion in Film. 3 Credit Hours.

This course will approach the features and problems of Religion in Eastern and Western societies through the medium of film and/or film as a medium for performing religion. The course, depending on who teaches, will ask students to consider the relationships among and between film, ritual, belief, myth, and communal engagement even as it looks at how specific traditions are depicted on screen. Students will view works by filmmakers representing a global spectrum and examine how these films provide insights into these larger issues regarding popular culture, art, performance and specific religious traditions and societies. Students will be required to watch one film per week (on their own time; films will be made available via DVD on reserve or through special internet streaming resources); this will be accompanied by two regular class sessions where the film, assigned readings and the range of critical issues regarding the film's connection to world religious traditions will be discussed. The goal of the course is to provide students with the intellectual tools to "read" films as vehicles for social and religious expressions, and to come to a more thorough understanding of how experiences and perceptions cross various cultural and religious boundaries.

Repeatability: This course may not be repeated for additional credits.

REL 2008. Religion in America. 3 Credit Hours.

A historical and sociological study of practices and beliefs of various religious groups that have shaped American culture, with special attention to ethnic and racial minorities, and to women, as well as to traditional main-line groups and newer movements.

Repeatability: This course may not be repeated for additional credits.

REL 2101. Indian Philosophies and Religions. 3 Credit Hours.

An introduction to the foundations, the nature, and the principles of classical Hinduism. An introduction to the fundamentals of Buddhism and Jainism. (Formerly known as Religions of India.) Note: This course is cross-listed with Asian Studies 2101. Students may only receive credit for one of these courses: ASST 2101 or REL 2101.

Repeatability: This course may not be repeated for additional credits.

REL 2102. Introduction to Buddhism. 3 Credit Hours.

Introduction to the historical development of Buddhism in relation to other East Asian religions. Topics include the Four Noble Truths of basic Buddhism and the Hinayana-Mahayana controversy over the Buddhist Dharma and practice, as well as the development of Buddhist thought throughout Asia. Note: This course is cross-listed with Asian Studies 2102. Students may only receive credit for one of these courses: ASST 2102 or REL 2102.

Repeatability: This course may not be repeated for additional credits.

REL 2201. Chinese Religions - Confucius to Mao. 3 Credit Hours.

Critical study of the development of Chinese religions from the time of Confucius to Mao, including the problem of ideological continuity in contemporary China (Maoist Marxism versus Confucianism). Note: This course is cross-listed with Asian Studies 2201. Students may only receive credit for one of these courses: ASST 2201 or REL 2201.

Repeatability: This course may not be repeated for additional credits.

REL 2301. Zen Buddhism. 3 Credit Hours.

This course surveys the historical development of Zen Buddhism as it unfolds in India, China, and Japan, and focuses on the examination of the nature of satori experience. It analyzes its existential meaning from perspectives of therapy, Zen practice, and philosophy. NOTE: Formerly titled "Introduction to Zen Buddhism." Students who earned credit under its original title will not receive additional credits for this course. Also, this course is cross-listed and students will earn credit only once for either REL 2301 or ASST 2301.

Repeatability: This course may not be repeated for additional credits.

REL 2401. Religion in the Ancient Near East. 3 Credit Hours.

This course will explore the religion of the pre-Biblical Near East. We will read texts from Akkadian, Egyptian, Ugaritic, Phoenician, and Mesopotamian cultures and civilizations. Special emphasis will be put on the differences and competing aspects of these religions with Israelite religion.

Repeatability: This course may not be repeated for additional credits.

REL 2403. Introduction to Judaism. 3 Credit Hours.

Introduction to the variety of rituals, customs, and practices of the Jewish people in a historical context. Compares and contrasts liberal and traditional Jewish religion with Zionism. Contemporary Jewish novels, poetry, and drama. Note: Formerly titled "What is Judaism." Students who earned credit under the prior title will not receive additional credits for this course. This course is equivalent to JST 2403; students may receive credit for either JST 2403 or REL 2403.

Repeatability: This course may not be repeated for additional credits.

REL 2407. The Body and The Bible. 3 Credit Hours.

This course will explore how the Hebrew Bible and other ancient Near Eastern literature use the body to conceptualize issues of ethnicity, gender, sexuality, age, disability, social class, religious expression and so on. Other issues considered in this course include the portrayal of divine bodies, the social, cultic, and literary significance of bodily changes and practices, the costuming of the body, disguising one's appearance, and passing as a member of another identity group. We will examine a number of these issues both in their ancient Near Eastern context and throughout the history of biblical interpretation. The course will be structured around readings of both recent biblical scholarship on these topics and the biblical texts discussed in this scholarship.

Repeatability: This course may not be repeated for additional credits.

REL 2447. Kabbalah and Mysticism. 3 Credit Hours.

Introduction to the basic concepts, worldview and psychology of the Kabbalah. Mystical experiences and spiritual practices of the Kabbalists are situated within the context of comparative mysticism.

Repeatability: This course may not be repeated for additional credits.

REL 2496. Introduction to the Bible. 3 Credit Hours.

Introduction to the Hebrew Bible (Old Testament). What is the Bible? Where did it come from? How can there be so many different interpretations of the Bible? This course provides an examination of the historical, archeological, literary, and religious backgrounds of the Old Testament. This course is designed as a Writing Course for the University, so the assignments will reflect the writing requirements.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

REL 2501. Early Christian Literature: New Testament, Gnostic Tracts, and Early Fathers. 3 Credit Hours.

This class explores the rich and diverse literature of Early Christianity, as Christianity emerged in the social/religious context of second Temple Judaism in the Roman Empire and in Palestine in the first century, when Jesus was born. Students will study the entire spectrum of early Christian literature, including the New Testament as well as other views of Jesus in Gnostic tracts. We will also talk about various writings of first century Fathers of the Church that did not make it into the New Testament, such as the letters of Clement and Barnabas. As such the class covers both literary and historical topics of the first and early second century when Christianity emerged in the Roman world. (Former course title: Introduction to New Testament)

Repeatability: This course may not be repeated for additional credits.

REL 2502. Jesus in the Media. 3 Credit Hours.

This class will explore the ever-changing identity of Jesus in both academic and popular culture. The class will study Jesus in the Gospels first, as a foundation for further analysis. The class then moves to the images of Jesus in various media today: award-winning novels, academic "Jesus" books, and films. We shall address these questions: who is Jesus for each one? why does each author/director emphasize different teachings or aspects of Jesus? what is their ultimate purpose? (Former course title: Jesus in the Gospels)

Repeatability: This course may not be repeated for additional credits.

REL 2596. What Is Christianity?. 3 Credit Hours.

The development of the Christian religion from the Bible to today. What are the principal beliefs of Christianity? How did they come to be so? What have been the major criticisms of Christianity? How can we understand the variety of Christian churches as they face the modern world?

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

REL 2602. Islam in America. 3 Credit Hours.

This course deals with Islam in the United States, including the history, practice, lifestyles, and experiences of American Muslims. Islam in America is presented in all its variety, with special attention to Philadelphia, which is a major center of American Islam. The contribution of both African American Muslim movements and recent immigrant Muslim groups is covered.

Repeatability: This course may not be repeated for additional credits.

REL 2606. Introduction to Islam. 3 Credit Hours.

A general survey of the religion of Islam, including history, beliefs, sacred texts (Qur'ân and Hadîth) and their interpretation, religious law, Sûfism, philosophy, art, and science. Particular attention also is given to actual Muslim practice and to Islam as a way of life.

Repeatability: This course may not be repeated for additional credits.

REL 2666. Zombie Apocalypse: Holy Land, Haiti, and Hollywood. 3 Credit Hours.

This course combines several academic disciplinary approaches to explore the intellectual and cultural histories of two highly influential and essentially religious ideas, that of the zombie and that of the apocalypse, and to critically trace their relatively recent merger in popular culture and imagination - as of 1968 - and to investigate that merger's significations about the human condition. The former is a rather modern idea rooted in Haitian Vodou and its African and European religious antecedents, while the latter is an ancient one rooted in Zoroastrianism and the Bible and widely expanded in Judaism, Christianity, and Islam, and is arguably one of the most influential ideas in world history. In the interim, the zombie has eclipsed the vampire and Frankenstein as the most prolific monster in popular American culture and consciousness, pervading video games, novels, novelties, the silver screen, and the touch screen. As such, the first two-thirds of the course will be comprised of biblical studies, African studies, Caribbean studies, and the sociology and history of religion, while the final third will trace the merger of the two ideas and their manifestation in popular culture, drawing upon readings in cultural studies, literary analysis, critical race theory, and cinema studies.

Repeatability: This course may not be repeated for additional credits.

REL 2701. Introduction to African American Religion. 3 Credit Hours.

Examines African American religion in the context of four periods of African American history: the exercise of slave religious leadership in the "invisible church"; during the post-Emancipation period (1863-1900), the development of institutionalized Black religion, that is, the Black church; in the period of northern immigration (1916-1945), the evolution of many aspects of Black liturgy - especially Black gospel music; and the civil rights struggle of the 1960s and '70s.

Repeatability: This course may not be repeated for additional credits.

REL 2702. Religion in Contemporary Africa. 3 Credit Hours.

This course draws upon leading scholarly literature on religion in post-colonial Sub-Saharan Africa. Substantive examples will be drawn from South Africa, Ghana, Senegal, Uganda, Rwanda, and Congo to understand the role of religion in the creation of and the struggle against poverty, political turmoil, civil war, and the AIDS epidemic.

Repeatability: This course may not be repeated for additional credits.

REL 2705. Anti-Semitism/Holocaust/Racism. 3 Credit Hours.

This course examines the history of antisemitism with a focus on the Holocaust and racism. It investigates the development and implementation of racial antisemitism in Germany and compares Nazi antisemitism with other forms of racism and antisemitism in Europe and America. The course also explores the social construction of race, the connection between antisemitism and anti-Zionism, the growth of neo-Nazism, the complex relationship between American Jews and African Americans, and racism in the world today. Be advised that students will only receive credit once for JST 2705, REL 2705, or HIST 2705.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

REL 2900. Honors Topics in Religious Studies I. 3 Credit Hours.

For description, see the Honors section of the course schedule of the semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

REL 2905. Honors Religion and Sports. 3 Credit Hours.

This course is an introduction to religion and sport that explores whether sport is a kind of religion, how different religious traditions have both connected to and conflicted with sports, and religious responses to ethical dilemmas in sports. It approaches these questions through an examination of case studies. Students will be expected to attend and participate in class, do weekly readings and activities based on the cases, and research and create cases of their own. There will be a final take-home examination. Note: Students who have already taken REL 2005 will not receive duplicate credit for the honors version.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

REL 2996. Honors Death and Dying. 3 Credit Hours.

Concepts, attitudes, and practices associated with death and dying in the major religious traditions and in literature, philosophy, and psychology. Contemporary implications for related fields such as medicine, psychiatry, social work, and education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, WI

Repeatability: This course may not be repeated for additional credits.

REL 3000. Topics in Religious Studies II. 3 Credit Hours.

Arranged each semester, please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

REL 3001. Earth Ethics. 3 Credit Hours.

What ethical relationship do human beings have to the natural world? What cultural and religious values, conceptions, and assumptions have shaped human interactions with the environment? Through also examining practical issues such as sustainability, technology, and urban living, students will assess individual life-styles and alternative visions of the good life on planet Earth. Note: This course is cross-listed with Environmental Studies 3001 and Asian Studies 3001. Students may only receive credit once for these courses: ASST 3001, ASST 3904, ENST 3001, ENST 3904, REL 3001, or REL 3904.

Course Attributes: SF, SS

Repeatability: This course may not be repeated for additional credits.

REL 3002. Philosophy of Religion. 3 Credit Hours.

Issues in philosophy of religion, including the nature of religion, the relation between reason and faith, concepts of God and proofs of the existence of God, religious and mystical experience, the nature of religious language, the problem of evil, the relation of religion to morality, concepts of death and immortality, conflicting truth-claims of different religions, and interreligious dialogue.

Repeatability: This course may not be repeated for additional credits.

REL 3003. Religion and Psychology. 3 Credit Hours.

Course examines major psychological thinkers' views on religion's origins, functions, and meanings. What personality factors create and sustain religiousness? Some attention to the formation of new religious groups as well as individual spiritual life.

Repeatability: This course may not be repeated for additional credits.

REL 3004. Religion and Science. 3 Credit Hours.

This course offers a historical examination of the relationship of religion and science, leading up to current debates. A variety of views are considered, ranging from those who have viewed the relationship in terms of conflict, to those who see the two as operating in separate spheres, to those who believe that each influences the other in important and often beneficial ways.

Repeatability: This course may not be repeated for additional credits.

REL 3005. Martyrs and Suicides: Religion and Self-Chosen Death. 3 Credit Hours.

This course investigates the way religious traditions have both extolled and condemned self-chosen deaths, and how they have drawn lines that carefully distinguish the honorable and heroic from the cowardly, sinful, and crazy among those who choose their own deaths. This topic will be examined from within a variety of traditions, using a range of methods: theological, philosophical, historical, social scientific.

Repeatability: This course may not be repeated for additional credits.

REL 3011. Monks, Masters, and Magicians: Religion in Premodern Chinese Literature. 3 Credit Hours.

This course offers an introduction into the rich heritage of Chinese literature before 1911 with a focus on religious culture. We will follow Buddhist nuns and monks, Daoist masters and Confucian scholars on their adventures through 2000 years of Chinese history. Thematically, the class will focus on texts that show how Chinese religious traditions (Confucianism, Daoism, and Buddhism) were depicted in secular literature, but will also include narrative religious texts. From 3rd century miracle tales, to the classical novels of the Ming and Qing dynasty, we will look at Chinese religion through the lens of literature. Next to the readings themselves, we will cover more general aspects such as the relationship of literature to historical facts and notions of genre and motif as they apply to China. NOTE: Students will receive credit only once for either REL 3011 or ASST 3011.

Repeatability: This course may not be repeated for additional credits.

REL 3082. Independent Study. 3 Credit Hours.

Individual research project with a specific faculty member. Permission of the professor the student wishes to work with must be given in writing, and registration is completed in the Religion Department.

Repeatability: This course may be repeated for additional credit.

REL 3101. Yoga & Tantric Mysticism. 3 Credit Hours.

This course introduces the students to the history, philosophy, literature, and culture of Classical Indian Yoga and Tantra traditions. Note: This course is cross-listed with Asian Studies 3101. Students may only receive credit once for these courses: ASST 3101 or REL 3101.

Repeatability: This course may not be repeated for additional credits.

REL 3102. Buddhist Philosophy. 3 Credit Hours.

This course surveys philosophical dimensions of Buddhism. We will discuss several important issues that are raised in Buddhist texts and analyze their logic, implications, and relevance. Among the topics we will discuss are ontology (what is), epistemology (how we know), and normative ethics (what we should do), which in Buddhist terms gets expressed as: view, meditation, and action. Although there is no prerequisite for this course, this class will be demanding: you will be required to read and analyze primary texts in translation that are challenging and foreign (linguistically, conceptually, and philosophically). Since this course is thematically-driven, the readings draw from across time and space (i.e., the spectrum of the Buddhist world, historically and geographically). At the end of the course, we will do a close reading of a polemical twentieth-century text in order to look deeper into a single Buddhist philosophical tradition within a particular cultural and historical context. Active participation in this course will give you a general knowledge of Buddhist philosophy, as well as a taste of the complexity and diversity of Buddhist philosophical traditions.

Repeatability: This course may not be repeated for additional credits.

REL 3201. I-Ching, Tao, and Ch'an/Zen. 3 Credit Hours.

This course covers selected topics in the history of Taoist ideas and religious practice, which have broadly influenced China for two and a half millennia. Discussion topics include: symbols and divination; the philosophy of Lao-tzu and Chuang-tzu; the interaction between Taoism and Ch'an/Zen Buddhism; the Taoist/Ch'an influence on the Chinese literary tradition and ideals of beauty; the Taoist view on ch'i energy, meditation, sexuality, and the good life; and Taoism/Zen in America today. Note: This course is cross-listed with Asian Studies 3201. Students may only receive credit once for these courses: ASST 3201 or REL 3201.

Repeatability: This course may not be repeated for additional credits.

REL 3222. Sociology of Religion. 3 Credit Hours.

This course examines the role of religion in constructing human realities. It emphasizes how human understandings of the world and of reality are constructed socially through collective action with religion playing a prominent role. It looks at how religion influences individual and collective action; the intersection of religion with politics and media; religion's connection to race, gender, class, and sexual orientation; and the connection between religion and science.

Repeatability: This course may not be repeated for additional credits.

REL 3301. Japanese Religions. 3 Credit Hours.

An introduction to Japanese religions, their origins and development in the social, cultural, and intellectual history of Japan. Religions covered are: Shinto, Japanese Buddhism, folk religions, Japanese Confucianism, and the New Religions. Some attention to the expression of Japanese spirituality in the fine arts, martial arts, festivals, and rituals.

Repeatability: This course may not be repeated for additional credits.

REL 3302. Japanese Buddhism. 3 Credit Hours.

This course is an introduction to Japanese Buddhism, covering some of the major Buddhist figures including Kukai, Dogen, Shinran, Hakuin, Takuan, and Myoe. In order to understand how Japanese Buddhism accepted Indian and Chinese Mahayana Buddhism, the course traces some of the prominent conceptual frameworks of Mahayana Buddhism which were developed in India and China. The methodological orientation of the course is philosophical or intellectual. NOTE: Students will receive credit only once for either REL 3302 or ASST 3302.

Repeatability: This course may not be repeated for additional credits.

REL 3403. Biblical Archaeology. 3 Credit Hours.

An introduction to the history, theory, and methods of Near Eastern Archaeology and its relation to Biblical Studies. Tracing the history of Biblical Archaeology from its roots in the treasure hunters of the 18th century down to the present, we will examine the changing philosophy of archaeology, and the evolving techniques of excavation, by studying several sites and archaeologists.

Repeatability: This course may not be repeated for additional credits.

REL 3405. Judaism and Literature. 3 Credit Hours.

Readings of various Jewish literatures focusing on America and issues of immigration and cultural assimilation.

Repeatability: This course may not be repeated for additional credits.

REL 3411. The Philosophies of Judaism. 3 Credit Hours.

Close study of works by one or more Jewish and political philosophers, stressing their relevance to an understanding of contemporary politics and issues of Jewish identity, culture, and religion.

Repeatability: This course may not be repeated for additional credits.

REL 3502. Global Pentecostalism. 3 Credit Hours.

The meteoric rise of Pentecostalism throughout the world in the twentieth and twenty-first centuries has been so impressive that some scholars speak of it as a "new Reformation." This course is a comparative historical and anthropological investigation of this important development in world Christianity, with specific substantive units of analysis drawn globally and locally; i.e., from Africa, Asia, and Latin American and from Philadelphia.

Repeatability: This course may not be repeated for additional credits.

REL 3601. The Islamic State. 3 Credit Hours.

This course examines both the classical theory and modern theory and practice of self-described Islamic states in the modern world. Main focus is on the Middle Eastern area.

Repeatability: This course may not be repeated for additional credits.

REL 3602. Women in Islam. 3 Credit Hours.

This course will explore the issues confronting women in the religion of Islam and how the surrounding cultures, Indian, Arab, Egyptian, American, Eastern European, Indonesian, African (to name a few) react to these issues. Topics of Feminism, Imperialism, Westernization, and endemic religious culture will organize the course. The syllabus will include Islamic female and male authors on these topics.

Repeatability: This course may not be repeated for additional credits.

REL 3603. Islamic Mysticism. 3 Credit Hours.

Introduction to the doctrines, practices, and history of Sufism. Analysis of the nature of mystical experience and Sufi principles. The course also includes a survey of Sufi literature and will discuss the brotherhoods, their relationship with orthodoxy, and al-Ghazali's synthesis.

Repeatability: This course may not be repeated for additional credits.

REL 3702. African Religions and New World Culture. 3 Credit Hours.

African religion and culture continues to exist in the religious and cultural life of African Americans. Using an interdisciplinary approach, we will examine African American religion, folklore, literature, music, and communication in order to assess the continuation and transformation of African culture in the world-view of African Americans.

Repeatability: This course may not be repeated for additional credits.

REL 3882. Independent Study. 2 Credit Hours.

Individual research project with a specific faculty member.

Repeatability: This course may be repeated for additional credit.

REL 3900. Honors Topics in Religious Studies. 3 Credit Hours.

The topic of this course changes each semester that it is taught, since different professors teach it. Check the course offerings online each semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

REL 3901. Honors Contemporary Religious Thinkers. 3 Credit Hours.

This course explores work of various thinkers from different World Religions organized around themes of cosmology, theology, ethics, mysticism, and global politics. NOTE: Students who received credit for REL 3801, the non-honors version of this course, may not receive additional credit for 3901.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

REL 3904. Honors Earth Ethics. 3 Credit Hours.

What is, or should be, our relation to the natural world? Especially since we are presently living in a modern urban environment, have we perhaps outgrown nature? Is it something we have mastered? Is it primarily a luxury of sorts that we can go to for periodic enjoyment or relaxation? On the other hand, why do we seem to be in a burgeoning environmental crisis? Is it just greed? Too many people? Insufficient technology? How did we get to where we are? Or more immediately--and perhaps deeply--what fundamental beliefs, attitudes, and values shape our everyday actions, how we perceive and use (or misuse) the earth? What creative alternatives can we find, and how can we apply them? In addressing these kinds of questions we will explore both Western and Asian ways of conceiving and interacting with the natural world, past and present. Our approach will also be interdisciplinary, including materials from art, film and literature, as well a range of academic disciplines. NOTE: This is an University Honors course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, SF, SS

Repeatability: This course may not be repeated for additional credits.

REL 4000. Topics in Religious Studies I. 2 Credit Hours.

The topic for this course changes each semester. Consult the instructor or an advisor in the Religion Department for specific details.

Repeatability: This course may be repeated for additional credit.

REL 4003. Comparative Mysticism East and West. 3 Credit Hours.

In this class the students will be introduced to the mysticism of certain eastern religions and certain western religions, which will be determined by the instructor. They will be chosen from Japanese Buddhism, Hinduism, Eastern Orthodoxy, Catholicism, Judaism, Islam. The students will read primary texts from these traditions. Understanding the practice of mysticism in these traditions, as well as the theoretical systems that support these practices -- in a comparative framework -- will organize the readings and the lectures for the semester.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in any REL course numbered 0802 to 4002.

REL 4010. Topics in Religious Studies. 3 Credit Hours.

The topic changes each semester. See the course schedule for the topic in a specific semester.

Repeatability: This course may be repeated for additional credit.

REL 4082. Independent Study. 3 Credit Hours.

Individual research project with a specific faculty member. Permission of the professor the student wishes to work with must be given in writing, and registration is completed in the Religion Department.

Repeatability: This course may be repeated for additional credit.

REL 4096. Capstone Seminar in Religion. 3 Credit Hours.

This course is designed to be the final culminating class experience for undergraduate Religion majors at Temple. The topic of the course is: "Theories of Religion and Secularism." The course first will consider the history of the terminology, ideology, and underlying theories about religion and those concepts that religion has been defined against from ancient times to the present, but mainly concentrating on modern western discourses, which are those that have primarily informed the prevailing definitions. Second, we will consider various theories currently challenging or seeking to modify this received tradition of religious studies. In doing this, we will also consider the relations of the field of religious studies with other academic fields as well as with current public discourses, especially those in our country, but also to some extent those in the rest of the world. NOTE: Capstone course in major. Typically offered only in Spring semester. Students must have completed at least 5 major courses prior to taking this course.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

REL 4406. Ancient Judaism. 3 Credit Hours.

Ancient Jewish history is usually narrated as if Jews went directly from Torah to Talmud, with nothing in between. Such an account privileges the authoritative religious developments and the leadership first, of the priests who collated the core of the Torah, and second, of the early Rabbis, who collated the Mishnah, the earliest strata of the Talmud. This course explores the explosive and intriguing history between these two religious moments, and in doing so, rejects the religious chronology as the basis of historiography. The history and textual materials from these periods in Jewish History raise many of the perennial themes that have come to inform Jewish social life over the centuries. In fact, during this period in which Jews first become Jews, these issues arise for the first time: exile, political decentralization, disagreements between Jews about what constitutes the parameters of the Jewish community; peoplehood, nation, and the boundaries of group identity, intermarriage, conversion, and the movement of Jewish identity from a territory-based definition to an ethnic definition, to a definition based in piety. Note: Prior to summer 1, 2016, the course title was "Secular Study of Ancient Jewish History: Between the Torah and the Talmud." Duplicate credit warning: Students who took REL 4406 or JST 4406 under the previous title will not earn additional credits for this course.

Repeatability: This course may not be repeated for additional credits.

REL 4411. Secularism: Jewish and Muslim Women. 3 Credit Hours.

In its three-hundred-year history as a Western concept, secularism is often defined as the opposite of religion. Religious women have alternately found western secularism to be a source of liberation (as it grants them greater civil rights) and a source of oppression (as it putatively shrinks the religious sphere). In creating feminisms through Jewish and Muslim experience, feminisms that are both secular and religious, these religious women have complicated the meanings of secularism. They have also challenged the notion that feminism is necessarily secular. This course looks at examples of Jewish and Muslim women's lives and feminist thought in the US, Europe, and the Middle East. The course will compare and contrast the feminism of these two groups of religious women, in order to more fully understand the role of concepts like secularism, feminism, and religion. NOTE: Students will receive credit only once for either REL 4411, GSWS 4411, or JST 4411.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

REL 4882. Independent Study. 1 to 4 Credit Hour.

Individual study with a specific faculty member. Permission of the professor the student wishes to work with must be given in writing, and registration is completed in the Religion Department.

Repeatability: This course may be repeated for additional credit.

REL 4900. Honors Topics in Religious Studies II. 3 Credit Hours.

For description, see the Honors section of the course schedule of the semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

REL 4901. Honors Comparative Philosophy of Religion. 3 Credit Hours.

An introduction to comparative philosophy of religion, Asian and Western. After asking what is meant by "comparative philosophy of religion," we will focus on comparative philosophical study of basic concepts and issues in Western and Asian religious traditions. For example: concepts of divine or ultimate reality; arguments for the existence of an ultimate reality; the relation of faith and reason; critiques of religion; the problem of evil; concepts of personal destiny and immortality; the relation of religion to morality; religious and mystical experience; the nature of religious language; the problem of conflicting truth-claims and religious pluralism.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Risk Management and Insurance (RMI)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

RMI 2101. Introduction to Risk Management. 3 Credit Hours.

Introduction to the study of risk management and insurance. Principal casualty risks to which organizations are exposed, including those involved in employee benefits. Means of identification, evaluation, and treatment of these risks are analyzed, with the methods of treatment including insurance, risk retention, self-insurance, and loss control.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Business, Business Plus, Construction Engr Tech, Construction Mgt Tech, Economics, Economics, Entrprnrship & Innovation Mgt, Engineering Technology, Entrepreneurship, Environmental Science, Environmental Prof Training, Finance, Financial Planning, General Business Studies, Horticulture, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, ECON 1102, or ECON 1902) and (STAT 1001, 'Y' in STA2, 'Y' in STT2, STAT 1102, STAT 1902, MATH 1022, MATH 1031, MATH 1041, MATH 1941, MATH 1038, 'Y' in STT3, 'Y' in ST2A, or 'Y' in MATW)

RMI 2102. Professional Development in Risk Management and Insurance. 1 Credit Hour.

This course is a continuation of the skills that were learned in Business Administration 2101. The class will further prepare students for internships and permanent placement in the areas of Risk Management and Actuarial Science. Emphasis on networking, career planning, interview preparation, and job search strategies. Students will attend the department's corporate seminar series as well. NOTE: This course can only be taken by students in the Risk Management and Insurance or Actuarial Science majors.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Actuarial Science, Risk Management and Insurance.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (RMI 2101, RMI 2901, 'Y' in RM01, 'Y' in CRRM01, or 'Y' in CRRM02) and BA 2101 (C- or higher)

RMI 2501. Fundamentals of Personal Financial Planning. 3 Credit Hours.

Managing your finances is an important and needed skill in society today. This course explores the areas needed to manage household and personal finances. This non-technical course will prepare students to make more informed decisions in a complicated financial world, enabling them to reach their financial goals. Some of the topics explored will include but are not limited to: creating and managing budgets, taxes, savings, estate planning, retirement goals, major purchases, risk management and insurance planning, credit cards, loans, investments, and interest rates.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Engineering Technology, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

RMI 2901. Honors Introduction to Risk Management. 3 Credit Hours.

This is the Honors version of Risk Management and Insurance 2101. NOTE: Open only to business-designated Honors students, or with special permission of the Program Director. May be used to satisfy the risk management and insurance requirement of the Fox School of Business and Management.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Business, Construction Mgt Tech, Economics, Economics, Entrprnrship & Innovation Mgt, Engineering Technology, Entrepreneurship, Finance, Financial Planning, General Business Studies, Horticulture, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101, ECON 1901, ECON 1102, or ECON 1902) and (STAT 1001, 'Y' in STA2, 'Y' in STT2, MATH 1022, MATH 1031, MATH 1041, MATH 1941, MATH 1038, STAT 1102, STAT 1902, 'Y' in STT3, 'Y' in ST2A, or 'Y' in MATW)

RMI 3501. Managing Human Capital Risk. 3 Credit Hours.

Analysis of the major areas in other-than-retirement employee benefits. Considerations in benefit plan design, group insurance and the group technique, state and federal regulation, health and miscellaneous types of benefits offered. Issues include managed care plans, CDHPs, the ACA, ERISA, funding issues, tax implications and health care cost containment. This course is required of all RMI majors.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (RMI 2101, RMI 2901, 'Y' in RM01, 'Y' in CRRM01, or 'Y' in CRRM02)

RMI 3502. Managing Property Liability Risk I. 3 Credit Hours.

This course examines the basic operational functions of a property-liability insurer and how the market and regulatory environments affect insurer operations. Key topics addressed in the course include industry structure, regulation, distribution systems, underwriting, ratemaking and insurance pricing, reinsurance, loss control and solvency. Throughout the course current issues affecting insurer options are examined. This course is required of all RMI majors.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School, Science & Technology.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (RMI 2101, RMI 2901, 'Y' in RM01, 'Y' in CRRM01, or 'Y' in CRRM02)

RMI 3503. Retirement Plans. 3 Credit Hours.

Contemporary fundamentals of pension plans. Major subject areas covered include history and development, plan design, actuarial aspects (costs and funding), investment of plan assets, and plan termination insurance. Provides an understanding of the types of individual account retirement plans available. Discussed are profit-sharing plans, thrift and savings plan, cash or deferred arrangements, employee stock ownership and stock bonus plans, individual retirement accounts, simplified employee pensions, tax-deferred annuities, and executive retirement arrangements. Certain functional areas applicable to all types of retirement plans such as taxation, plan installation, disclosure, and fiduciary aspects are also discussed. NOTE: This course is one of two courses satisfying the Technology Requirement for Risk Management & Insurance majors.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (RMI 3501 or 'Y' in CRRM03) and (FIN 3101, FIN 3901, AS 2503, 'Y' in CRFI01, 'Y' in CRFI07, or 'Y' in CRAS04)

RMI 3504. Managing Property Liability Risk II. 3 Credit Hours.

This course evaluates property, net income, cyber, environmental, and liability loss exposures, analysis of insurance contracts and specific insurance coverages designed to handle the above exposures.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School, Science & Technology.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (RMI 3501 or 'Y' in CRRM03) and (RMI 3502 or 'Y' in CRRM04)

RMI 3505. Risk Financing. 3 Credit Hours.

This course is designed to provide students with a sound foundation in the financial characteristics of the U.S. property-liability insurance industry as well as noninsurance financing techniques available to corporations. U.S. property-liability fundamental statistics and ratio analysis are studied. Loss reserve forecasting and reinsurance types and techniques are reviewed in the course. Noninsurance financing techniques, also called alternative risk transfer (ART), discussed in the course include captives, securitization, and finite risk reinsurance. The course is designed to provide students a "hands-on" feel in the discussion, as calculations are involved with the topics studied. Excel applications of the topics discussed are included in the course as well.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (RMI 3501 or 'Y' in CRRM03), (RMI 3502 or 'Y' in CRRM04), and (FIN 3101, FIN 3901, AS 2503, 'Y' in CRFI01, 'Y' in CRFI07, or 'Y' in CRAS04)

RMI 3506. Risk Analytics. 3 Credit Hours.

This course will focus on the modern use of data and analytical tools in the insurance industry. We will begin by developing a set of tools for presenting, handling, and analyzing data and developing predictive models. In particular, we will focus on "big" data. We will briefly review traditional analysis techniques before moving onto more modern approaches such as classification trees, cluster analysis, and neural networks. We will then apply these techniques to problems unique to the risk and insurance industry such as underwriting, risk modeling, ratemaking, loss reserving, and risk control. The course is separated into Three Modules. The first module is a general introduction to modern data analytics. The second module takes the first module and applies the techniques learned to applications in risk management such as risk modeling, analyzing loss exposures, and risk control. The third module takes the first module and applies the techniques learned to applications in the insurance industry such as underwriting, loss reserving, and ratemaking.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School, Science & Technology.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (RMI 3501 or 'Y' in CRRM03), (RMI 3502 or 'Y' in CRRM04), and (STAT 2103 (C- or higher) or AS 2505 (C- or higher))

RMI 3511. Social Insurance and Public Policy. 3 Credit Hours.

This course will introduce you to the fundamentals of economic and insurance theories related to government intervention in insurance markets. In the first part of the course we will use basic microeconomic principles to analyze concepts such as scarcity of resources, tools of positive and normative analysis, supply and demand for insurance, requirements of an insurable risk and their violations as well as the economic view of government and reasons for government intervention in private markets. This part of the course will cover theories related to both the supply and demand for insurance. In addition we will explore the nature of economic security and insecurity, the basic principles of social insurance and comparisons of social verses private insurance. We will also learn and analyze, health, healthcare, and alternative theories of the demand for health insurance in order to compare and contrast private and national health insurance. We will then evaluate various social insurance programs using the tools of analysis we have developed in the course. In particular we will focus on OASDI (Social Security), Medicare, Medicaid and National Healthcare.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

RMI 3519. Insurance, Benefits and Retirement Planning. 3 Credit Hours.

This course equips you with an understanding of personal insurance products to promote your understanding of individual risk management in the process of wealth protection and retirement planning and strategies. Additionally, time will also be devoted to insurance products available through the traditional employee benefits offerings. Finally, the tools for retirement planning are introduced and strategies to meet individual goals are incorporated including employer sponsored, government, and individual plans.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (RMI 2101, RMI 2901, 'Y' in CRRM01, or 'Y' in CRRM02)

RMI 3567. Managing International Risk. 3 Credit Hours.

This course is designed to provide an in-depth understanding of risk management and insurance from an international perspective. Enterprise risk management is examined in a global economy, with an emphasis on risk management for multinational corporations. Topics covered in this course also include an extensive review and comparison of life insurance, non-life insurance and reinsurance markets throughout the world, and the financial service integration globally.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School, Science & Technology.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (RMI 2101, RMI 2901, 'Y' in CRRM01, or 'Y' in CRRM02) and ((RMI 3501 and RMI 3502), AS 3596 (may be taken concurrently), AS 3597 (may be taken concurrently), (RMI 3501 and 'Y' in CRRM04), (RMI 3502 and 'Y' in CRRM03), ('Y' in CRRM03 and 'Y' in CRRM04), 'Y' in CRAS06, or 'Y' in CRAS07)

RMI 3580. Special Topics - Risk Management & Insurance. 3 Credit Hours.

Special topics in current developments in the field of risk management and insurance.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (RMI 2101, RMI 2901, 'Y' in RM01, 'Y' in CRRM01, or 'Y' in CRRM02)

RMI 3581. Field Experience in Risk Management and Insurance. 3 Credit Hours.

Students undertake a research project that integrates their current work experience with their classroom experience at Temple University. The results are reported in a paper prepared under the supervision of a faculty member. NOTE: Arrangements are made through the Department of Risk Management and Insurance. This course is open to Risk Management & Insurance and Actuarial Science majors only. This course may NOT be used as a course toward the Risk Management & Insurance or Actuarial Science major.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (RMI 2101, RMI 2901, 'Y' in RM01, 'Y' in CRRM01, or 'Y' in CRRM02) and minimum GPA of 3 in: courses numbered 0700 to 4999.

RMI 3582. Independent Study. 1 to 6 Credit Hour.

Readings and/or papers under the supervision of a faculty member. Individually arranged each semester.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Actuarial Science, Risk Management and Insurance.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (RMI 2101, RMI 2901, 'Y' in RM01, 'Y' in CRRM01, or 'Y' in CRRM02)

RMI 3682. Independent Study. 1 to 6 Credit Hour.

Readings and/or papers under the supervision of a faculty member. Individually arranged each semester.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Actuarial Science, Risk Management and Insurance.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (RMI 2101, RMI 2901, 'Y' in RM01, 'Y' in CRRM01, or 'Y' in CRRM02)

RMI 3999. Honors Thesis I. 1.5 Credit Hour.

The first of a two-part sequence of courses in which independent research is conducted under the supervision of a thesis advisor from the Risk Management & Insurance department resulting in a substantial piece of original research, roughly 30 to 50 pages in length upon completion of Risk Management & Insurance 4999. The student must publicly present his/her findings at a Temple University Research Forum session or the equivalent during one of the two semesters during which these courses are undertaken.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

RMI 4596. Advanced Topics in Managing Human Capital Risk. 3 Credit Hours.

The goals of this course are to expose students to certain advanced topics in the design of health and welfare employee benefit plans; to improve the ability of students to work in groups and teams on common projects; to improve the writing ability of students through the use of a term paper completed by each student and the completion of a case study written with a group; and to improve the oral presentation skills of students through a presentation of the results of their particular case study. We will examine several major advanced issues in the operation and design of health and welfare employee benefit plans. These include the design and use of group term and permanent life insurance products, group disability income insurance, advanced alternative funding arrangements such as experience rating and minimum premium arrangements, cafeteria and flexible benefit plans under Section 125, benefits provided under the Transportation Equity Act (TEA) and miscellaneous benefits such as leave benefits such as FMLA and PTO. NOTE: This course is one of two capstone courses for Risk Management & Insurance majors. Students must earn a grade of C- or higher in this course if they are using it to fill the writing intensive course requirement for their degree.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Risk Management and Insurance.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (RMI 3501 or 'Y' in CRRM03), (RMI 3502 or 'Y' in CRRM04), and (BA 2196 (C- or higher) or BA 2996 (C- or higher))

RMI 4597. Managing Risk Across the Enterprise. 3 Credit Hours.

This course examines the management of risk within a complex global organization. It introduces Strategic and Enterprise Risk Management (SRM and ERM). Discussions will include the strategic and administrative aspects of global corporate risk management including the examination of how a risk manager and Chief Risk Officer operates within a complex organization. The course also applies holistic risk identification techniques (pure and speculative risk) employing a group project and case competition to enhance the understanding and application of these techniques. The course also explores how the firm identifies and manages emerging risks. Advanced alternative risk financing and transfer including the use of reinsurance and capital markets within a captive insurance company based global risk financing program structure addressing risk domestically and internationally will also be explored. Finally, the course will apply sophisticated and cutting edge risk management tools such as the application of: key risk indicators, risk registers, and risk maps; forecasting loss contingencies and expected losses including data management; integrated risk financing; financial reinsurance; captives/risk retention groups; and, benchmarking, to name a few.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Risk Management and Insurance.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C (except where noted) in (RMI 3502 or 'Y' in CRRM04), (RMI 3504 or 'Y' in CRRM05), and (BA 2196 (C- or higher) or BA 2996 (C- or higher))

RMI 4999. Honors Thesis II. 1.5 Credit Hour.

Independent research conducted under the supervision of a thesis advisor from the Risk Management & Insurance Department resulting in a substantial piece of original research, roughly 30 to 50 pages in length. Student must publicly present his/her findings at a Temple University Research Forum session or the equivalent if this was not done in Risk Management 3999.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Risk Management and Insurance.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in RMI 3999.

Russian (RUS)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

RUS 0815. Language in Society. 3 Credit Hours.

How did language come about? How many languages are there in the world? How do people co-exist in countries where there are two or more languages? How do babies develop language? Should all immigrants take a language test when applying for citizenship? Should English become an official language of the United States? In this course we will address these and many other questions, taking linguistic facts as a point of departure and considering their implications for our society. Through discussions and hands-on projects, students will learn how to collect, analyze, and interpret language data and how to make informed decisions about language and education policies as voters and community members. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0815/0915, Asian Studies 0815, Chinese 0815, CSCD 0815, EDUC 0815/0915, English 0815, Italian 0815, PSY 0815, or Spanish 0815.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

RUS 0831. Immigration and the American Dream. 3 Credit Hours.

As a Temple student, you go to school and live in a city full of immigrants. Perhaps your own relatives were immigrants to the United States. But have you ever listened to their stories? With an historical and sociological framework as a basis, we will take an in-depth and more personal look at the immigrant experience as expressed through the immigrants' own voices in literature and film. Topics explored include: assimilation, cultural identity and Americanization, exploitation and the American Dream, ethnic communities, gender, discrimination and stereotyping. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0831, CRIT 0831, History 0831, Italian 0831/0931, SOC 0831, or SPAN 0831/0931.

Course Attributes: GD, SI

Repeatability: This course may not be repeated for additional credits.

RUS 0868. World Society in Literature & Film. 3 Credit Hours.

Learn about a particular national culture by taking a guided tour of its literature and film. In this course, you'll learn about contemporary Russia. You don't need to speak Russian to take this exciting course, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film include family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. Each course section focuses on a specific country or culture. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0968, or Spanish 0868/0968.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

RUS 0871. Arts in Cultural Context. 4 Credit Hours.

View the arts as an expression of cultural identity as it occurs across the globe. Each semester, we will focus on a particular world region or country, including but not limited to Russia, Japan, and Latin America. The exploration of cultural identity begins with an overview of the region or country's historical and religious influences and then studies the culture's arts, including the visual arts (painting, sculpture), musical traditions, literature (folktales, national mythology), the vernacular arts (crafts, storytelling), film and theater. You will take field trips or have experiences that will allow you to encounter the region's arts firsthand, and to develop a blended understanding of a people's cultural identity and the larger world. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0871, Asian Studies 0871 or Hebrew 0871.

Course Attributes: GA

Repeatability: This course may not be repeated for additional credits.

RUS 0968. Honors World Society in Literature & Film. 3 Credit Hours.

Learn about contemporary Russia by taking a guided tour of its literature and film. You don't need to speak Russian to take this course, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. (This is an Honors course.) NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868, or Spanish 0868/0968.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GG, HO

Repeatability: This course may not be repeated for additional credits.

RUS 1001. First-Year Russian I. 4 Credit Hours.

Students acquire skills to communicate in Russian on a variety of topics in predictable situations. Classroom work focuses on listening, speaking, reading and writing as students build their mastery of vocabulary and grammar. Emphasis is on communication in a cultural context. This course is not appropriate for students who speak or spoke Russian in their home environments; students with family background in Russian are directed to take Russian 3003 (Heritage Russian I) or Russian 3004 (Heritage Russian II). Students who can speak Russian comfortably, but cannot read or write in Russian take Russian 3003; students with some literacy skills in Russian may be prepared to take Russian 3004.

Repeatability: This course may not be repeated for additional credits.

RUS 1002. First-Year Russian II. 4 Credit Hours.

This course focuses on communication in a cultural context. Students will improve listening, reading, speaking and writing skills while expanding their vocabulary.

Course Attributes: LA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (RUS 1001, 'C1002' in LCRU, 'B1002' in LCRU, or 'EXMPT' in LCRU)

RUS 1004. Intensive First-Year Russian. 10 Credit Hours.

This is an intensive course for those students who wish to take first-year Russian but missed the fall semester option of Russian 1001 (0051). This course meets 10 hours per week and students have 3-4 hours of homework per night. By the end of the semester, students complete the entire sequence of first-year Russian (equivalent to Russian 1001-1002 / 0051-0052) and are prepared to enter second-year Russian in the following fall semester.

Repeatability: This course may not be repeated for additional credits.

RUS 1082. Independent Study in Russian Language. 1 to 5 Credit Hour.

This course is an independent study in Russian language for students not yet ready to take on the more advanced independent study of Russian 3082. It is designed to provide a bridge for students who transfer in to Temple and need some work to improve their Russian to be able to join an existing Russian language course. This course is NOT available to students who can be placed into an existing course and is NOT open to enrollment except by consent of the instructor.

Repeatability: This course may be repeated for additional credit.

RUS 1201. Russian Culture. 3 Credit Hours.

Students in this course will study the historical origins of Russian culture and the modern manifestations of this rich culture. At the beginning of the 19th century, Russian culture had not established itself in the world canon in music or literature and had made only a tiny impression in the canon of world art. By the beginning of the 20th century, Russian masters had gained world renown in music, literature, dance, theater, painting, and in the newest art form, film. This course will describe the historical origins of this remarkable cultural transformation and explain how Russian culture has become an inextricably integral part of human culture. Students may not earn credit for both Russian 0871 and Russian 1201.

Repeatability: This course may not be repeated for additional credits.

RUS 2001. Second-Year Russian I. 4 Credit Hours.

Students completing this course acquire skills they need to communicate with native speakers of Russian on a variety of topics in predictable situations. Students in this course work on listening, speaking, reading, and writing skills as they improve their mastery of Russian vocabulary and grammar. Classroom and homework activities emphasize contemporary standard Russian in its cultural and historical contexts. Materials from the Internet supplement textbook-based activities. NOTE: Students who took Russian 0051/0052 prior to the 2006-2007 academic year should see an advisor before registering for this course.

Course Attributes: LB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (RUS 1002, RUS 1004, or 'EXMPT' in LCRU)

RUS 2002. Second-Year Russian II. 4 Credit Hours.

Students completing the 2nd semester of this 2-semester sequence (Russian 2001/2002) acquire the skills they need to communicate with native speakers of Russian on a variety of topics in predictable situations. In this course students continue to work on listening, speaking, reading, and writing skills as they improve mastery of Russian vocabulary and grammar. Classroom and homework activities emphasize contemporary standard Russian in its cultural and historical contexts. Materials from the Internet, especially news articles from the Russian press, supplement textbook-based activities. NOTE: Students who took Russian C061 (2001) before fall 2007 should consult with an advisor before registering for this course.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in RUS 2001.

RUS 2101. Contemporary Russia in Literature and Film. 3 Credit Hours.

Students read short stories and novels and watch recent Russian films to understand the cultural and historical context in which Russia finds itself today. NOTE: This course is taught in English and includes required film screenings. All readings are in translation; all films are shown with English subtitles.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in RUS 2002.

RUS 2102. Russian Short Story in English. 2 Credit Hours.

Readings of selected masterpieces by authors such as Tolstoy, Dostoevsky, Turgenev, Pushkin, Leskov, Chekhov, Gorky, and Bunin. Analysis and discussion.

Repeatability: This course may not be repeated for additional credits.

RUS 2103. The Power and the Poet. 3 Credit Hours.

Students in this course read controversial Russian literary texts, written from the late 18th century through the beginning of the 21st century, which brought upon their authors political or social censure from the Russian or Soviet state. As we read and discuss these texts in their cultural and historical contexts, we consider the stylistic, narrative and other features of each text that may have attracted such unfavorable attention. The course concludes with a comparative discussion of the place of the writer in society. NOTE: The course includes readings both of poetry and prose fiction; the word poet in the course title is designed to evoke the broader image of the writer in Russian society.

Repeatability: This course may not be repeated for additional credits.

RUS 2105. Echoes of Terror in Russian Culture. 3 Credit Hours.

Students will read and study literary works (novels, short stories, poetry), memoirs and feature and documentary films depicting Stalin's terror (from the murder of Kirov in 1934 to the death of Stalin in 1953) and its impact on Russian and Soviet society after that period. Students will come to understand the enormity of these historical events by reading, discussing, and analyzing the texts and the films, drawing connections between the Soviet historical and cultural contexts and historical events elsewhere in the world (e.g., Nazi Germany, Apartheid South Africa, Cambodia, Rwanda, Darfur) about the legacy of totalitarian rule. Note: This course is equivalent to SOC 2105; students may receive credit for either RUS 2105 or SOC 2105.

Repeatability: This course may not be repeated for additional credits.

RUS 2106. Russian Comedy. 3 Credit Hours.

Students will apply a theoretical framework of comedy to exploring Russian works of fiction, drama and film, as well as to other performances (e.g., folk songs and dances, stand-up comedians' monologues) to gain a deeper understanding of the Russian sense of humor and its place in Russian culture.

Repeatability: This course may not be repeated for additional credits.

RUS 2107. History of Russian Film. 3 Credit Hours.

Students will study the history of the Russian cinema, viewing nearly 30 films spanning the period from 1900 to the present day.

Repeatability: This course may not be repeated for additional credits.

RUS 2108. Women's Voices in Russian Culture. 3 Credit Hours.

In this course we will study the depiction of women's voices in Russian culture (memoirs, fiction, feature and documentary films, research in both anthropology and sociology), by female and male authors, researchers, and filmmakers in the context of a larger study of women in Russian culture. Our course will start with an historical survey, but focus most closely on Russian women in the 20th century. No knowledge of Russian is required; all works are read in translation or viewed with subtitles. Note: This course is equivalent to GSWS 2108; students may receive credit for either RUS 2108 or GSWS 2108.

Repeatability: This course may not be repeated for additional credits.

RUS 2109. Jewish Voices in Russian Culture. 3 Credit Hours.

In this course we will study the Jewish experience in the Russian Empire, the Soviet Union, and Post-Soviet Russia, with an emphasis on the 20th century, debunking many of the myths with which many students may have been familiar from the film "Fiddler on the Roof." We will read, in translation, excerpts from memoirs, works of literature and history, and view films, with subtitles by Jewish and non-Jewish scholars, authors, poets, and filmmakers about what Russians have called "The Jewish Question" for more than two centuries. We will also take up issues of anti-Semitism and xenophobia and consider them in the context of European and American history. This course requires no knowledge of Russian, Yiddish, or Hebrew; all works are read in translation or viewed with subtitles.

Repeatability: This course may not be repeated for additional credits.

RUS 2111. 19th Century Slavic Literature in English. 3 Credit Hours.

Survey of Slavic literature; reading of representative works from Bulgarian, Croatian, Czech, Polish, Russian, Serbian, and Ukrainian literature.

Repeatability: This course may not be repeated for additional credits.

RUS 2112. Modern Slavic Literature in English. 3 Credit Hours.

Survey of East, West, and South Slavic literature; reading of representative works from Bulgarian, Croatian, Czech, Polish, Russian, Serbian, and Ukrainian literature.

Repeatability: This course may not be repeated for additional credits.

RUS 2114. Social and Economic Transformation in Russia. 3 Credit Hours.

Students will study the transformation of Russian society and the Russian economy, focusing on the 20th and 21st centuries. We will closely examine Russian economic transitions from a market to a planned economy (in the 1920s and 1930s) and from a planned economy back to a market economy (after 1991), as well as analyses of the Russian economy and society in periods of great stress (civil war, collectivization, famine, terror, war and occupation, arms race). We will also read memoirs and works of prose fiction and watch films in order to learn about the consequences of economic decisions on the lives of actual Russian citizens. The course will culminate with interviews with Russian businessmen visiting the United States. No knowledge of Russian required; all works read in translation or viewed with subtitles.

Repeatability: This course may not be repeated for additional credits.

RUS 2121. Russian Cities. 3 Credit Hours.

In this course we will study the Russian city, analyzing the nexus of physical geography, climate, natural resources, ethnography, history, commerce, politics and culture on the development of urban centers in Russia. The study of Moscow and St. Petersburg will occupy much of our attention in this course, but we will also examine Russia's medieval cities ("the Golden Ring"), as well as cities in Siberia and the Far East. We will read works from the disciplines of geography, history, anthropology, and sociology, as well as works of fiction; we will also view Russian films in which a city (or the city) plays an important role. No knowledge of Russian is required; all works will be read in translation or viewed with subtitles.

Repeatability: This course may not be repeated for additional credits.

RUS 2415. Russian History in Literature and Film. 3 Credit Hours.

Students will read and study a short history of Russia and then read literary works and watch films depicting various periods, topics, events, figures, and issues in Russian history. No knowledge of Russian is required; all works are read in translation or viewed with subtitles.

Repeatability: This course may not be repeated for additional credits.

RUS 2901. Honors Modern Russia in Literature and Film. 3 Credit Hours.

Students in this course will read a wide range of literary and critical texts and view films from before, during (1985-1991) and after (1991-present) the Perestroika Era in Russia in order to gain an understanding of Russian cultural history and trends during and after the collapse of the Soviet Union. This is an HONORS course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

RUS 2915. Honors Russian History in Literature and Film. 3 Credit Hours.

In this honors course, students read and study a short history of Russia and then read literary works and watch films depicting various periods, topics, events, figures, and issues in Russian history. Students in the course develop an understanding of the depiction of history in literature and film as contingent on the ideological perspective of the storyteller; students also learn to identify ideological perspective through attention to symbol, metaphor, and theme in both literature and film and, in addition, in film, through attention to lighting, sound and other filmic devices.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

RUS 3001. Third-Year Russian I. 4 Credit Hours.

Students completing Russian 3001 will improve their listening, speaking and writing skills (the latter in the context of both formal and informal letter writing). Upon completion of this course, they will be prepared to function in predictable situations in Russia on study abroad or tourist travel. Perhaps most importantly, students completing this course will improve their understanding of Russian cultural perspectives on the world. In this course students will read important Russian cultural texts (e.g., poetry by Pushkin), newspaper articles, and popular Russian fiction, analyzing both for cultural and linguistic patterns. Students will be graded on their performance on quizzes, oral and written tests, written papers, and presentations.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in RUS 2002.

RUS 3002. Third-Year Russian II. 4 Credit Hours.

Students completing Russian 3002 will build on skills gained in listening, speaking and writing skills (the latter in the context of both formal and informal letter writing) in Russian 3001. In this course we will pay special attention to syntactical structures typically found in written discourse. Upon completion of this course, they will be prepared to function in predictable situations in Russia on study abroad or tourist travel. Perhaps most importantly, students completing this course will improve their understanding of Russian cultural perspectives on the world. In this course students will read important Russian cultural texts (e.g., poetry by Akhmatova), newspaper articles, and popular Russian fiction, analyzing both for cultural and linguistic patterns. Students will be graded on their performance on quizzes, oral and written tests, written papers, and presentations.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in RUS 3001.

RUS 3003. Heritage Russian I. 3 Credit Hours.

This course is the first of two for students who speak or spoke Russian in their homes but do not know how to read and/or write in Russian. Students taking this course learn how to read and write in Russian; the course assumes no literacy skills in Russian. The course will help students build on their oral fluency in Russian to develop literacy in Russian. The focus is on the acquisition of contemporary standard Russian (CSR) in the Moscow dialect. Students who speak other dialects in their home environments will be encouraged to recognize the difference between their home dialect and CSR and acquire CSR in order to use it in professional settings. One of the most important aspects of this work is to develop sensitivity towards informal and formal speech and writing styles, since students without a formal educational experience in Russian may have little training to speak and write in formal (professional) contexts. NOTE: This course is for students who grew up speaking Russian in their home environment.

Repeatability: This course may not be repeated for additional credits.

RUS 3004. Heritage Russian II. 3 Credit Hours.

This course is the second of two designed for students who grew up in a Russian-speaking home and may have had some or much of their primary education in a Russian-language school. The course will help these students build on their oral fluency in Russian to develop literacy in Russian. The focus is on the acquisition of contemporary standard Russian (Moscow dialect). Students who speak other dialects in their home environments will be encouraged to recognize the difference between their home dialect and CSR and acquire CSR in order to use it in professional settings. One of the most important aspects of this work is to develop sensitivity towards informal and formal speech and writing styles, since students without a formal educational experience in Russian may have little training to speak and write in formal (professional) contexts. NOTE: This course is for native Russian speakers.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in RUS 3003.

RUS 3082. Independent Study. 1 to 3 Credit Hour.

Arranged each semester. Please consult with the instructor. NOTE: Permission of instructor required. Considered only for extraordinary reasons.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in RUS 2002.

RUS 3201. Service Learning in Russian I. 2 Credit Hours.

Students spend 3 hours a week interacting in Russian with Russian speakers in the Philadelphia community in a service learning placement through agencies such as Lutheran Child and Family Services or Jewish Social Services. Course requires vocabulary quizzes, reflection in electronic diary and course forum, course meetings, oral presentations.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in RUS 3001.

RUS 3202. Service Learning in Russian II. 2 Credit Hours.

Students who have completed one service learning course may take this course and spend 3 hours a week interacting in Russian with Russian speakers in the Philadelphia community in a service learning placement. Heritage speakers of Russian majoring in Russian are required to take this course as part of their major curriculum. This course requires two reflection papers in Russian.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in RUS 3201.

RUS 3285. Internship in Russian. 1 to 4 Credit Hour.

Students will be placed in an internship setting in which they will use their Russian in the workplace. This course will provide students with extended exposure to authentic Russian in professional contexts. Students will listen to, read, and write authentic Russian business communications and enhance their understanding of the styles characteristic of such communications. Students are graded on their attendance at the internship site, their electronic reflections (journal), a midterm reflective essay, a final presentation, and a portfolio of samples of their work from the internship site. In some cases, students may be assigned grammar and syntax exercises to help them master structures necessary for written communications at their internship site. NOTE: By special authorization only.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Russian.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (RUS 3001 or RUS 3003)

RUS 3501. Russian for Business and Travel. 3 Credit Hours.

Intensive work in spoken and written Russian needed by business executives and other travelers. Vocabulary, idiomatic usage and special terminology for professional needs. Cultural aspects, practice in personal contact and letter writing.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in RUS 2002.

RUS 4001. Fourth-Year Russian I. 3 Credit Hours.

Students will acquire the skills they need to communicate with native speakers of Russian on a variety of topics in predictable situations. In this course, students will work on listening, speaking, reading, and writing skills as they build their mastery of Russian vocabulary and grammar. Classroom and homework activities will emphasize contemporary standard Russian in its cultural and historical contexts. Materials from the internet will supplement textbook-based activities. NOTE: Students majoring in Russian are required to take Russian 4097 instead of Russian 4001.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (RUS 3001 or RUS 3002) and (RUS 3003 or RUS 3004)

RUS 4002. Fourth-Year Russian II. 3 Credit Hours.

Survey of Russian culture and civilization from its beginnings to the present.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in RUS 4001.

RUS 4101. Contemporary Russia in Literature and Film: Russian Trailer Section. 4 Credit Hours.

This course meets with the English-language lecture Contemporary Russia in Literature and Film. Students taking the Russian trailer section of this course must attend the English-language lectures 3 hours per week, but also have a fourth hour in Russian with the instructor. Students in this Russian trailer section read all the texts for this course in Russian and discuss them in Russian with one another and the instructor. They also write two papers of 7-10 pages in length in Russian on short stories or films they have read or watched that were not presented to the larger lecture course in translation. Students who took either Russian 2101 or Russian 0868 are not eligible to take Russian 4101 due to overlap in content. NOTE: Fourth hour conducted in Russian; all readings are to be done in Russian; all papers and tests are in Russian.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Russian.

Repeatability: This course may not be repeated for additional credits.

RUS 4103. The Power and the Poet (in Russian). 4 Credit Hours.

Students in this course will read controversial Russian literary texts, written from the late 18th century through the beginning of the 21st century, which brought upon their authors political or social censure from the Russian or Soviet state. As we read and discuss these texts in their cultural and historical contexts, we will consider the stylistic, narrative and other features of each text that may have attracted such unfavorable attention. The course will conclude with a comparative discussion of the place of the writer in society. NOTE: The course includes readings both of poetry and prose fiction; the word poet in the course title is designed to evoke the broader image of the writer in Russian society. Students who took either Russian 2103 or Political Science 2202 are not eligible to take Russian 4101 due to overlap in content. NOTE: Fourth hour conducted in Russian; all readings are to be done in Russian; all papers and tests are in Russian.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in RUS 3001.

RUS 4104. Russian History in Literature and Film (in Russian). 4 Credit Hours.

Students will read and study a short history of Russia and then read literary works and watch films depicting various periods, topics, events, figures, and issues in Russian history. The fourth class hour of this course will be conducted in Russian; most readings and all papers will be assigned in Russian. Students who took either Russian 2415, Russian 2915, History 2415, or History 2915 are not eligible to take Russian 4104 due to overlap in content. NOTE: Fourth hour conducted in Russian; all readings are to be done in Russian; all tests and papers are administered in Russian.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (RUS 3001 or RUS 3003)

RUS 4105. Echoes of Terror in Russian Culture (in Russian). 4 Credit Hours.

Students will read novels, short stories, memoirs, and historical essays and view films about Stalin's terror (1934-1941 and again 1946-1953) and its impact in Russia and the Soviet Union. NOTE: Fourth hour conducted in Russian; all readings in Russian; all tests and papers in Russian. Students who took Russian 2105 or Sociology 2105 are not eligible to take Russian 4105 due to overlap in content.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (RUS 3001 or RUS 3003)

RUS 4106. Russian Comedy (in Russian). 4 Credit Hours.

Students will apply a theoretical framework of comedy to exploring Russian works of fiction, drama and film, as well as to other performances (e.g., folk songs and dances, stand-up comedians' monologues) to gain a deeper understanding of the Russian sense of humor and its place in Russian culture. Readings of texts will be in Russian. NOTE: Fourth hour conducted in Russian; all readings in Russian; all tests and papers in Russian. Students who took Russian 2106 are not eligible to take Russian 4106 due to overlap in content.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (RUS 3001 or RUS 3003)

RUS 4107. History of Russian Film (in Russian). 4 Credit Hours.

Students will study the history of the Russian cinema, viewing nearly 30 films spanning the period from 1900 to the present day. Students enrolled in this course will be assigned readings in Russian, will write papers and exams in Russian, and will have one class meeting per week in Russian. NOTE: Class conducted in Russian.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (RUS 3001 or RUS 3003)

RUS 4108. Women's Voices in Russian Culture (in Russian). 4 Credit Hours.

In this course we will study the depiction of women's voices in Russian culture (memoirs, fiction, feature and documentary films, research in both anthropology and sociology), by female and male authors, researchers, and filmmakers in the context of a larger study of women in Russian culture. Our course will start with an historical survey, but focus most closely on Russian women in the 20th century. This course meets with Russian 2108: three hours in class will be conducted in English for students in both Russian 2108 and Russian 4108; the fourth class hour, for Russian 4108 alone, will be conducted in Russian. Students will do substantial reading in Russian and will write an extended paper in Russian.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (RUS 3001 or RUS 3003)

RUS 4109. Jewish Voices in Russian Culture (in Russian). 4 Credit Hours.

In this course we will study the Jewish experience in the Russian Empire, the Soviet Union, and Post-Soviet Russia, with an emphasis on the 20th century, debunking many of the myths with which many students may have been familiar from the film "Fiddler on the Roof." We will read, in Russian, excerpts from memoirs, works of literature and history, and view films, with subtitles by Jewish and non-Jewish scholars, authors, poets, and filmmakers about what Russians have called "The Jewish Question" for more than two centuries. We will also take up issues of anti-Semitism and xenophobia and consider them in the context of European and American history. NOTE: Class conducted in Russian. Readings, papers and tests in Russian.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (RUS 3001 or RUS 3003)

RUS 4111. Pushkin. 3 Credit Hours.

Reading and analysis of selected major works.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in RUS 2002.

RUS 4112. Tolstoy. 3 Credit Hours.

Study and analysis of selected major works.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in RUS 2002.

RUS 4113. Dostoevsky. 3 Credit Hours.

Reading and analysis of selected major works.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in RUS 2002.

RUS 4114. Russian Novel. 3 Credit Hours.

Reading and analysis of selected major works.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in RUS 2002.

RUS 4115. Russian Drama. 3 Credit Hours.

Reading and analysis of selected Russian plays.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in RUS 2002.

RUS 4116. Russian Poetry. 3 Credit Hours.

Analysis of the major works of Russian poets.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in RUS 2002.

RUS 4121. Russian Cities (in Russian). 4 Credit Hours.

In this course we will study the Russian city, analyzing the nexus of physical geography, climate, natural resources, ethnography, history, commerce, politics and culture on the development of urban centers in Russia. The study of Moscow and St. Petersburg will occupy much of our attention in this course, but we will also examine Russia's medieval cities ("the Golden Ring"), as well as cities in Siberia and the Far East. We will read works from the disciplines of geography, history, anthropology, and sociology, as well as works of fiction; we will also view Russian films in which a city (or the city) plays an important role. NOTE: Class conducted in Russian. Readings, papers and tests in Russian.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (RUS 3001 or RUS 3003)

RUS 4182. Advanced Independent Study in Russian Literature. 1 to 3 Credit Hour.

Supervised reading, research, and reports on an advanced level in Russian language, literature or civilization. NOTE: Considered only for extraordinary reasons.

Repeatability: This course may be repeated for additional credit.

RUS 4282. Advanced Independent Study in Russian Literature. 1 to 3 Credit Hour.

Supervised reading, research, and reports on an advanced level in Russian language, literature or civilization. NOTE: Considered only for extraordinary reasons.

Repeatability: This course may be repeated for additional credit.

RUS 4382. Advanced Independent Study in Russian Area Studies. 1 to 3 Credit Hour.

This course, available only by consent of the instructor, is for students who want to do advanced-level research in Russian studies (e.g., history, politics, society). To be eligible for this course, students must demonstrate advanced Russian language skills typical of those demonstrated by students in 4000-level Russian language courses.

Repeatability: This course may be repeated for additional credit.

RUS 4483. Advanced Directed Readings in Russian Area Studies. 1 to 3 Credit Hour.

Students enroll in this course only with special permission from the instructor. In this course, students do advanced directed readings in Russian area studies, using Russian press and other Russian-language sources to explore Russia through disciplines such as anthropology, geography, history, political science, sociology, as well as contemporary business.

Repeatability: This course may be repeated for additional credit.

School of Business and Management (SBM)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

SBM 0880. GenEd Limited Edition GU. 3 Credit Hours.

This is a General Education Limited Edition course that will satisfy the GenEd U.S. Society requirement. Topics vary by semester. Check the Class Schedule for the full description of specific topics offered. Students cannot repeat this course for additional credits, regardless of the topic.

Course Attributes: GU

Repeatability: This course may not be repeated for additional credits.

SBM 0980. Honors GenEd Limited Edition GU. 3 Credit Hours.

This is an Honors General Education Limited Edition course that will satisfy the GenEd U.S. Society requirement. Topics vary by semester. Check the Class Schedule for the full description of specific topics offered. Students cannot repeat this course for additional credits, regardless of the topic.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GU, HO

Repeatability: This course may not be repeated for additional credits.

SBM 3585. Diamond Peer Teachers - Internship I. 1 Credit Hour.

The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

SBM 3586. Diamond Peer Teachers - Internship II. 1 Credit Hour.

The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

School of Sport, Tourism & Hospitality Management (STHA)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

STHA 0850. GenEd Limited Edition GQ. 4 Credit Hours.

This is a General Education Limited Edition course that will satisfy the GenEd Quantitative Literacy requirement. Topics vary by semester. Check the Class Schedule for the full description of specific topics offered. Students cannot repeat this course for additional credits, regardless of the topic.

Course Attributes: GQ

Repeatability: This course may not be repeated for additional credits.

STHA 0950. Honors GenEd Limited Edition GQ. 4 Credit Hours.

This is an Honors General Education Limited Edition course that will satisfy the GenEd Quantitative Literacy requirement. Topics vary by semester. Check the Class Schedule for the full description of specific topics offered. Students cannot repeat this course for additional credits, regardless of the topic.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GQ, HO

Repeatability: This course may not be repeated for additional credits.

STHA 3485. Diamond Peer Teachers - Internship I. 1 Credit Hour.

The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

Repeatability: This course may be repeated for additional credit.

STHA 3486. Diamond Peer Teachers - Internship II. 1 Credit Hour.

The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

Repeatability: This course may be repeated for additional credit.

School Psychology (SPSY)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

SPSY 0828. The Meaning of Madness. 3 Credit Hours.

What is madness? Insanity? Mental illness? Who decides where the line between madness and normalcy is drawn? How have ideas about madness changed over time? Can the same behaviors be considered "insane" in one culture but "normal" in another? What is "stigma" and how does it affect individuals with mental illnesses? This course will explore biological, social, and cultural factors that influence mental illness, perceptions of individuals with mental illness, and treatments of mental illness over time and across cultural groups. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed SPSY 0928.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

SPSY 0928. Honors The Meaning of Madness. 3 Credit Hours.

What is madness? Insanity? Mental illness? Who decides where the line between madness and normalcy is drawn? How have ideas about madness changed over time? Can the same behaviors be considered "insane" in one culture but "normal" in another? What is "stigma" and how does it affect individuals with mental illnesses? This course will explore biological, social, and cultural factors that influence mental illness, perceptions of individuals with mental illness, and treatments of mental illness over time and across cultural groups. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed SPSY 0828.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GB, HO

Repeatability: This course may not be repeated for additional credits.

SPSY 2271. Introduction to School Psychology. 3 Credit Hours.

This course serves as an introduction to the discipline of school psychology. As such, a primary focus of this course will be to learn about the field of school psychology, particularly the role and function of a school psychologist. We will explore a scientist-practitioner model of practice that is based on the current best practice model in the field. As such, a focus will be on the application of psychological principles to improve learning for all students. Emphasis will be placed on research-based models of prevention that help to improve outcomes for individual students and classrooms as well as overall schools and school districts. This course will focus on the role and function of school psychologists, paying particular attention to the three main pillars of practice: assessment, intervention, and consultation. Core topics will include systems-based service delivery, assessment, learning theory, effective interventions (academic, behavioral, and social), culturally competent practice, effective instruction, data-based decision making, and collaborative consultation.

Repeatability: This course may not be repeated for additional credits.

SPSY 2303. The Impact of Trauma on the Individual and Society. 3 Credit Hours.

The purpose of this course is to provide a theoretical and practical understanding of the impact of psychological trauma at the individual and societal level. Students will become familiar with the impact and nature of a wide variety of traumas on the individual including: childhood abuse, violent crimes in adulthood, domestic violence, accidents, traumatic deaths, natural disasters, and war and genocide. Students will also focus on the impact of trauma on society by studying the economic and social costs of trauma. In addition, students will explore issues related to resiliency and prevention of trauma.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

SPSY 3000. Topics in School Psychology I. 3 Credit Hours.

This course covers special topics of interest to students in a broad range of educational contexts. The topics will vary each semester depending on the population being served.

Repeatability: This course may be repeated for additional credit.

Science Education (Elementary) (SCEE)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

SCEE 3151. Teaching Science: N-6. 3 Credit Hours.

An introductory, activity-oriented approach to materials and methodology appropriate to teaching science in kindergarten through sixth grade. Emphasis on development of inquiry techniques and the constructivist theory of learning stressed in most of the newer early childhood and elementary science programs. Practical application through experiences with children.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: ELED 3387, MAEE 3141.

Repeatability: This course may not be repeated for additional credits.

Science Education (Secondary) (SCES)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

SCES 2189. Classroom Interactions. 3 Credit Hours.

This course continues the process of preparing students to teach mathematics and science in upper elementary and secondary settings. The specific objectives of this course are to: 1) demonstrate to students how learning theories (from the "Knowing and Learning" course) manifest themselves in instructional settings (usually classrooms), allow students to design and implement instructional activities from their own understanding of knowing and learning mathematics and science, and evaluate the outcomes of those activities based on evidence from student artifacts, and 2) provide students with frameworks for thinking about equity issues in the classroom and larger school setting and their effects on learning and provide students with strategies for teaching diverse students equitably. The culminating activities of the course are the opportunities for students to teach in a high school and to learn whether they enjoy and are good at it. While in "Knowing and Learning" students study the meaning behind understanding a particular content area from an individual perspective, in "Classroom Interactions" the perspective shifts to studying how classroom events might promote or discourage learning mathematics and science and student equity. A major component of the "Classroom Interactions" course is the opportunity for students to reflect on and evaluate their own work as teachers.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in EDUC 2179 (may be taken concurrently) and (SCTC 1289 or SCTC 1389)

SCES 3146. The Teaching of Science in Secondary Schools. 3 Credit Hours.

For students beginning their classes in science teaching at the secondary level. This course must be taken before student teaching. Role of science education in the secondary curriculum, and sources of material and content for teaching physical, biological, earth sciences and environmental sciences are covered.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: EDUC 4389.

Repeatability: This course may not be repeated for additional credits.

SCES 4146. Teaching Science in Secondary Schools II. 3 Credit Hours.

This course serves as the second science education course. In this course, we will continue to use ideas generated in SCES 3146, such as meaningful understanding, how children's ideas progress as they become more sophisticated, and designing instruction around inquiry experiences, in order to take a deeper look at curriculum, instruction and learning at the secondary level. In addition, we will cover the following ideas: (1) units of instruction, as well as the relationships among units, (2) connections to other fields, specifically math and models as a way to understand more sophisticated science ideas, (3) relationships among big ideas in science (and across science courses), (4) the learning environment (i.e. level of task, management-motivation-instruction connections), and (5) accounting for language, culture and social backgrounds in science teaching/learning. Throughout the semester, we will examine and reflect on science content, field experiences, unit planning and curricula, video vignettes, connections to help us meet the objectives. NOTE: Background clearances required.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: EDUC 4389.

Repeatability: This course may not be repeated for additional credits.

SCES 4189. Project-Based Instruction. 3 Credit Hours.

"Project-Based Instruction" (PBI) is the capstone course in the sequence of required education courses and is required before TUteach students take Education 4688: "Student Teaching in Secondary Education." PBI is the course in which the major themes of the TUteach program - integrated content of mathematics and science learning, infusion of technology in representation, analysis, modeling, assessment and contextualization of the content, field-based experiences, and equity - converge into an exciting and intellectually challenging culminating experience. When students complete PBI, they are fully prepared for Student Teaching. Whereas in "Classroom Interactions," students gain experience designing a sequence of several lessons that they teach to a high school class, in PBI, students design full units of connected lessons - a skill that is required in Student Teaching. PBI also provides students with the experience of managing lessons and students outside a classroom, in a field setting. Despite its name, PBI emphasizes choosing from a variety of appropriate teaching styles, depending on the type of material and the learning objective, with project-based instruction being just one possible alternative. In addition, PBI requires students to incorporate various technologies into the units they plan.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: TUteach.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (SCES 2189 and '100' in PRAX) and minimum GPA of 3 in: courses numbered 0700 to 4999.

Science, Secondary Education (SCSE)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

SCSE 3147. The Scientific Industry for Teachers. 3 Credit Hours.

This course exposes science teachers to industry and industrial related operations in situ where teachers can see and learn how science and scientific principles that they teach in their classrooms are applied in non-academic settings and how our economy is affected by these industries. Teachers will meet and talk with non-academic scientists, to observe them "at the bench," in action to learn the importance of the use of the laboratory and modern technology in applying the very principles that they, the teachers, teach in their classes.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may not be repeated for additional credits.

Secondary Education (SECE)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

SECE 3796. Differentiated Literacy Instruction in the Disciplines, 7-12. 3 Credit Hours.

This course examines ways in which secondary teachers can support students' struggles with reading and writing in the disciplines, including Mathematics, History (Social Studies), the Sciences, Foreign Language, and English. How can we teach all students the concepts, facts, and skills that they need to do well in our discipline? What kinds of reading and writing issues can inhibit students' progress? How do we identify the kinds of difficulties that different text organizations may pose for students? What must a high school student learn to do to read and write appropriately in English, History, Science, and so on? How can we address these issues without taking time away from teaching our discipline? What kinds of reading and writing tasks can we use as resources for helping students to learn in our discipline? How do the current state and national emphases on standards and teacher accountability affect our responsibilities in the classroom? The answers to these questions have deep implications for the instructional activities that we will develop to enable all children to use reading and writing as tools for learning in our fields. This is also the Capstone Writing-Intensive Course in the Major. The course immerses you in the kinds of literate activities practiced in our profession. It examines the ways that reading and writing vary across the disciplines included in this course. NOTE: This course was previously called "Reading Problems in the Secondary School."

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

SECE 4688. Student Teaching in Secondary Education. 9 to 11 Credit Hours.

Involves a school placement where students demonstrate their knowledge of and competence in teaching. Students work with a certified cooperating teacher and are supervised by a Temple University faculty member. NOTE: All coursework must be completed before taking this course.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: SECE 4801.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: minimum GPA of 3 in: courses numbered 0700 to 4999.

SECE 4801. Senior Seminar and Performance Assessment in Secondary Education. 3 Credit Hours.

Students will be involved in experiences that prepare them for making the transition from college to the practice setting, and engage in activities that foster professionalism in school and community settings. The senior performance assessment, a requirement for teacher certification students, is also a part of the course. NOTE: This is a required course for all teacher certification candidates, which is taken during the student teaching semester.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: SECE 4688.

Repeatability: This course may not be repeated for additional credits.

Slavic Languages & Literature (SLVC)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

SLVC 2111. 19th Century Slavic Literature in English. 3 Credit Hours.

Survey of Slavic literature; reading of representative works from Bulgarian, Croatian, Czech, Polish, Russian, Serbian, and Ukrainian literature.

Repeatability: This course may not be repeated for additional credits.

SLVC 2112. Modern Slavic Literature in English. 3 Credit Hours.

Survey of East, West, and South Slavic literature; reading of representative works from Bulgarian, Croatian, Czech, Polish, Russian, Serbian, and Ukrainian literature.

Repeatability: This course may not be repeated for additional credits.

SLVC 3182. Independent Study. 1 to 3 Credit Hour.

Arranged each semester. Please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

Social and Behavioral Sciences (SBS)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

SBS 1003. Public Health Careers. 1 Credit Hour.

What can I do with an undergraduate degree in public health? There is a growing demand for public health professionals in various sectors in the United States and across the globe. However, because of the wide range of career options, it can be difficult for students to answer this question concisely. Public Health Careers will take you on a journey where you explore a diverse range of career opportunities in public health. You will reflect on your skills and experiences thus far and compare these to the competencies and transferable skills needed as an entry level public health professional. You will also participate in a series of professional development activities specifically targeted towards your areas of growth and development. A professional development plan will be created to use and adapt for your remaining time in the program. This course should be taken during your first year in the public health major.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

SBS 1104. Nutrition and Health. 3 Credit Hours.

This course is an introduction to nutrition and its impact on health. We will explore the various classes of nutrients and their food sources, dietary guidelines and meal planning considerations across the lifespan, the impact of energy (calorie) balance on health and weight management, and the basics of digestion. We will examine the importance of sustainable food systems, the dangers of hunger, and the social and economic factors that affect food production and consumption. We will also consider nutrition marketing, diet or other nutrition fads, and dietary assessment. Nursing, Health Professions, and Public Health majors and Public Health and Nutrition minors must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

SBS 1105. Substance Use and Society. 3 Credit Hours.

This introductory, discussion-based course explores the use of psychoactive substances in the United States. It will cover motivations behind substance use; policies and laws that relate to substance use, harm reduction, prevention and treatment; a range of substance categories and their physiological, psychological and social effects; and the general concepts of substance use stigma, education, prevention, harm reduction and treatment. Public Health majors and minors must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

SBS 1106. Human Sexuality. 3 Credit Hours.

This introductory course explores the biological, psychological, and socio-cultural aspects of human sexuality. Students will have the opportunity to explore human sexuality as it relates to relationships, identities, and lifespan development. Students are encouraged to apply their own knowledge and experiences to this class to facilitate discussion. Public Health majors and minors must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

SBS 1114. Cultural Nutrition. 3 Credit Hours.

This course explores the central role of food in defining, unifying, and sustaining culture and religious expression around the world. It will also survey the traditional health beliefs and practices, especially as they relate to diet, of cultural groups before and after immigration to the United States. Students will investigate health concerns and counseling strategies associated with nutritional intake of the various cultural groups. Students will examine the role of preserving traditional cultural cuisines and related practices as a way of maintaining overall health.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

SBS 1124. Cooking and Presenting Food Fundamentals. 4 Credit Hours.

This course covers the basic concepts of cooking food successfully. It includes the chemistry, biology, sensory qualities, and nutritional aspects of food preparation and delivery. The majority of lab will be spent applying what we learn in the textbook to actual food preparation. Labs that are spent cooking will end in eating and critiquing the recipes prepared. All students are required to adhere to proper sanitation and food safety guidelines, which will be discussed throughout the semester. If you have a food allergy, you are responsible to inform the instructor and strictly abide by your related medical care plan (such as avoidance of the food item). In addition, the course will cover the importance of incorporating aesthetic principles in the presentation of food to the public for wellness and customer satisfaction. These principles will include various themes from the selection of proper garnishes to event-appropriate tableware and plate selection. Each lab will practice aesthetics in the presentation of the day's cooked item.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

SBS 1201. Contemporary Health Issues. 3 Credit Hours.

This undergraduate-level lecture oriented course introduces students to a variety of contemporary health issues. These topics can change from semester to semester but typically will include: understanding stress and change, mental illness and psychosomatic disease, human sexuality, sexually related diseases, infections and HIV, and health eating and exercise. Public Health majors and minors must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

SBS 2001. Biological Foundations of Population Health. 3 Credit Hours.

Biological Foundations for Population Health will focus on the human body in health and disease. This course will provide an overview of the biological mechanisms of disease at the cellular and individual level through human anatomy and physiology terminology and processes. Students will also apply pathophysiology concepts to population health issues including pertinent chronic and infectious diseases.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

SBS 2003. Introduction to Public Health Writing. 1 Credit Hour.

This course will build on concepts developed in your Analytical Reading and Writing GenEd requirement and introduce discipline specific writing skills. This course will review the stages of the writing process which will provide a framework upon which to build the skills needed to become an effective writer in public health. In this course you will learn basic research and academic writing skills including identifying and evaluating sources, paraphrasing, and APA style. The course will also reinforce general writing skills such as paper and paragraph structure, grammar, and mechanics. This course is designed to help you assess the writing skills that you possess and identify areas of improvement/growth to be successful in upper level and writing intensive coursework.

Repeatability: This course may not be repeated for additional credits.

SBS 2101. Disease Prevention and Control. 3 Credit Hours.

This course will focus on the public health study of the nature, prevention, treatment and control of common communicable and non-communicable human diseases, with an examination of the cultural, social, behavioral, biological, and environmental factors involved in promoting health and preventing disease. Public Health majors and minors must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

SBS 2103. Health Psychology and Human Behavior. 3 Credit Hours.

This course provides a comprehensive introduction to the field of health psychology. The intent is to familiarize students with a breadth of information linking biological, psychological, and social factors with overall health and illness, health risks and health behaviors. Emphasis will be on theoretical and evidence-based behavioral and social science approaches to health and wellness. Applications to individual, family, social, and wider societal situations will be explored.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

SBS 2104. Nutrition in the Lifecycle. 3 Credit Hours.

This course explores the specific common health conditions and appropriate corresponding nutrition interventions for each stage of the lifecycle, from preconception to older adults. The course will begin with a brief overview of basic nutrition concepts. It will end with group presentations of an assigned case study involving an individual at one stage of the lifecycle, in which students will provide their nutrition assessment and a proper nutrition intervention plan.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

SBS 2105. Nutrition and the Community. 3 Credit Hours.

This course discusses the importance of translating evidence-based nutrition research into effective programs that support health and prevent chronic disease at the population level. Students will investigate the framework of community based nutrition programs in the context of, and in relation with, other sectors of public health. Students will also gain insight in the challenges involved with designing, implementing, and evaluating nutrition programs, especially those targeting vulnerable subgroups. This course will contain a community service component, such as assisting with local community garden or food pantry activities, which will be the primary pedagogical vehicle to solidify the principles discussed in the course.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

SBS 2106. Perspectives on Lifecycle Nutrition. 2 Credit Hours.

This course is designed to teach students how nutrition principles are adapted to meet the needs and health conditions that occur during each phase in the life course. The course will cover 1) nutrition during preconception, pregnancy and lactation; 2) infant, child, and adolescent nutrition; and 3) nutrition assessment and intervention for adults and older adults (65+). By participating in this class, students will develop the skills to 1) recognize what nutrition-related challenges might occur during each phase in the life cycle, and 2) make age-appropriate recommendations to meet requirements, improve health, and reduce disease risk. This course uniquely encourages students to solve case studies with "patients".

Field of Study Restrictions: Must be enrolled in one of the following Majors: Nursing 4 Year.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

SBS 2201. Health Communication. 3 Credit Hours.

This course will provide a broad overview and exploration of health communication theory and practice, examining the powerful influences of communication on the promotion of health. Health Communication includes the study of efforts to change personal and social behaviors through community interventions and interpersonal means. These interventions can occur through the use of media (including advertising, news, social media, and entertainment content), community based education and communication, provider-patient communication, social support, media and health policy, patient disclosure and compliance, and health information-seeking, among others. The course will thus cover multiple levels, channels, media, and communication technologies, but will focus on the nature of persuasive communications and how communication can be used effectively to persuade people to adopt and maintain health behavior. As the course evolves, students will apply and extend the course concepts to situations observed in their own lives, and in public health contexts, and review past health communication efforts to learn how best to apply lessons learned to future communication efforts. Public Health majors and minors must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

SBS 2203. AIDS and Society. 3 Credit Hours.

This course offers the student the opportunity for an in-depth study of one of the most critical public health issues facing society today. Topics include: current HIV/AIDS information as well as exploration of related issues including sexuality, homophobia, and discrimination, research, international/political implications, and worldwide economic effects. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

SBS 2204. Diet and Weight Management. 3 Credit Hours.

Fundamentals of weight management, including a basic understanding of the role of behavior changes, exercise, and food choices in attaining and maintaining a healthy weight. Emphasis is on a healthy lifestyle; diets don't work. The student should be able, at the conclusion of the course, to recognize what constitutes a healthy diet and lifestyle and have the tools to make the changes needed to attain it. Public Health majors and minors must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

SBS 2205. Coping with Life Stress Workshop. 3 Credit Hours.

This course focuses on the impact of poorly managed stress on physical and emotional health. Coping skills and strategies for effective stress management are reviewed. Individual stress profiles are developed, emphasizing a holistic view of the individual in a rapidly changing society. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better. NOTE: Lab fee required.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

SBS 2216. Ethnicity, Culture and Health. 3 Credit Hours.

One of the goals of Healthy People 2020, the nation's health agenda, is to "achieve health equity, eliminate disparities, and improve health of all groups." This course seeks to encourage students to critically examine how ethnicity and culture impacts health and explore the individual and structural factors that contribute to health disparities. Students will become familiar with the key concepts in the public health literature on race and ethnicity and health disparities. We will also examine how prejudice and discrimination, neighborhood and community context may contribute to health disparities. While global health disparities exist, this course deals with the health issues among urban minority populations in the USA. Students are encouraged to apply their own knowledge and experience to this class to facilitate discussion. Public Health majors and minors must complete this course with a C or better.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Kinesiology, Public Health.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

SBS 2301. Contemporary Slavery and Public Health. 3 Credit Hours.

Modern-day slavery exists in the margins of western consciousness, somehow removed from the cell phones, cars, jewelry, and foods we covet and consume. However, the forced free labor used to produce the materials for these and other commodities around the world perpetuates a devastating legacy that destroys individuals, families, communities, and the Earth itself. This 3 credit hour course will engage undergraduate students in an exploration and analysis of contemporary forms of slavery and human trafficking in order to understand the systems and behaviors driving the issue, the public health implications of trafficking on individual and community health, evidence of the environmental degradation associated with modern slavery, and possibilities for advocacy and intervention. This course aims to enhance critical thinking regarding the intersectionality of global citizenship, consumerism, public health, environmental sustainability, ethics, disparities, power and privilege, and the role of the field of public health in advocating for systematic change on all ecological levels.

Course Attributes: SI, SS

Repeatability: This course may not be repeated for additional credits.

SBS 2302. Maternal and Child Health. 3 Credit Hours.

Reproduction, childbirth, infancy, and development throughout childhood involve specific health needs that many students will address throughout their careers as public health and healthcare professionals. This 3-credit course will apply a social-ecological approach that considers multiple factors that influence maternal, child, and family health, including biological, psychological, social, economic, and environmental factors. Specific topics will include family planning, pregnancy and birth, infant health, and healthcare needs of children. For each topic, the course will identify factors that impact risk, health disparities, and access to care, including disparities related to race/ethnicity and experiences of LGBTQIA+ families, and identify public health programs that address these factors. It aims to foster students' critical thinking about intersectionality and social justice as they relate to maternal and child health (MCH), as well as an examination of associated structural and individual factors.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

SBS 2303. Adolescent Health. 3 Credit Hours.

Physical, social-emotional, and cognitive development throughout adolescence involves specific public health needs that many students will address throughout their careers as public health and healthcare professionals. This 3-credit course will apply a social-ecological approach to adolescent development and public health, which includes biological, psychological, social, economic, and environmental factors. Specific topics include sexual and reproductive health, family and peer relationships, nutrition, violence, substance use, and the role of schools and healthcare. For each topic, the course will identify factors that impact risk and access to equitable care, particularly as they impact populations of different races/ethnicities, LGBTQIA+ youth, and adolescents with special healthcare needs. It aims to foster students' critical thinking about intersectionality and social justice as they relate to adolescent health.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

SBS 2304. HEART Peer Educator Training. 3 Credit Hours.

HEART Peer Educators are Temple University students who focus on promoting campus social and educational environments consisting of lower-risk choices, which reflect the attitudes, behaviors and values of healthy lifestyles. They are dynamic students who are ready to make a significant contribution to the campus community. Peer educators believe in their ability to stimulate personal growth in others as well as in themselves. HEART peer educators have the passion and skills to create programs, find an audience and facilitate discussions. They are trained to facilitate on-campus workshops and programs that focus on sexual health, mental well-being, stress management, sexual assault, alcohol and other drug use, and other general wellness issues. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better. NOTE: This course is for HEART Peer Educators only.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

SBS 2903. Honors Health Psychology and Human Behavior. 3 Credit Hours.

This course provides a comprehensive introduction to the field of health psychology. The intent is to familiarize students with a breadth of information linking biological, psychological, and social factors with overall health and illness, health risks and health behaviors. Emphasis will be on theoretical and evidence-based behavioral and social science approaches to health and wellness. Applications to individual, family, social, and wider societal situations will be explored.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

SBS 3001. Community-Based Participatory Research I. 3 Credit Hours.

This course introduces community-based participatory research (CBPR). CBPR is a collaborative approach that addresses social injustices and public health inequities, particularly at the intersections of class, racial ethnic, indigenous, gender, immigrant, religious, and ability identities. In this course, students will (1) utilize the principles and theoretical foundations of CBPR to discuss and reflect on central concepts, including citizen participation, community development, and collective power; (2) engage in interactive CBPR activities, including identifying community needs and assets, and taking systematic action to resolve community identified problems; and (3) conduct a small-scale project that will generate critical thinking about CBPR approaches and the shifting "locations of power" during various stages of the CBPR process.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

SBS 3103. Counseling Techniques for Health Professionals. 3 Credit Hours.

This course introduces counseling techniques used by health professionals working with individuals and groups. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

SBS 3104. Professional Seminar. 2 Credit Hours.

This course is designed as a professional development course for Public Health majors. This course will help you prepare for your public health internships by developing new and strengthening existing professional skills necessary for entry into the workforce. You will develop and refine necessary marketing materials for your internship and job search including a resume, cover letter, LinkedIn profile and effective interview skills. We will explore and analyze pertinent topics related to population health and professionalism such as effective communication, emotional intelligence, health literacy, and unconscious bias in the workplace.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Public Health.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (SBS 3496 (may be taken concurrently) or 'Y' in CRSB07)

SBS 3105. Fundamentals of Health Education. 3 Credit Hours.

This course explores the science and art of teaching. Included in this course are the beginning skills of becoming an effective facilitator, teacher, and presenter of health education in a variety of settings. Formulating goals and objectives, planning, teaching, evaluating lessons and instructional materials are necessary skills for health education specialists. This course focuses on learning and applying various teaching methods and strategies and practicing these skills in a controlled environment.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Public Health.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (SBS 2103 or 'Y' in CRSB05), (SBS 2101 or 'Y' in CRSB04), and Complete 2 of the following: (SBS 1104 or 'Y' in CRSB01), (SBS 1105 or 'Y' in CRSB02), and (SBS 1106 or 'Y' in CRSB03)

SBS 3382. Independent Study in Public Health. 1 to 6 Credit Hour.

Students in this course pursue supervised independent projects on issues related to public health. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better. NOTE: Registration must be preapproved by faculty before registration.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Public Health.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

SBS 3496. Community-Based Health Program Planning I. 3 Credit Hours.

Community-Based Program Planning I will prepare students to begin to develop skills to create innovative and lasting public health education programs and interventions. Linked to SBS 3596, these two semesters will provide an opportunity to develop all materials needed to plan, implement and evaluate an intervention, including needs assessment, objective development, intervention development and evaluation. This will be done through the mechanism of writing a grant proposal to a fictitious foundation. Public Health majors and minors must complete this course with a C or better. NOTE: This course is the first part of a two-semester, writing intensive capstone. Precedes SBS 3596.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Public Health.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Course Attributes: SI, WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (EPBI 2219 or 'Y' in CREP01), (SBS 2101 or 'Y' in CRSB04), (SBS 2103 (may be taken concurrently) or 'Y' in CRSB05), and Completed 2 of the following: (SBS 1104 or 'Y' in CRSB01), (SBS 1105 or 'Y' in CRSB02), and (SBS 1106 or 'Y' in CRSB03)

SBS 3596. Community-Based Health Program Planning II. 3 Credit Hours.

Community-Based Health Program Planning II will prepare students to finalize the development of a public health education program through the mechanism of writing a grant proposal to a fictitious foundation. This semester will further define the student's public health intervention, developed in SBS 3496, including developing specific goals and objectives and intervention components, critiquing existing programs as well as developing thorough evaluation, marketing and promotion plans and a program budget and budget justification. Public Health majors and minors must complete this course with a C or better.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Public Health.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Course Attributes: SI, WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (SBS 3496 or 'Y' in CRSB07)

SBS 4185. Public Health Internship. 6 Credit Hours.

The Public Health Internship course is designed to be a practical experience that provides an opportunity for students to use the concepts, techniques and theories learned in the classroom. This course is among one of the most crucial components of the Public Health curriculum. It is designed to be a valuable and rewarding experience for both the intern and the agency involved. Public Health Internship helps prepare the intern for a career in Public Health and is intended to give the intern an opportunity to observe, learn, and participate in the various activities of health agencies. Interns are expected to be diligent, thorough, responsible and professional with all assigned tasks during their internships. As a result of their commitment, it is hoped that invaluable knowledge, insight, and professional growth will occur. What you will take away from this experience will depend primarily on what you put into it. A positive attitude and dedication will lead to a positive experience that will be invaluable. Interns are required to complete 300 hours at their fieldwork site over a minimum of twelve (12) weeks. On average, interns should plan to spend 20-25 hours per week at their internship site this semester.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (SBS 3496 or 'Y' in CRSB07), SBS 3104, SBS 3105, and (SBS 3596 (may be taken concurrently) or 'Y' in CRSB06)

SBS 4991. Honors Directed Research: Prevention Research in Public Health. 3 Credit Hours.

This course is designed to provide students with an opportunity to participate in a project carried out by a research team as a research assistant. Students participate in a range of activities on the project, depending on their schedules, their aptitude with particular tasks, and the project needs at various times. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better. NOTE: Registration must be preapproved by faculty.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

Social Studies Education (Elementary) (SSEE)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

SSEE 3161. Teaching of Social Studies: N-6. 3 Credit Hours.

This course addresses issues and methods in teaching social studies at the elementary level. The emphasis is on teaching for understanding, social justice, and investigating resources and curriculum in social studies.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may not be repeated for additional credits.

Social Studies Education (Secondary) (SSES)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

SSES 3278. Methods and Materials in Secondary Social Studies. 3 Credit Hours.

The course focuses on instructional materials and teaching strategies for teaching history and secondary social studies. There is an emphasis on social justice and teaching with documents. Students are required to complete a resource file, unit of study, and several short papers. Also, students will complete the Intermediate Performance assessment in this course.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: EDUC 4389.

Repeatability: This course may not be repeated for additional credits.

SSES 4278. Teaching for Understanding in Secondary Social Studies. 3 Credit Hours.

This course builds on the foundation prepared in SSES 3278: Issues Teaching Secondary Social Studies. The purpose is to develop an understanding of teaching the four major content areas of the social studies (history, geography, economics, and civics and government). The goal is to help prepare candidates to teach these areas in terms of designing curriculum and assessment; adapting strategies from the field; and considering innovative ways to teach by drawing on available resources. The course will cover the important theories of social education and the developmental course of learning history, economics, civics, geography, psychology, sociology, and anthropology. Woven throughout the class will be a discussion of culture and diversity as adolescents encounter the world and prepare for full citizenship and to enter the workforce. SSES 4278 includes a 1-credit field experience. Students are expected to participate in level two fieldwork in a school setting for 30 hours that addresses one or more of the content areas of social studies (history, geography, economics, civics, psychology, anthropology, and/or sociology). Through field experiences, readings, projects and papers, and class discussions the following questions will be addressed: How will we prepare adolescents for a world in which respect for the environment, diversity, and the principles of democracy have become increasingly important? How can activities be developed that embody the principles of adolescents' concept development in the social studies? How can we create learning experiences that include and value all students' backgrounds? NOTE: Clearances required.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: EDUC 4389.

Repeatability: This course may not be repeated for additional credits.

Social Work - Undergraduate (SSWU)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

SSWU 0822. Human Behavior and the Photographic Image. 3 Credit Hours.

How do photographs become more than just a pile of disparate images? Is there more to photography than that single "decisive moment" in the hunt and capture of an image? How do photographers comment on issues that are important to them? How can photographs tell a story? Is there a way one can use the art of photography to elicit change? In this class, students will use their digital cameras to investigate individual photographs, as well as series of photographs. We will look at photography in its historical context -- at the advent of documentary photography and photojournalism, and at narrative photography in its more contemporary form, as photographers use it to chronicle their own lives and to tell a story. Through the exercises of looking at and making photographic images, several core concepts of social work, along with theories of human behavior in the social environment, will be introduced. Students will learn not only about the place photography holds in our culture, but our culture itself, and the students' place in that culture. Students will critically analyze published photographs, as well as photographs made during the class. The semester will culminate in a class exhibition where students will be given the opportunity to present their photographs to the public, demonstrating their understanding of human behavior in the social environment. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed ART 0822, GAD 0822 or PHOT 0822.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

SSWU 1002. Communication in Social Work Practice. 3 Credit Hours.

Communication is a major component of all social work practice across all systems levels. This course provides students with opportunities to develop knowledge, values, and skills necessary for effective communication in social work practice with individuals, families, groups, communities, organizations, and in policy arenas. Verbal, nonverbal, and written communication skills are essential for effective social work practice. Understanding and application of these communication skills are stressed in this course. NOTE: Open to majors and minors.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate.

Repeatability: This course may not be repeated for additional credits.

SSWU 2003. The History and Values of Social Welfare. 3 Credit Hours.

This course provides an overview of the events that have influenced the provision of social services to people in the United States. The course considers the historical, political, economic, and cultural contexts in which social work and social welfare policy have evolved. Important historical events include the Elizabethan Poor Laws, the Progressive Era, the Great Depression, New Deal, Social Security Act, Civil Rights Movement, War on Poverty, the Reagan Revolution, and the policies of the Clinton, Bush and Obama administrations. The course considers the unique characteristics of the welfare system in the United States and compares it to systems in other countries. It also identifies current dilemmas facing the welfare state and efforts to further decrease the role of the federal government in social welfare programs. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work - Undergraduate.

Course Attributes: AC

Repeatability: This course may not be repeated for additional credits.

SSWU 2004. Social Welfare in the United States. 3 Credit Hours.

This course is the second half of a two-course sequence concerned with social welfare policy. The course is centered on the analysis of social problems and social policies in the United States. It addresses competing values, interest groups, conceptual approaches and processes involved in policymaking including implementation and evaluation. The course considers the ways in which policymakers have addressed human needs in specific areas. Topics include: different ways of defining poverty; the two major forms of income maintenance in the United States (social insurance and public assistance); health (both biomedical and social); substance abuse, hunger, and the service needs of children, older people, and those with disordered mental states.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Social Work.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in SSWU 2003.

SSWU 2005. Introduction to the Social Work Profession I. 3 Credit Hours.

Introduction to the Social Work Profession I is the first of two 3-credit required courses in the BSW Program for social work majors. As an introductory social work course, SSWU 2005 introduces students to the BSW curriculum, the National Association of Social Workers (NASW) Code of Ethics, the Council for Social Work Education (CSWE) Educational Policy & Accreditation Standards (EPAS), and generalist social work practice. Additionally, because communication is a major component of all social work practice across all systems levels, this course provides students with opportunities to develop knowledge, values and skills necessary for effective communication in social work practice with individuals, families, groups, communities, and organizations. While this course focuses on individual, family, and group practice it is with the understanding social work professionals acknowledge individuals are a part of a larger environment. This course will emphasize this relationship between individuals and their environment. As such, this course will enable students to develop an understanding of various forms of oppression and injustice that are prevalent in U.S. society and their impact on individuals, families, and groups. There is a focus on populations at risk, diversity, issues of social and economic justice, and human rights as they relate to work with people in client status, the social service delivery system, and society as a whole.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (HRPR 1001 (C or higher; may be taken concurrently) or 'Y' in CRHR01), SOC 1176 (may be taken concurrently), PSY 1001 (may be taken concurrently), and (STRC 1111 (may be taken concurrently) or CSI 1111 (may be taken concurrently))

SSWU 2006. Introduction to the Social Work Profession II. 3 Credit Hours.

Introduction to the Social Work Profession II is the second introductory course in the Intro to the Social Work Profession two-course sequence. This course is taken after successful completion of Introduction to the Social Work Profession I, and is offered in the spring semester, as well as summer session II. Introduction to the Social Work Profession II builds on Introduction to the Social Work Profession I continuing to emphasize the interplay between the individual and the social environment. Theory, skills, values, and professional self-development related to community are covered. Content includes issues that affect service delivery such as racism, sexism, heterosexism, and classism. Populations at risk, diversity, and issues of social and economic justice will continue to be highlighted. Communication remains a major component of social work practice at all levels. This course provides students with additional opportunities to develop knowledge, values and skills necessary for effective communication in social work practice with individuals, families, groups, communities, and organizations. Basic communication skills are revisited, while advanced skills are introduced.

Co-requisites: SSWU 2089.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (SSWU 2005 or 'Y' in CRSW05)

SSWU 2089. Service Learning in the Social Work Profession. 2 Credit Hours.

In this course students will arrange a 60-hour service learning experience, or a series of experiences totaling 60 hours. Through this experience students will develop an understanding of the social service delivery system at multiple levels, as they engage in and reflect in selected service tasks and test their own suitability for social work as a career. The purpose of this lab is to engage students in a service learning experience where they will have the opportunity to apply the skills, values, and principals discussed in SSWU 2005 and SSWU 2006. Students' academic learning will be enriched and meaningful civic learning will take place as they integrate textbook concepts with community needs. Assignments will require students to utilize critical thinking while they combine course themes and text content with experience, analysis, and action.

Co-requisites: SSWU 2006.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (SSWU 2005 or 'Y' in CRSW05)

SSWU 3000. Special Topics in Social Work. 1 to 3 Credit Hour.

This course is designed to explore contemporary issues in social work practice. The design of this course provides students with an opportunity to develop knowledge of specific emerging and current social work issues or specific social work practice topics. The variable course credit allows instructors to design a wide range of courses that focus on diverse topics relevant for social work students.

Repeatability: This course may be repeated for additional credit.

SSWU 3003. History and Values of Social Welfare. 3 Credit Hours.

The History and Values of Social Welfare provides an overview of social welfare policies and institutions and introduces the basic skills in social problem and policy analysis that will be further developed in the second policy course that follows (SSWU 3004/ formerly 2004).

Field of Study Restrictions: Must be enrolled in one of the following Majors: Social Work - Undergraduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (SSWU 2005 (may be taken concurrently) or 'Y' in CRSW05)

SSWU 3004. Social Welfare in the US. 3 Credit Hours.

This course is the second half of a two-course sequence focused on social welfare policy. The purpose of the course is to introduce students to the arena of social policy analysis, policy practice, and advocacy. The course explores the influence of competing values, theories, and interest groups on policy making. We also consider federal and state budget basics and policy advocacy as well as the role of the judiciary. Special attention is given to the influence of demographic characteristics in social policy formation. Additionally, the course gives students practice writing a policy brief and in organizing and presenting a policy analysis that addresses the legislative history, implementation, and evaluation of a social policy. This conceptual approach to policy practice can be used effectively in many situations.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Social Work - Undergraduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (SSWU 3003 or 'Y' in CRSW03) and (SSWU 2006 (may be taken concurrently) or 'Y' in CRSW01)

SSWU 3005. Helping Processes in Social Work I. 3 Credit Hours.

In this course, students are introduced to the value base, knowledge and skills of the social work profession as well as the importance of the interplay between the individual and the social environment. The course introduces students to the generalist model of social work practice, which includes practice with individuals, families, groups, communities, and organizations. It explores theories, skills, values, and professional self development in community practice and issues that affect service delivery, such as racism, sexism, heterosexism, and classism. Focus is placed on populations at risk, diversity, and issues of social and economic justice as they relate to work with clients, the social service delivery system, and society as a whole. Students begin to examine their own abilities for social work as a discipline and a career and also engage in community and agency experiences outside of class.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work - Undergraduate.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Co-requisites: SSWU 3015.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1061 or PSY 1001) and SOC 1176.

SSWU 3006. Helping Processes in Social Work II. 3 Credit Hours.

This course builds upon the beginning foundation of professional social work introduced in Social Work 3005. The focus of this continuing course, however, is on individual, family, and group practice. The course continues to examine the forms of oppression and injustice, populations at risk, diversity, and human rights as they relate to work with people in client status, the social service delivery system, and society as a whole.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate.

Co-requisites: SSWU 3016.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in SSWU 3005.

SSWU 3007. Human Behavior in the Social Environment. 3 Credit Hours.

This course is designed to explore the theoretical knowledge-base of social work in relation to human behavior and human development within the context of the social environment. Theories of human behavior are identified as undergirding the practice of social work. The course begins with an exploration of the role of human behavior theory, its limitations and strengths, and proceeds to draw from theories to provide knowledge of human development and human behavior throughout the life course from a person-in-environment perspective. The mutual influence of transactions between individuals, families, communities, social institutions and societies are explored using a social systems perspective. Interrelationships among biological, psychological, social and cultural systems as they affect and are affected by human behavior are studied using a number of interdisciplinary theoretical approaches.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any BIOL course numbered 1000 to 4999 (may be taken concurrently) or any KINS course numbered 1000 to 4999 (may be taken concurrently)), (PSY 1061 (may be taken concurrently) or PSY 1001 (may be taken concurrently)), SOC 1176 (may be taken concurrently), and (any STAT course numbered 1000 to 4999 (may be taken concurrently), MATH 1013 (may be taken concurrently), PSY 1003 (may be taken concurrently), PSY 1167 (may be taken concurrently), SOC 1167 (may be taken concurrently), or SOC 1967 (may be taken concurrently))

SSWU 3009. Human Behavior and the Social Environment: Communities and Organizations. 3 Credit Hours.

This course examines the practice of social service delivery within its organizational and environmental contexts. Social services are delivered within organizations that have varying degrees of economic, political and cultural complexity. Professional and organizational values and expectations are constantly in dynamic tension with each other. The course explores the impact of these tensions on the quality and quantity of services and addresses the professional social worker's role as a proactive force partnering with clients to advocate for services and systems improvement.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (SSWU 3007 or 'Y' in CRSW04)

SSWU 3010. Special Topics in Social Work. 1 to 3 Credit Hour.

This course is designed to explore contemporary issues in social work practice. The design of this course provides students with an opportunity to develop knowledge of specific emerging and current social work issues or specific social work practice topics. The variable course credit allows instructors to design a wide range of courses that focus on diverse topics relevant for social work students.

Repeatability: This course may be repeated for additional credit.

SSWU 3011. The Social Worker in the Group. 3 Credit Hours.

The purpose of this course is to introduce students to the important and prevalent role of groups in generalist social work practice and to provide the knowledge, experience, and skills necessary for group leadership, participation, and evaluation at the BSW level. Students will study, experience, and identify the impact of personal, interpersonal, cultural, and environmental factors on group dynamics and their personal reactions to a group process. Students will also learn content to prepare them for undertaking assessments for group membership; designing and conducting task and educational groups; anticipating practice challenges; and grounding group planning and implementation in research.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (SSWU 2006 (may be taken concurrently) or 'Y' in CRSW01)

SSWU 3015. Lab for Helping Processes in Social Work I. 1 Credit Hour.

Students will experience several field experiences through which they can engage in selective service tasks, develop an understanding of human service organizations and of the social service delivery system. Through these experiences they will have the opportunity to test their own suitability for social work as a career.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Co-requisites: SSWU 3005.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (PSY 1061 or PSY 1001) and SOC 1176.

SSWU 3016. Lab for Helping Processes in Social Work II. 1 Credit Hour.

Students will arrange a service learning experience through Temple University's Office of Community Service. Through this experience students will begin to develop an understanding of the social service delivery system at multiple levels, as they engage in selected service tasks and continue to assess their own suitability for social work as a career.

Co-requisites: SSWU 3006.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in SSWU 3005.

SSWU 3096. Institutional Racism. 3 Credit Hours.

This course is designed to introduce and sensitize students to the forms, practices, and effects of racism. The course examines the historical foundations of racism as an ideology, various racial theories and theories of racism, and the practices that perpetuate institutional systems which continue to limit the opportunities afforded to persons of color. Specifically, it emphasizes the role of institutional racism in education, human services, housing, law, business, and prisons. The complex interplay among racism and other institutionalized systems of oppression (e.g., sexism, ageism, heterosexism, ethnocentrism, and anti-Semitism) are explored throughout the semester. NOTE: This is a Writing Intensive course.

Course Attributes: SF, WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (SSWU 3007 (may be taken concurrently) or 'Y' in CRSW04)

SSWU 4000. Special Topics in Social Work. 1 to 3 Credit Hour.

This special topics course can explore a range of issue areas of importance to social work and give students an opportunity to study topics that are not a standard part of the curriculum. Each semester, an instructor can create a course in an area they see as particularly relevant. This course may meet the Social Work Elective requirement. Students who are seriously interested in the content must meet with the instructor to obtain authorization to register.

Repeatability: This course may be repeated for additional credit.

SSWU 4001. Seminar in Social Work Practice. 3 Credit Hours.

This course is the first semester of a two-semester integrative practice course for senior Social Work majors. Students use the seminar format to learn empowerment based social work practice skills and to apply the social work curricular areas of human behavior in the social environment, social welfare policy, and research. The background acquired from the Core or General Education curriculum and the content of the professionally related courses are used to inform social work practice. An important focus of the senior seminar is the agency environment in which the students practice. The formal and informal systems in which students do their fieldwork comprise the foci of the senior seminar classes. The classroom instructor is the liaison for the students' fieldwork agencies. This maximizes the opportunity to create an intense, supportive, and integrative educational experience. Students stay in the same section and field agency throughout both fall and spring semesters. Previously acquired skills are enhanced while new skills are developed so that students acquire the competencies for beginning generalist social work practice at all levels with systems of all sizes. NOTE: It is recommended that students take SSWU 3096, Institutional Racism, before entering this Senior Seminar, but if this is not possible, it may be taken in the fall semester of senior year.

Co-requisites: SSWU 4396.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (SSWU 3004, SSWU 2004, or 'Y' in CRSW06)

SSWU 4002. Seminar in Social Work Practice. 3 Credit Hours.

This course is the second semester of a two-semester integrative practice course for senior social work majors. Students use the seminar format to learn empowerment based social work practice skills and to apply the social work curricular areas of human behavior in the social environment, social welfare policy, and research. The background acquired from the Core or General Education curriculum and the content of the professionally related courses are used to inform social work practice. An important focus of both the Social Work 4001 and Social Work 3009 is the agency environment in which the students practice. The realities of the formal and informal systems in which students do their fieldwork are constant foci of the senior seminar classes. The classroom instructor is the liaison for the students' fieldwork agencies. This maximizes the opportunity to create an intense, supportive and integrative educational experience. Students stay in the same section and field agency throughout both fall and spring semesters. Previously acquired skills are enhanced while new skills are developed so that students acquire the competencies for beginning generalist social work practice at all levels with systems of all sizes.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Social Work - Undergraduate.

Co-requisites: SSWU 4287, SSWU 4407.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in SSWU 4001.

SSWU 4107. BSW Field Seminar I. 2 Credit Hours.

Field Seminar is designed to integrate the knowledge, values, and skills presented in the classroom with the field practicum experience. Students will utilize field seminar for placement agency exploration and problem-solving, including but not limited to ethical dilemmas, supervision, client interventions, and project development, with assistance from peers and course instructor/s.

Co-requisites: SSWU 4187.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (SSWU 3009 or 'Y' in CRSW02)

SSWU 4187. Social Work Field Practicum I. 5 Credit Hours.

This first semester of a two-semester practicum offers the opportunity to practice social work in selected social agencies. The student spends 200 supervised hours in the field. This generalist experience provides students the opportunity to apply the knowledge, skills, and values learned in research, policy, human behavior, and practice classes. It allows them to connect social work theory with practice and to develop increasing depth in knowledge and skills. These include the development of communication, problem-solving, and networking skills within various focal systems and demonstration of purposeful use of self within a culturally competent empowerment model of practice. NOTE: For details on the field placement process, refer to the Field Education Manual available from the Field Education Office.

Co-requisites: SSWU 4001, SSWU 4396.

Repeatability: This course may be repeated for additional credit.

SSWU 4207. BSW Field Seminar II. 2 Credit Hours.

Field Seminar is designed to integrate the knowledge, values, and skills presented in the classroom with the field practicum experience. Students will utilize field seminar for placement agency exploration and problem-solving, including but not limited to ethical dilemmas, supervision, client interventions, and project development, with assistance from peers and course instructor/s.

Department Restrictions: Must be enrolled in one of the following Departments: CPHSW: Social Work.

Co-requisites: SSWU 4287.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in SSWU 4107.

SSWU 4287. Social Work Field Practicum II. 5 Credit Hours.

This second semester of a two-semester practicum offers the opportunity to practice social work in selected social agencies. The student spends 200 supervised hours in the field. This generalist experience provides students the opportunity to apply the knowledge, skills, and values learned in Research, Policy, Human Behavior, and Practice classes. It allows them to connect social work theory with practice and to develop increasing depth in knowledge and skills. These include the development of communication, problem-solving, and networking skills within various focal systems and demonstration of purposeful use of self within a culturally competent empowerment model of practice.

Co-requisites: SSWU 4002, SSWU 4407.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (SSWU 4001, SSWU 4187, and SSWU 4396)

SSWU 4301. Women and Social Policy. 3 Credit Hours.

This course examines policy issues that have a major influence on the agency and well-being of women. It identifies values, attitudes, and belief systems about females that have contributed both to the problems women and girls experience and to the conceptualization and implementation of related policy responses in political, social, and economic areas. Policy areas covered include economic status, labor force participation, family, caregiving, reproduction, substance abuse, violence, health, mental health, and international issues affecting women.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

SSWU 4302. Emotional Disorders in Children and Adolescents. 3 Credit Hours.

This course provides students with a knowledge base in emotional and behavioral difficulties of children and adolescents from the perspective of social work. Students become familiar with the current literature in the field of child mental health. This includes knowledge about specific emotional and behavioral problems, theoretical perspectives for understanding child mental health and populations at risk, and current practices with children and families.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

SSWU 4303. Social Work with the Homeless. 3 Credit Hours.

This course provides a framework for the analysis of social policies and programs related to the social problems of homelessness in the United States. Although the focus of the course is on contemporary issues of homelessness, the approach includes an historical perspective in order to explore the enduring legacy of early interventions and approaches to the relief and social control of marginalized populations. The implications of differing viewpoints and alternative problem definitions for policy and service delivery are considered. The course explores shifts in housing policies. Additionally, employment programs are discussed in some detail to demonstrate their impact on the increasing numbers of Americans who are homeless.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

SSWU 4304. HIV/AIDS and Social Work: Prevention and Practice. 3 Credit Hours.

This course provides a comprehensive overview of HIV/AIDS, including biomedical, psychological, sociological, and global considerations for prevention and care. The course is intended to familiarize students with current knowledge for culturally competent direct social work practice with HIV-positive individuals and their families. In addition, attention is focused on organizational, community, and policy-level responses to AIDS. Specific topics include medical and cultural origins of HIV; multilevel prevention strategies and barriers to their enactment, including stigma; legal and ethical aspects of prevention, testing, and treatment; psychosocial issues for families of HIV-positive persons, including the implications of grieving, death, and dying; clinical skills in assisting HIV-positive clients/patients; ways to assess comprehensiveness of services offered in and for varying communities; social workers' varying roles in responding to AIDS as a social and health problem; and current research and policy implications of the illness. NOTE: Includes a minimum of 12 hours of volunteer work related to HIV/AIDS.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

SSWU 4305. Health Care Policy. 3 Credit Hours.

This course traces the evolution of health care policy in the United States and the changing roles of social workers in health care over time. A range of specific issues are discussed including access to care, quality of care, cost and financing of care as well as specific topics such as health disparities, AIDS, homelessness, and health care in prisons. The course also considers the way selected other countries have organized their health systems, the values that have informed their decisions, and the trade-offs reflected.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

SSWU 4306. Child Welfare Policy. 3 Credit Hours.

This course will explore the historical, philosophical, legal, social, political, and economic influences on the development of child welfare services. Selected aspects of children's lives will be examined to understand and analyze the state of children in the United States and the effects of state intervention in the lives of children and their families. A range of services from family supports to foster care, kinship care, adoption, and family preservation will be examined. Issues of access and equity, gender, differential needs and treatment of children based on race, socioeconomic status, and family type will frame the analyses. Comparisons between the U.S. and other countries will be made to address changes for the future.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

SSWU 4307. Alcohol and Substance Abuse. 3 Credit Hours.

This course provides students with current information about alcohol and other substance abuse. Using ecosystems and family systems frameworks, information is presented regarding the bio-psycho-social impact of alcohol and other substance abuse on individual and family functioning. Particular attention is given to treatment options and resources for change.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

SSWU 4308. Social Transformation. 3 Credit Hours.

This is an exploration of theories of social transformation with particular focus on analyzing and addressing societal oppression and injustice. Course topics include dynamics of empowerment and self-determination, social movements and collective action, and the risks and rewards of being a change agent. Emphasis is on participatory learning and practical application in social work and human service settings.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

SSWU 4309. Societal Responses to Aging. 3 Credit Hours.

This course explores public and private resources, the need for social and political action, the network of services to meet the needs of individuals and their families, present policies and practice in income maintenance, health, housing, safety, and social status. Public-private sponsorship, cost, accountability, benefit levels and administration are also explored. Student social action projects are completed and expanded.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

SSWU 4311. Law and Practice of Human Services. 3 Credit Hours.

This course provides an introduction to the law as it affects the human services professional and the practice of social work. The course provides an overview of major areas of the law as they relate to juveniles, families, and the elderly. It also includes a review of professional responsibilities including informed consent, privileged communication, malpractice laws and the building of effective social work/legal terms.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

SSWU 4312. Loss and Grief. 3 Credit Hours.

This course examines the dynamics of loss, the stress of grief and mourning, societal attitudes about death, and cultural variations in dealing with loss and bereavement practices. The course aims to help students explore and examine personal meanings about loss and to prepare them to be responsive and helpful as social workers working with those experiencing loss and grief. Class sessions combine cognitive and experiential material.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate.

Repeatability: This course may not be repeated for additional credits.

SSWU 4314. Beyond the Binary: Intersections of Gender, Sexuality, and Health. 3 Credit Hours.

Gender and sexuality health and identity are important aspects of the overall human experience. This course will provide an opportunity to explore the influence of social construction on development of gender and sexual identities, roles, expectations, and behavior. The intersection of body image, trauma, lived experiences, beliefs, values and expectations and how these may affect expressions of gender and sexuality will be discussed. The intersection of socioeconomic status, race, culture, religion, and geographical location will be examined in regards to gender and sexuality as a whole and access to reproductive healthcare specifically. Sexuality education policy will be considered on their priorities, assumptions, and potential effectiveness. Students will reflect on readings, class discussions, personal beliefs/values and how these may affect their future professional lives in the helping professions of social work, public health, nursing, education, and others. Note that the subject matter in this course may be considered sensitive to many, and respectful, mature engagement throughout the work is expected.

Repeatability: This course may not be repeated for additional credits.

SSWU 4396. Introduction to Social Research. 3 Credit Hours.

An introduction to the philosophy, concepts, principles, and methods of empirical research in the social and behavioral sciences. Characteristic stages and formats of social research are reviewed, with the primary aim of developing beginning competence in the critical assessment of published research and use of research techniques.

Co-requisites: SSWU 4001.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (SSWU 3004 or 'Y' in CRSW06)

SSWU 4407. Evaluating Programs and Practice in Social Work. 3 Credit Hours.

This course is designed to introduce students to the range of activities and methods included in program evaluation. These are examined in the larger context within which programs exist, the specific stage of program development, and the ends to which information is to be used. Students will learn the historical context of accountability and development of program evaluation; the nature, substance and role of evaluation research; the inherent and contextual constraints and potentialities of program evaluation; the role and use of program evaluation in relation to planning, administration, and social policy; the relationship between program evaluation and practice at the individual and program levels; and the options available in doing program evaluation.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Social Work.

Co-requisites: SSWU 4002, SSWU 4287.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in SSWU 3009, SSWU 4001, SSWU 4396, and SSWU 4187.

SSWU 4482. Independent Study in Social Work. 1 to 6 Credit Hour.

In this course, a program is developed by instructor and student to permit the study of issues of interest to the student and relevant to social welfare and social work. Students must meet with the faculty member within the first week of the term and agree on the topic area(s), readings, graded assignments, and due dates. NOTE: Registration for this course requires prior consent from the faculty member with whom the student wishes to study. An academic advisor will register the student once the instructor has agreed and the student communicates this information to the advisor. Also, a study plan must be submitted and preapproved by the instructor and the director of the BSW program.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate.

Repeatability: This course may be repeated for additional credit.

Sociology (SOC)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

SOC 0817. Youth Cultures. 3 Credit Hours.

Do you listen to hip hop, spend all your time in Second Life, dress up like a cartoon character and go to anime fairs, or go skateboarding every day with your friends? Then you're part of the phenomenon called youth culture. Often related to gender, race, class and socio-economic circumstances, youth cultures enable young people to try on identities as they work their way to a clearer sense of self. Empowered by new technology tools and with the luxury of infinite virtual space, young people today can explore identities in ways not available to previous generations. Students in this class will investigate several youth cultures, looking closely at what it means to belong. They will also come to appreciate how the media and marketing construct youth identities and define youth cultures around the world. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed ANTH 0817, ASST 0817 or EDUC 0817/0917.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

SOC 0818. Human Sexuality. 3 Credit Hours.

We often think about sexuality in terms of the physical and reproductive aspects of sex. But our sexuality is complex and dynamic. We will address this dynamic complexity as we explore the biological, psychological, relational, and cultural aspects of sexuality. The goal of this course is to broaden your perspective of human sexuality, and deepen your understanding and awareness of your own sexuality. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: PSY 0818/0918, SOC 0918.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

SOC 0825. Quantitative Methods in the Social Sciences. 4 Credit Hours.

Psychological, political, social, and economic arguments and knowledge frequently depend on the use of numerical data. A psychologist might hypothesize that I.Q. is attributable to environmental or genetic factors; a politician might claim that hand gun control legislation will reduce crime; a sociologist might assert that social mobility is more limited in the United States than in other countries, and an economist might declare that globalization lowers the incomes of U.S. workers. How can we evaluate these arguments? Using examples from psychology, sociology, political science, and economics, students will examine how social science methods and statistics help us understand the social world. The goal is to become critical consumers of quantitative material that appears in scholarship, the media, and everyday life. NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed SOC 0925, POLS 0825, POLS 0925, PSY 0825, or ANTH 0825.

Course Attributes: GQ

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 0701, MATH 0702, 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC3A, 'Y' in MC6A, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

SOC 0829. The History & Significance of Race in America. 3 Credit Hours.

Why were relations between Native Americans and whites violent almost from the beginning of European settlement? How could slavery thrive in a society founded on the principle that "all men are created equal"? How comparable were the experiences of Irish, Jewish, and Italian immigrants, and why did people in the early 20th century think of them as separate "races"? What were the causes and consequences of Japanese Americans' internment in military camps during World War II? Are today's Mexican immigrants unique, or do they have something in common with earlier immigrants? Using a variety of written sources and outstanding documentaries, this course examines the racial diversity of America and its enduring consequences. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: African American Studies 0829, Africology and African American Studies 0829, Anthropology 0829, Geography and Urban Studies 0829, History 0829, Political Science 0829/0929, Sociology 0829, 0929, 1376, 1396, R059, or X059.

Course Attributes: GD, SI

Repeatability: This course may not be repeated for additional credits.

SOC 0831. Immigration and the American Dream. 3 Credit Hours.

As a Temple student, you go to school and live in a city full of immigrants. Perhaps your own relatives were immigrants to the United States. But have you ever listened to their stories? With an historical and sociological framework as a basis, we will take an in-depth and more personal look at the immigrant experience as expressed through the immigrants' own voices in literature and film. Topics explored include: assimilation, cultural identity and Americanization, exploitation and the American Dream, ethnic communities, gender, discrimination and stereotyping. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0831, CRIT 0831, History 0831, Italian 0831/0931, Russian 0831, or SPAN 0831/0931.

Course Attributes: GD, SI

Repeatability: This course may not be repeated for additional credits.

SOC 0832. Politics of Identity in America. 3 Credit Hours.

Gay or straight. Black or white. Male or female. What do these different group identities mean to Americans? How do they influence our politics? Should we celebrate or downplay our diversity? This course explores how we think about others and ourselves as members of different groups and what consequences it has for how we treat one another. Our fundamental social identities can be a source of power or of powerlessness, a justification for inequality or for bold social reform. Students learn about the importance of race, class, gender and sexual orientation across a variety of important contexts, such as the family, workplace, schools, and popular culture and the implications these identities have on our daily lives. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed Gender, Sexuality & Women's Studies 0832/0932, History 0832, Political Science 0832/0932, or Women's Studies 0832/0932.

Course Attributes: GD, SI

Repeatability: This course may not be repeated for additional credits.

SOC 0833. Race & Poverty in the Americas. 3 Credit Hours.

The transatlantic slave trade was one of the most brutal and momentous experiences in human history. Attitudes toward Latino, Caribbean, African, and Asian immigrants in the United States today can only be fully understood in the contexts of slavery and the "structural racism," "symbolic violence" (not to mention outright physical violence), and social inequalities that slavery has spawned throughout the region. Although focusing primarily on the United States, we will also study the present entanglements of poverty and race in Brazil, Haiti, and other selected nations of "The New World," placing the U.S. (and Philadelphia in particular) experience in this historical context. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed REL 0833/0933, ANTH 0833, or LAS 0833/0933.

Course Attributes: GD, SI

Repeatability: This course may not be repeated for additional credits.

SOC 0835. Ethnicity and the Immigrant Experience in the U.S.. 3 Credit Hours.

How do immigrants learn to become American? How does living an ethnic identity vary for different groups? When does ethnicity become a chosen identity or an unwanted label? How do we learn to value some aspects of ethnicity but not others? What are markers of ethnicity? How do language, food, music, family and community work to provide authenticity to the American immigrant experience? What happens to ethnicity with assimilation to the American way of life? Can ethnicity combat the tidal social expectations to conform to the dominant culture? Using a variety of written materials including novels that explore the ethnic identity of different groups, this course raises questions about how ethnicity and American identity are connected. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: Sociology 0835, 0935, 1476, 1496, R064, X064.

Course Attributes: GD

Repeatability: This course may not be repeated for additional credits.

SOC 0845. Deadly Contagions: Past, Present, and Future Pandemics. 3 Credit Hours.

Over the course of recorded history, infectious diseases have been responsible for the deaths of hundreds of millions of humans. Hundreds of millions - perhaps billions - more suffered terrible and sometimes lasting illness due to their encounters with pathogens. What drives deadly contagions? Can they be stopped, and if so, how? What if anything can be learned from past pandemics to guide us in the present and the future? This course combines sociological, historical, and epidemiological perspectives on infectious diseases. We will consider contagions as biological and medical events, but also as products - and producers - of social, political, and economic systems and inequalities. We will explore the concept of social contagions (for example, the spread of fears, misinformation, behaviors, and attitudes) as well. Special emphasis is placed on understanding how the centuries-long processes of globalization and urbanization have shaped epidemics and pandemics in the past and the present, and how these and other forces, like climate change and mass migrations, are likely to affect the nature of infectious diseases in the future. A basic goal of our scholarly explorations is understanding how to prevent needless deaths during the epidemics and pandemics to come.

Course Attributes: GB, SI

Repeatability: This course may not be repeated for additional credits.

SOC 0851. Gender in America. 3 Credit Hours.

Being a man or a woman means feeling like a man or a woman. People display gender by learning the routines and expectations associated with being male or female. How do people learn gender? How does living in a gendered society lead to differences in power and opportunities between men and women? How do race, ethnicity and sexuality affect the way gender is experienced for these different groups? How does gender acquire such important meaning in terms of identity and behavior? Using a variety of written materials including novels that explore gender identity construction, this course looks at how gender has become such a prominent feature of life in America. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: Gender, Sexuality & Women's Studies 0851; Sociology 0851, 1676, 1696, C081, X081; Women's Studies 0851, 1676, 1696, C081, X081.

Course Attributes: GU, SI

Repeatability: This course may not be repeated for additional credits.

SOC 0857. Sport & Leisure in American Society. 3 Credit Hours.

Explore the complexity and diversity of American society through the study of sport and leisure. To what extent does the way we play or spectate sports, the way we plan or experience leisure time, reflect American values? As we trace a brief history of the United States through the lens of sport and leisure, we will observe how concepts of freedom, democracy and equality are tested through time. Issues of race, ethnicity, gender, age, disability, and socio-economic class will be prominent as we observe American ideals both upheld and contradicted in the context of the way Americans recreate. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed AAAS 0857, AAS 0857, STHM 0857 or REL 0957.

Course Attributes: GU

Repeatability: This course may not be repeated for additional credits.

SOC 0861. Urban Dynamics: Global, Regional, and Local Connections. 3 Credit Hours.

Cities are a study in contrast - both a source of opportunity and a place where great wealth and poverty coincide. U.S. cities face enormous challenges as globalization has sparked a new era of urban innovation, yet has also intensified inequality and spurred new technologies of social control. This course asks: How have U.S. cities changed over the last century? How is globalization impacting the lives and opportunities of city dwellers? How do gender, age, race/ethnicity, class, and citizenship affect urban residents' experiences? How do urban policies and social movements advance or impede social justice across groups and places? Course topics include the social, economic, and political forces restructuring cities, inequality and diversity in the city, cities in the global economy, and the future of cities. Students cannot receive credit for this course if they have successfully completed CTRP 0861, CRP 0861 or SOC 0861.

Course Attributes: GU, SI

Repeatability: This course may not be repeated for additional credits.

SOC 0862. Development & Globalization. 3 Credit Hours.

Use historical and case study methods to study the differences between rich and poor nations and the varied strategies available for development in a globalizing world. Examine the challenges facing developing countries in historical and contemporary context and analyze the main social, cultural, and political factors that interact with the dynamic forces of the world economy. These include imperialism/colonialism, state formation, labor migration, demographic trends, gender issues in development, religious movements and nationalism, the challenges to national sovereignty, waves of democratization, culture and mass media, struggles for human rights, environmental sustainability, the advantages and disadvantages of globalization, and movements of resistance. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: SOC 0962, History 0862, POLS 0862/0962, or GUS 0862.

Course Attributes: GG, SI

Repeatability: This course may not be repeated for additional credits.

SOC 0918. Honors Human Sexuality. 3 Credit Hours.

Our sexuality is a core part of being human. We often think about sexuality in terms of the physical and reproductive aspects of sex. But our sexuality is complex and dynamic. We will address this dynamic complexity as we explore the physical, psychological, relational, and cultural aspects of sexuality. The goal of this course is to broaden your perspective of human sexuality, and deepen your understanding and awareness of your own sexuality and the many influences on this essential part of yourself. (This is an Honors course.) NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: PSY 0818/0918, SOC 0818.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GB, HO

Repeatability: This course may not be repeated for additional credits.

SOC 0925. Honors Quantitative Methods in the Social Sciences. 4 Credit Hours.

Psychological, political, social, and economic arguments and knowledge frequently depend on the use of numerical data. A psychologist might hypothesize that I.Q. is attributable to environmental or genetic factors; a politician might claim that hand gun control legislation will reduce crime; a sociologist might assert that social mobility is more limited in the United States than in other countries, and an economist might declare that globalization lowers the incomes of U.S. workers. How can we evaluate these arguments? Using examples from psychology, sociology, political science, and economics, students will examine how social science methods and statistics help us understand the social world. The goal is to become critical consumers of quantitative material that appears in scholarship, the media, and everyday life. (This is an Honors course.) NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: SOC 0825, POLS 0825, POLS 0925, PSY 0825, or ANTH 0825.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GQ, HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 0701, MATH 0702, 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC3A, 'Y' in MC6A, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

SOC 0929. Honors: The History & Significance of Race in America. 3 Credit Hours.

Why were relations between Native Americans and whites violent almost from the beginning of European settlement? How could slavery thrive in a society founded on the principle that "all men are created equal"? How comparable were the experiences of Irish, Jewish, and Italian immigrants, and why did people in the early 20th century think of them as separate "races"? What were the causes and consequences of Japanese Americans' internment in military camps during World War II? Are today's Mexican immigrants unique, or do they have something in common with earlier immigrants? Using a variety of written sources and outstanding documentaries, this course examines the racial diversity of America and its enduring consequences. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: African American Studies 0829, Africology and African American Studies 0829, Anthropology 0829, Geography and Urban Studies 0829, History 0829, Political Science 0829/0929, Sociology 0829, 0929, 1376, 1396, R059, or X059.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GD, HO, SI

Repeatability: This course may not be repeated for additional credits.

SOC 0935. Honors Ethnicity and the Immigrant Experience in the U.S.. 3 Credit Hours.

How do immigrants learn to become American? How does living an ethnic identity vary for different groups? When does ethnicity become a chosen identity or an unwanted label? How do we learn to value some aspects of ethnicity but not others? What are markers of ethnicity? How do language, food, music, family and community work to provide authenticity to the American immigrant experience? What happens to ethnicity with assimilation to the American way of life? Can ethnicity combat the tidal social expectations to conform to the dominant culture? Using a variety of written materials including novels that explore the ethnic identity of different groups, this course raises questions about how ethnicity and American identity are connected. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: Sociology 0835, 0935, 1476, 1496, R064, X064.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GD, HO

Repeatability: This course may not be repeated for additional credits.

SOC 0962. Honors Fate, Hope, and Action: Globalization Today. 3 Credit Hours.

Use historical and case study methods to study the differences between rich and poor nations and the varied strategies available for development in a globalizing world. Examine the challenges facing developing countries in historical and contemporary context and analyze the main social, cultural, and political factors that interact with the dynamic forces of the world economy. These include imperialism/colonialism, state formation, labor migration, demographic trends, gender issues in development, religious movements and nationalism, the challenges to national sovereignty, waves of democratization, culture and mass media, struggles for human rights, environmental sustainability, the advantages and disadvantages of globalization, and movements of resistance. (This is an Honors course.) NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: SOC 0862, History 0862, POLS 0862/0962, or GUS 0862.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GG, HO, SI

Repeatability: This course may not be repeated for additional credits.

SOC 1002. Professional Development for Sociology Majors. 1 Credit Hour.

Did you know that the American Sociological Association recognizes over 50 different specialized areas of sociological study? Did you know that Temple sociology graduates pursue careers in a range of fields including law, medicine and health, business, non-profit organizations, community planning, housing, market research, and education? In this professional development seminar, faculty and alumni from the department will help you navigate your options to help you maximize your sociological studies for impact in the real world. During the semester, you will discover sociology internship opportunities and courses, you will meet and network with recent graduates who are putting their sociology degree to work, and you will begin to assemble a sociology portfolio that can be used to present your sociological knowledge and skillset to current and future employers. Because there is significant overlap in course content, students will receive credit for only one of these courses: CLA 1002, CJ 1002, ENG 1801, HIST 1012, NSCI 1002, POLS 1002, PSY 1002, SOC 1002.

Repeatability: This course may not be repeated for additional credits.

SOC 1167. Social Statistics. 3 Credit Hours.

The objective of this course is to enhance data comprehension and explain statistical information. The emphasis is on applications, with examples taken from a variety of sources including the mass media. The course covers the uses and interpretation of descriptive statistics, the requirements of valid statistical sampling, the bases of statistical inference, and the analysis of cross-tabular data. NOTE: (1) This course is not open to students who have taken Mathematics 1013 (C067) or Psychology 1167 (C067). (2) This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: QB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 0701, MATH 0702, 'Y' in MC3, 'Y' in MC4, 'Y' in MC5, 'Y' in MC6, 'Y' in MC3A, 'Y' in MC6A, 'Y' in MC3S, 'Y' in MC3D, 'Y' in MC3O, 'Y' in MC3T, or 'Y' in MC6T)

SOC 1176. Introduction to Sociology. 3 Credit Hours.

This course introduces students to the discipline of sociology, which offers distinctive concepts and methods to understand human behavior and the societies we all inhabit. How do societies evolve and change? What can be learned from comparing them? How do they make us into the kinds of people we are, and which facts either sustain or shatter everyday life? What do culture, power, bureaucracy, racial discrimination, inequality, sexual and social conflict have in common? In this course, students will learn about themselves by exploring the hidden patterns in the world around them. By the end of the semester, students will have a firm grasp of the sociological imagination and how to use it to understand our increasingly diverse and complex world. Note: Students may only earn credit for one of the following: SOC 1176, 1576, or 1976.

Course Attributes: IN, SI

Repeatability: This course may not be repeated for additional credits.

SOC 1576. Introduction to Sociology for Health Professions. 3 Credit Hours.

This course offers an introduction to the discipline of sociology. Focused on a systematic study of social life, the discipline of sociology offers distinctive concepts and methods to understand human beings and the societies they inhabit. The primary operating principle of sociology is to shift analytic emphasis--common to the health professions--from individual characteristics to the characteristics of broader social contexts, groups, and institutions. This Introduction to Sociology is specifically intended for those with interests in the health professions. We apply each topic we study to issues in health and medicine, pairing general sociology readings with readings specifically on health and medicine. Students preparing for the revised MCAT (2015) are especially encouraged to take this course.

Duplicate credit warning: Students who have received credit for SOC 1176 or SOC 1976 Introduction to Sociology (or its equivalent in transfer) may not receive additional credits for this course.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

SOC 1967. Honors Social Statistics. 3 Credit Hours.

The objective of the course is on understanding data and explaining statistical information. The emphasis is on applications, with examples taken from a variety of sources including the mass media. The course covers the uses and interpretation of descriptive statistics, the requirements of valid statistical sampling, the bases of statistical inference, and the analysis of cross-tabular data. NOTE: (1) This course is not open to students who have taken Mathematics 1013 (C067) or Psychology 1167 (C067). (2) This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, QB

Repeatability: This course may not be repeated for additional credits.

SOC 1976. Honors Introduction to Sociology. 3 Credit Hours.

This course introduces students to the discipline of sociology, which offers distinctive concepts and methods to understand human behavior and the societies we all inhabit. How do societies evolve and change? What can be learned from comparing them? How do they make us into the kinds of people we are, and which facts either sustain or shatter everyday life? What do culture, power, bureaucracy, racial discrimination, inequality, sexual and social conflict have in common? In this course, students will learn about themselves by exploring the hidden patterns in the world around them. By the end of the semester, students will have a firm grasp of the sociological imagination and how to use it to understand our increasingly diverse and complex world. Note: Students may only earn credit for one of the following: SOC 1176, 1576, or 1976.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, IN, SI

Repeatability: This course may not be repeated for additional credits.

SOC 2002. Leadership for Social Change. 3 Credit Hours.

Leadership for social change, sometimes called social entrepreneurship, is the process of community-based collaborative change-making. It is the application of both critical thinking and critical action strategies to targeted social problems. For individuals, it is found in the movement from criticism to leadership. For communities, it is found in the claiming of self-efficacy. This course is rooted in sociology, but the readings and assignments extend from sociological analysis to social activism, community engagement, business, and art.

Repeatability: This course may not be repeated for additional credits.

SOC 2111. Sociology of Sports. 3 Credit Hours.

This course analyzes sports as a socializing agent and as a set of cultural, social, economic and political institutions. The course will begin with a distinction between play, sports, and organized sports. We will then look at the role of sports in childhood and adolescence, with a particular emphasis on gender and sports. Next, we examine the role of sports in collegiate life and finally at the professional level. As a course in sociology, this class will examine the connections between sports and race, gender, social class, politics, and the economy.

Repeatability: This course may not be repeated for additional credits.

SOC 2122. Global Sports. 3 Credit Hours.

This course centers on the globalization of sports. It views sports as a set of cultural, social, economic and political institutions and practices and asks the following orienting questions: 1) "How have forces of globalization changed the world of sport?" and 2) "What do the changes in sport teach us about globalization processes more generally?" The course will cover the structure, organization, and culture of globalized sport. Topics include: the business of global sports, the flow of labor and capital in global sports, the impact of culture on sport and sport on culture, the role of communication, transportation, and technology in the globalization of sport.

Repeatability: This course may not be repeated for additional credits.

SOC 2128. Men and Masculinities. 3 Credit Hours.

This course examines and interrogates masculinity by drawing upon the diverse voices and experiences of men and boys across age, race, ethnicity, class, sexuality, ability and religion. This course will explore the social and personal meanings of "manhood" and its impact on relationships, institutions and in our public and private lives.

Repeatability: This course may not be repeated for additional credits.

SOC 2130. Selected Topics in Sociology. 3 Credit Hours.

The topics will vary and cover areas not covered by the current roster of classes. Students should consult with the instructor for details.

Repeatability: This course may be repeated for additional credit.

SOC 2163. Area Studies: Latin American Development. 3 Credit Hours.

This course examines patterns of socioeconomic and political development in different parts of Latin America. Topics to be studied include: agrarian reforms, patterns of industrialization and urbanization, financial dependency, military regimes, revolutionary movements, and transitions to democracy. NOTE: This course is taught in Spanish for the LASS program.

Repeatability: This course may not be repeated for additional credits.

SOC 2166. Money: Who Has It, Who Doesn't, Why It Matters. 3 Credit Hours.

This course looks at the sociological issues surrounding money as a mechanism and medium of exchange. The course covers history of money and the development of finance. The course also explores the role of money in shaping lives: friendship patterns, life chances, educational opportunities, and health and well-being. Students will learn about structural changes in the economy that stem from the globalization of money. Students who have earned credit for Sociology 1166 will not earn additional credit for this course.

Repeatability: This course may not be repeated for additional credits.

SOC 2168. Sociology of Popular Culture. 3 Credit Hours.

Popular culture is ubiquitous in contemporary life, in the forms of television, books, radio, internet, music, video games, and film. It has been accused of making us more violent and less healthy, more biased and less participatory in society. Popular culture has also been celebrated for making art democratic and giving voice to a wider range of people. This course surveys what we know about the social effects of popular culture including issues like representations and stereotypes, media consolidation, and the impact of new technologies.

Repeatability: This course may not be repeated for additional credits.

SOC 2171. Sociology of Law. 3 Credit Hours.

This class looks at what is both special and ordinary about legal systems. The law's features and the scope of its functions in society are examined and compared with other institutions, and with legal systems in societies and periods other than our own. It considers legal institutions as a product of actions and interactions of both specialists and ordinary citizens. Additionally, it examines the role of the law as a potential vehicle and agent of change. It gives a practical sociological introduction to the professional study of law.

Repeatability: This course may not be repeated for additional credits.

SOC 2176. Is College Worth It? Student Debt and Student Gain. 3 Credit Hours.

This course offers a sociological take on the costs and benefits of colleges. The first three quarters are about the college experience and how it affects students and alumni. We will look at what students get out of college in terms of learning, careers, extra-curricular activities, and socializing. We will look at the current state of research on whether or not the financial benefits of college are worth the costs. In the remaining time we will look at the political and organizational aspects of colleges, including why college costs have risen so much, why student indebtedness has increased, the rise of the for-profit sector in higher education, and the future of higher education.

Repeatability: This course may not be repeated for additional credits.

SOC 2179. Racial and Ethnic Stratification. 3 Credit Hours.

This course focuses on the elements of racial and ethnic stratification as they appear in the United States and other nations. It outlines the concepts that shape the sub-field of race and ethnic relations, in addition to examining how sociologists have theorized about racial and ethnic hierarchies and their role in the organization and distribution of social resources. Through an analysis of the historical and contemporary circumstances of selected communities in the United States, it seeks to reveal which theory best explains the experience of particular communities and which best explains societal patterns of inequality. Additionally, the course examines racial and ethnic relations in other nations and as a global phenomenon in an effort to reveal the common elements of racial inequality regardless of national identity. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: RS

Repeatability: This course may not be repeated for additional credits.

SOC 2333. Creative in the City: Bohemians, Hipsters, Punks, and Creatives. 3 Credit Hours.

This course will provide required readings, short lectures and class discussions that will enable students to address the following questions: What are the cultural practices and ideologies of urban dwellers that have viewed themselves or have been viewed by others to be relatively "creative," "hip," or "bohemian"? What types of contemporary urban enclaves have they created? To what extent have those living within these enclaves maintained continuity with their historic counterparts (e.g., nineteenth century French bohemians, twentieth century American hipsters, 1980's Punks, the pseudo bohemian "posers" of numerous eras)? How do these enclaves affect, and get affected by their contemporary global, neo-liberal urban context?

Repeatability: This course may not be repeated for additional credits.

SOC 2522. Sociology of the Self. 3 Credit Hours.

What is the self? Where does the self come from? And why does the self matter? In this course, we seek to answer these questions from the standpoint of symbolic interactionism - a sociological perspective that explains human action in terms of the meanings that things have for the actors. Meanings are not regarded as inherent in objects but rather as emerging from interactions among humans and between humans and their environments. The self, which plays a pivotal role in human interaction, is both a product and a force of social life. This course is divided into three parts. In Part 1, we conceptualize the self as a symbolic object that emerges from social interaction. In Part 2, we examine the origin of the self, the "true self," identity construction, self and autism, as well as other related issues. And in Part 3, we analyze the impact of the self on mental health and interpersonal relations. The ultimate goal of this course is to promote a deeper self-understanding and a better relationship with others.

Repeatability: This course may not be repeated for additional credits.

SOC 2530. Selected Topics in Medical Sociology. 3 Credit Hours.

The topics will vary and cover medical topics not in the current roster of classes. Please consult with the instructor for details. Health Track students can use this course to fulfill the requirement for four health-related courses.

Repeatability: This course may be repeated for additional credit.

SOC 2545. Food for Thought: Sociological Thinking About Food. 3 Credit Hours.

Are we what we eat? How have our choices about what (and how much) to eat been shaped by society, and by our social and cultural identities? How and why are our culinary choices associated with social pleasures, social anxieties, negative public health outcomes, and the changing environment? Can we make alternative food choices and support food-oriented social change that help create a more equitable, sustainable, healthy and delicious world? This course raises these and other sociological questions about food and food systems, critically examining some of the answers that sociologists and other social scientists have provided. The focus will be on the U.S., but a range of relevant global issues and case studies will be addressed.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

SOC 2552. Health and Disease in American Society. 3 Credit Hours.

In this course, students research health and disease in the United States, placing special emphasis on the historical changes in the ideas of health and disease and the nature of the responses to illness in society. We examine social/political influences on morbidity and mortality and the experiences of subgroups of the population with illness and with the medical systems they must confront. Finally, we discuss the problems associated with financing health care, with making and implementing health policy, and the issues raised by the growing field of bio-ethics. The course contains instruction in several research methods including the calculation of rates, standardization, and the construction and reading of tables. We also focus throughout the course on how the authors of the readings know what they report: for example, what methods did they use. Finally, students do a small well-defined research project for their semester paper.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

SOC 2555. Sociology on Drugs. 3 Credit Hours.

This course focuses on the use and abuse of drugs as a common social and cultural practice rather than as a moral, medical, legal, or epidemiological problem. While conventional wisdom considers drug use and abuse to be a social problem, we will consider drug use and abuse as a response to economic, political, and cultural problems. Recurring course themes include the relationship between drug use and racial and class conflict; various perspectives on the origins of drug use and abuse; the pros and cons of harm reduction versus legal interventions; the nature and extent of drug using subcultures; the individual and community-level effects of drug policy, legislation, and enforcement; and depictions of drug use in the media.

Repeatability: This course may not be repeated for additional credits.

SOC 2565. Race, Science, Health, and Medicine. 3 Credit Hours.

Race and scientific medicine are powerful forces shaping the modern world. This course charts the origins and emergence of these two forces in the 17th century and explores how they have informed each other and continue to form each other in the 21st century. Topics include slavery and medicine, eugenics and racial science, genocide and the rise of medical ethics, disease and distinctiveness, racial disparities in health, and the status of race in the era of genomics.

Repeatability: This course may not be repeated for additional credits.

SOC 2572. Sex & Society. 3 Credit Hours.

Sex is at the forefront of many legislative, cultural and personal debates. This course uses sociological perspectives to examine several key areas of conflict in the sexual culture war, including sex education in American schools, global public health policies and contraception, changing definitions of marriage and family, abortion rights, the personal and national impact of prenatal testing and reproductive technologies, and the growing concern over issues such as sexual violence on college campuses, child pornography, and sex trafficking.

Repeatability: This course may not be repeated for additional credits.

SOC 2575. Science, Technology & Society. 3 Credit Hours.

This course examines the relationships between science, technology, and society, and focuses on the social, historical, and cultural contexts that shape these relationships. Students are introduced to the history of human technological development, how it has been shaped by historical and cultural contexts, and how it has, in turn, influenced the social world. The course will also examine the ways in which scientific facts are established among the public. This course is intended for sociology students interested in better understanding the technological and scientific dimensions of the social world. It is also intended for students in physical and natural sciences and engineering fields interested in the social dimension and implications of their work.

Repeatability: This course may not be repeated for additional credits.

SOC 2922. Honors Global Sports. 3 Credit Hours.

This course centers on the globalization of sports. It views sports as a set of cultural, social, economic and political institutions and practices and asks the following orienting questions: 1) "How have forces of globalization changed the world of sport?" and 2) "What do the changes in sport teach us about globalization processes more generally?" The course will cover the structure, organization, and culture of globalized sport. Topics include: the business of global sports, the flow of labor and capital in global sports, the impact of culture on sport and sport on culture, the role of communication, transportation, and technology in the globalization of sport.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

SOC 3082. Independent Study. 1 to 4 Credit Hour.

This course involves an intensive study in a specific area of sociology. The proposal outlining the work to be completed must be filed in the department office and with the undergraduate chair before the end of the first two weeks of the semester. NOTE: This class may not be used as a substitute for required sociology courses.

Repeatability: This course may be repeated for additional credit.

SOC 3176. Sociology of Education. 3 Credit Hours.

Did you know that SAT scores, and other standardized tests, vary by parents' education? In this course we examine the many ways students' social positions shape educational experiences and educational outcomes. We learn about the ways in which students' race, gender, and social class origins shape school experiences. We also examine an important question: how much does education provide a pathway for social mobility for American children? We will also address a number of other topics including current proposals for improving American education. Students will engage with a local high school by aiding high school seniors with senior graduation projects.

Repeatability: This course may not be repeated for additional credits.

SOC 3185. Internship in Sociology. 1 to 4 Credit Hour.

Students spend a semester working in a public or private agency or organization where they gain sociologically relevant experience and participate in applied sociological research. Interns will learn about a substantive sociological issue through reading, writing, and hands-on experience. Students will be required to write a term paper that includes a review of the sociological literature relevant to the internship and an analysis of the data they gathered.

Repeatability: This course may be repeated for additional credit.

SOC 3201. Statistical Methods in Sociology. 4 Credit Hours.

Duplicate Course: This course is not open to students who have taken Psychology 2168 (0122). This course introduces students to the basics of social statistics. It covers how to describe data, how to generalize from a tiny sample to an extremely large population, and how to make comparisons. It addresses three major questions for every statistical procedure introduced in this course: What is the basic logic of this procedure? What is this procedure for? How to use this procedure? The lecture part of this course focuses on the first two questions and the lab part of the course on the third question. By the end of the semester, students will develop a repertoire of statistical techniques so they know what situations will call for what analysis (t-tests, chi-square, regression) and how to carry out those analyses using statistical software. NOTE: This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: QB

Repeatability: This course may not be repeated for additional credits.

SOC 3208. Globalization, Development, and Labor in East Asia. 3 Credit Hours.

This undergraduate course will introduce students to the major perspectives and debates in social sciences on globalization, development, and labor in East Asia, primarily focusing on China, Japan, South Korea, and Taiwan. We will examine: What is globalization and how is it affecting countries in East Asia? What are different development strategies and paths pursued in those countries? How have workplaces changed and how have workers fared in East Asia under globalization? What roles have different kinds of labor unions played? How have workers responded, economically and politically? We will also discuss the social and political origins of "East Asian Miracle" and the impact of the rise of China on the region and the world. Through lectures, discussions, small group projects, and documentary films, students will be engaged with key theoretical debates and develop their own perspectives and research skills on these themes.

Repeatability: This course may not be repeated for additional credits.

SOC 3209. Immigrant America: Belonging and Integration. 3 Credit Hours.

This course addresses central questions relating to the new immigrants entering the United States since the 1960s. It examines: 1) why people move and the policies by which foreign "outsiders" become integrated; 2) what determines the economic, political, cultural, linguistic and psychological adaptation processes of different types of immigrants and refugees, and of their children; 3) the changing ethnic and generational composition of the American population; 4) the influence of gender and race on immigrant identities; 5) the struggle of second-generation youth with their backgrounds; and 6) new meanings around sexuality and romance emerging in transnational families that straddle generations and international borders.

Repeatability: This course may not be repeated for additional credits.

SOC 3217. The Sociology of Affect and Emotions. 3 Credit Hours.

This course offers students the opportunity for specialized study of one of the most debated issues in sociology and cultural studies nowadays: affect and emotions; while dealing with the latest developments in the sociology of emotions, the cultural study of feelings, and the proposals advanced by the "affective turn." In this course, we will spend a good amount of time on understanding affect and emotions as lived experience in the daily lives of individuals, by exploring the social side of affect and emotions. An important part of the course is dedicated to the so called "affective turn," which refers to a "wilder," more encompassing conceptualization of affect, highlighting difference, process and force in more general terms (affect as "intensities"). While the approach that emphasizes emotions relates affects entirely to human bodies, the so-called "affect studies" tends to address the conceivable relevance of any kind of bodies (organic, inorganic, artificial, imaginary, discursive, etc.). Another major theme of the course is the relationship between race and emotions, and music and emotions.

Repeatability: This course may not be repeated for additional credits.

SOC 3219. Understanding Globalization. 3 Credit Hours.

We will explore the debates on the economic, political, cultural, social, and environmental aspects of globalization and the accelerating increase in worldwide social connections. We will pay particular attention to the relationships between globalization and global inequalities by place, social class, race and ethnicity, and gender. Other topics include neoliberal and critical perspectives on globalization, global networks of production and distribution, global capitalism, globalization and the environmental crisis, and resistance to the current form of globalization through global social movements. Note: SOC 3219 was previously taught with the title "Globalization: Causes, Promises and Discontents." Students who have already received credit for this course number under the prior title will not be able to repeat this course for additional credit.

Repeatability: This course may not be repeated for additional credits.

SOC 3221. Global Development. 3 Credit Hours.

This course is an introduction to the sociology of economic development and social, political, and cultural change. We will study the concepts, theories, historical processes, and issues regarding the interrelations and transformations of the social groups, economies, political systems, and cultures of developing societies - and their relationships with developed countries - over time. Thus, our focus will be on developing countries, our scope will be global and long-term, our perspective will be sociological but interdisciplinary, and our methodology will be historical-comparative. The primary questions we will address are: What is development? How do "developing societies" differ from "developed societies"? What are the relationships of "developing" and "developed" societies? How can we best approach an understanding of why the historical experiences of "developing" countries seem to differ so much from those of "developed" countries? In the first half of the course, we will focus on understanding, largely through case studies, the main theories of development: modernization theory, dependency, world-system analysis, and neoliberalism. In the second half of the course, we will expand our empirical and theoretical understanding by examining development and globalization, gender, ethnicity, ecology, and global social movements. NOTE: Course formerly called "Sociology of International Development."

Repeatability: This course may not be repeated for additional credits.

SOC 3222. Sociology of Religion. 3 Credit Hours.

This course examines the role of religion in constructing human realities. It emphasizes how human understandings of the world and of reality are constructed socially through collective action with religion playing a prominent role. It looks at how religion influences individual and collective action; the intersection of religion with politics and media; religion's connection to race, gender, class, and sexual orientation; and the connection between religion and science.

Repeatability: This course may not be repeated for additional credits.

SOC 3223. East to America: The Sociology of Asian Americans. 3 Credit Hours.

The purpose of this course is to explore contemporary issues for Asian Americans through a sociological lens. To do so, we will place contemporary Asian American experiences within the larger social context by examining the social, political, and economic institutions that have shaped the Asian American experience. As such, students will explore sociological concepts of immigration, adaptation, and assimilation while also examining issues of race, ethnic conflict, education, gender, sexuality, social movements, and media representations. Note: This course is cross-listed with Asian Studies 2107, History 2107, and American Studies 2107. Students may only receive credit for one of these courses: ASST 2107, AMST 2107, HIST 2107, or SOC 3223.

Repeatability: This course may not be repeated for additional credits.

SOC 3230. Selected Topic in Sociology. 3 Credit Hours.

The topics will vary and cover areas not covered by the current roster of classes. Please consult with the instructor for details.

Repeatability: This course may be repeated for additional credit.

SOC 3240. Selected Topic in Sociology. 3 Credit Hours.

The topics will vary and cover areas not covered by the current roster of classes. Please consult with the instructor for details.

Repeatability: This course may be repeated for additional credit.

SOC 3242. Constructing Race and Ethnicity. 3 Credit Hours.

This course examines the social construction of race and ethnicity in the United States. It investigates the use of race and ethnicity as institutionalized, official categories that shape individual identity and experience, as well as opportunities and resource distribution. The course will analyze the formal procedures and informal interactions that define race and ethnicity as socially meaningful categories for individuals and groups. The course seeks to make the connections between the macro social organization of race and ethnic categories and the micro social interactions that shape race and ethnic experience.

Repeatability: This course may not be repeated for additional credits.

SOC 3243. Social Movements and Conflict. 3 Credit Hours.

The central theme of the course is conflict as a basic social process and the organization of mass movements to alter political and social conditions. A variety of social movements are studied: reformist and revolutionary movements; nationalist, messianic, and populist movements; identity politics and issue-oriented movements. Organizational strategies and ideological orientations of the movements are also examined.

Repeatability: This course may not be repeated for additional credits.

SOC 3246. Theories of Identity. 3 Credit Hours.

Various developments within the twentieth-century social thought have forced an attention to identity. Particular theoretical developments such as Marxism, psychoanalysis, structuralism, feminism and the "linguistic turn" have not simply highlighted issues of identity, but, more importantly, they have problematized identity as a contingent construction process. In that regard, the theoretical impulse, in general, has moved from a conception of identity as something people have, to processes of identification that people constantly perform. This course offers students the opportunity for specialized study of one of the most debated issues in contemporary sociology: social and cultural identities.

Repeatability: This course may not be repeated for additional credits.

SOC 3247. Ideology and Social Change in Japan. 3 Credit Hours.

A sociological look at the conditions which have contributed to Japan's emergence as a world economic force. How do culture, social organization, life style, ideology, and global politics affect Japan's rapid rise to power? Is Japan a closed society? What significance do factors such as racism, religion, education, family, the military, class, and population changes hold for understanding what has happened in Japan and in Japan's relations with outsiders, particularly the U.S.? What significance does this analysis have for the future of Sociology in the U.S.? Duplicate credit warning: This course is regularly cross-listed with ASST 3247. Students may receive credit for only one course from: ASST 3247, ASST 3947, SOC 3247, or SOC 3947.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

SOC 3249. Social Inequality. 3 Credit Hours.

In this course, we examine a number of the fundamental dimensions of inequality in our society. Among the questions raised are: 1) How great are the inequalities by class, race and ethnicity, and gender? 2) What is the nature of this inequality? Where does it come from? How deeply does it affect the lives of individuals? 3) How do these dimensions of equality interact? This course stresses participation, group work, and personal research on topics of interest to the student.

Repeatability: This course may not be repeated for additional credits.

SOC 3250. Selected Topic in Sociology. 3 Credit Hours.

The topics will vary and cover areas not covered by the current roster of classes. Please consult with the instructor for details.

Repeatability: This course may be repeated for additional credit.

SOC 3251. Urban Sociology. 3 Credit Hours.

Urban sociology asks how the physical and built environments, technology, population growth and shifts, governmental policy, and cultural and social organization shape the location and course of the development of urban areas. It focuses on urban America, although there is frequent reference to the development of urban areas elsewhere in the world in order to highlight commonalities and differences in the forces which structure urban life. Students research and write a sociological history of a block and census tract in the Philadelphia metropolitan area. It may be a history of the one in which they grew up, in which they now live, or another in which they have an interest. The objective is to combine quantitative and qualitative data to trace how and why the selected area developed as it did. A student will typically combine data drawn from several censuses with archival records to depict how the area changed in the context of the larger evolution of the community in which it is located.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

SOC 3256. Political Sociology. 3 Credit Hours.

This course analyzes the social basis of political institutions and political action, stressing the importance of both in the life of communities and individuals. Our emphasis is on the influence of social classes, professional and occupational groups, political parties, social movement organizations, and other notable interest groups have on the political system. We discuss the formation and organization of political activity and its varied outcomes.

Repeatability: This course may not be repeated for additional credits.

SOC 3258. Women and Work. 3 Credit Hours.

Women's work will be defined in the fullest sense. We will examine the gender division of labor in society and changes in women's paid and unpaid work from both historical and cross-cultural perspectives. We will discuss trends in women's employment and the rewards of women's work by race, marital status, etc., and trends in household work and child care. Reasons for women's expanded opportunities and persistent barriers will be explored.

Repeatability: This course may not be repeated for additional credits.

SOC 3259. Women and Poverty. 3 Credit Hours.

This course focuses on women's poverty in the U.S. and the social welfare policies designed to address it. We begin with an overview of poverty in the U.S., ways to measure poverty, and how to read census tables on poverty and income. We then dive into the history of the welfare state in America, starting with the Poorhouse Era and moving through 1996's welfare reform legislation. The second part of the course addresses major issues and themes in poverty scholarship: the culture of poverty thesis, low-wage work, teenage motherhood effects, marriage and single motherhood, social capital, and neighborhood effects. We conclude with a comparative analysis of U.S. and international welfare states.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

SOC 3261. Research Design and Methods. 4 Credit Hours.

This course is an introduction to the logic and methods of social research. We examine the issues, including internal, external, and construct validity, that arise in doing and evaluating both quantitative and qualitative research. The laboratory time involves both computer applications and instruction in the use of the library for research.

Repeatability: This course may not be repeated for additional credits.

SOC 3301. Philadelphia as a Social Laboratory. 3 Credit Hours.

This course uses a community-engaged learning approach that enables direct interaction with the city of Philadelphia and familiarity with Philadelphia-based organizations, activists, and institutions. Each week students are expected to participate in hands-on activities, including site visits and panel discussions, to witness the way various social issues play out in Philadelphia. This includes issues like racial inequality, history and memory, public arts and social justice, neighborhood change, education, public space, homelessness, incarceration and criminal justice, health, and housing. We consider various ways to approach complex social challenges by critically assessing the relationship between "problems" - as they are defined - and "solutions" - as they are developed. The course provides an opportunity for students to familiarize themselves with organizations and institutions working to address the social challenges that face the city of Philadelphia, its people, and its communities.

Repeatability: This course may not be repeated for additional credits.

SOC 3396. Development of Sociological Thought. 3 Credit Hours.

Theory is the narrative account, the explanatory framework, that underlies and grounds all knowledge. Sociological theories are accounts of the fundamental principles and relationships that organize society. This course focuses on the most successful sociological theories, emphasizing the work of scholars, mostly European and American, who contributed the most influential ideas to modern sociology. Attention is also paid to the social and historical context in which the major theories emerged.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

SOC 3430. Selected Topics in Sociology. 3 Credit Hours.

The topics will vary and cover areas not covered by the current roster of classes. Please consult with the instructor for details.

Repeatability: This course may be repeated for additional credit.

SOC 3511. Environmental Sociology: The End of the World as We Know It?. 3 Credit Hours.

This course will introduce you to the sociology of the environment - the study of the interrelationships of human social systems and ecosystems - with a primary focus on their social aspects. We will focus on how social systems can be rearranged to ensure environmental justice, sustainability, and human and planetary well-being. Topics may include the ecological footprint, pollution and toxins, and climate change; the limits to growth; the treadmill of production vs. ecological modernization; technology and productivity; corporations, the media and the politics of climate change denial; unequal ecological exchange between developed and developing countries; and the nature and impacts of environmental movements. Duplicate credit warning: This course was previously offered as "Sociology of the Environment"; students who have earned credits under this title will not earn additional credits for this course.

Course Attributes: SF, SS

Repeatability: This course may not be repeated for additional credits.

SOC 3525. Urban Health. 3 Credit Hours.

Cities are home to half the world's population and urban populations are rapidly growing. Yet we know too little about why some urban populations are quite healthy and others quite sick and why some live long and others die young. This course blends medical sociology with population health science to explore these and other important questions in urban health. The focus is on U.S. cities with additional examples drawn from global cities. Attention will also be given to rural and urban and suburban differences in health, disease, and mortality. The goal is to better understand if and how cities might become places where people can live longer, healthier, and happier lives.

Repeatability: This course may not be repeated for additional credits.

SOC 3530. Selected Topics in Medical Sociology. 3 Credit Hours.

The topics will vary and cover medical topics not in the current roster of classes. Please consult with the instructor for details. Health Track students can use this course to fulfill the requirement for four health-related courses.

Repeatability: This course may be repeated for additional credit.

SOC 3551. Critical Race Feminist Theory. 3 Credit Hours.

Building from the groundbreaking critical race theory texts that emerged within legal academia during the early 1990s this course will consider the historical underpinnings of this literature and its implications for future feminist theory and practice. The course will investigate the limits of liberal legal remedies in addressing the severe social realities faced by many women, men, trans and non-binary people of color of various sexual identities. We will pay particular attention to the persistence of structural, institutional and everyday racism despite the rejection of race as a viable biological human concept, and its intersection with gender, gender identity and sexuality. The course will also consider how core concepts from critical race theory are deployed within transnational feminist thought and activism. Note: Students who earned credit for "Critical Race Theory and Feminist Implications" will not receive additional credits for "Critical Race Feminist Theory." This course was formerly known as GSWS 2051; students who have received credit for GSWS 2051 will not receive additional credits for GSWS 3551. Please also be aware that students who have already completed GSWS 3551 will not receive duplicate credit for taking SOC 3551.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in GSWS 1301 and (GSWS 3097 or ENG 3097)

SOC 3559. Health and Reproduction. 3 Credit Hours.

The course will focus on health and human reproduction in the United States. We will view reproduction as both a biological and social event and will be particularly concerned with the medical and health aspects of reproduction. Decisions about child bearing, the medicalization of child bearing, fecundity, birth control, fetal and neonatal health, maternal health and new reproductive technologies are among the topics that will be considered in this research-intensive course. The course will also cover technical, methodological and statistical issues arising in the study of reproduction.

Repeatability: This course may not be repeated for additional credits.

SOC 3565. Sociology of the Body. 3 Credit Hours.

What do bodies tell us about ourselves and about others? Does our speaking voice show our class background? Why might someone who is "black" or "white" in the United States not be considered so in another country? Who decides what a healthy body is? In this course, we will look at the body, not simply as a physical object, but as a physical medium that is molded by social forces and interpreted through a cultural lens. Our bodies are simultaneously sites of personal embodiment and subject to external classification and social control. We will examine some of the ways bodies are significant markers of social categories, analyzing the link between the body and personal identity, and consider how identity is enacted through bodily practices and modification.

Repeatability: This course may not be repeated for additional credits.

SOC 3571. Methods in Program Evaluation. 3 Credit Hours.

Evaluation research uses standard social science methods to help judge the effectiveness of social programs and policies. The purpose of this course is to develop students' abilities to use evaluation methods to describe real world situations. Students will also learn to make inferences based on evaluations in order to improve policy decisions and service delivery programs in public health and social services. Previous knowledge of social science methods is not required.

Repeatability: This course may not be repeated for additional credits.

SOC 3575. Population Studies. 3 Credit Hours.

This course tackles a large and important question: What impact does population growth and change have on our lives? In this class, we examine how populations across the world are studied using censuses and surveys. The class explores three basic demographic processes: fertility, mortality, and migration, and how these processes vary internationally. Further, we focus on how the structure and characteristics of particular populations impact individual members. Finally, we uncover the demographic foundations of international contemporary social issues like the aging of the population in North America, Europe, and Japan, the AIDS epidemic in Thailand and Africa, as well as the U.S., changing household structures in the U.S. and Europe, and environmental change across the globe. Students learn both important concepts in demography and the methods used to study international populations.

Repeatability: This course may not be repeated for additional credits.

SOC 3582. Independent Study in Medical Sociology. 1 to 4 Credit Hour.

This course involves an intensive study in a specific area of sociology. The proposal outlining the work to be completed must be filed in the department office and with the undergraduate chair before the end of the first two weeks of the semester. NOTE: This class may not be used as a substitute for required sociology courses.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

SOC 3585. Internship in Medical Sociology. 1 to 4 Credit Hour.

This course will give students an opportunity to experience working in a health-related setting. Students taking this internship course will be expected to use their sociological skills in understanding and analyzing the setting in which the experiential learning takes place. An internship requires an individual contract with a faculty member in the Department of Sociology.

Repeatability: This course may be repeated for additional credit.

SOC 3930. Honors Special Topics. 3 Credit Hours.

The topics will vary and cover areas not covered by the current roster of classes. Students should consult with the instructor for details.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

SOC 4001. Qualitative Research. 4 Credit Hours.

This course provides students with skills to evaluate qualitative research studies, which deal with the meanings and values that people assign to things in the social world. More importantly, this class teaches students to conduct their own research using a variety of techniques, including participant observation, in-depth interviewing, focus groups, and the careful analysis of text and documents. Each student carries out a qualitative research project during the semester under the direction of the instructor. By the end of the semester, students will have gained skills in qualitative research that will make them competitive for jobs in a variety of different settings, from marketing and research firms to non-profit organizations.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SOC 3201 and SOC 3261)

SOC 4002. Data Analysis. 4 Credit Hours.

This course gives students practical experience with the statistical analysis of data. Students will learn how to develop research questions based on a literature review; how to turn research problems into testable hypotheses; how to test hypotheses through statistical analysis; and how to present research findings in oral as well as written form. Statistical topics include: analysis of variance, bivariate and tri-variate cross-tabulation, χ^2 , γ , and Pearson's r .

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SOC 3201 and SOC 3261)

SOC 4096. Senior Seminar. 3 Credit Hours.

The goal of this course is to teach you how to use the sociological skills you have learned to make the transition to the next steps of your life. This will involve making decisions about your occupational goals, and collecting evidence on how realistic these are and how you might go about achieving them. We will learn about global and local trends in the economy and the labor market. As part of this, each of you will collect data on the occupation in which you have a particular interest. We will then learn how to do a self-assessment of skills and interests and you will learn how to advertise these on a web site. Finally, you will interview persons working in the occupation of your choice and match your skills with the ones they brought to their job. NOTE: This is the capstone writing intensive course. This course is taken in the semester before graduation, and is open to sociology majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Sociology.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Spanish (SPAN)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

SPAN 0815. Language in Society. 3 Credit Hours.

How did language come about? How many languages are there in the world? How do people co-exist in countries where there are two or more languages? How do babies develop language? Should all immigrants take a language test when applying for citizenship? Should English become an official language of the United States? In this course we will address these and many other questions, taking linguistic facts as a point of departure and considering their implications for our society. Through discussions and hands-on projects, students will learn how to collect, analyze, and interpret language data and how to make informed decisions about language and education policies as voters and community members. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0815/0915, Asian Studies 0815, Chinese 0815, CSCD 0815, EDUC 0815/0915, English 0815, Italian 0815, PSY 0815, or Russian 0815.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

SPAN 0826. Bilingual Communities. 3 Credit Hours.

What is the relationship between language and identity? How do bilinguals sort between their two languages and cultures to form their identity? In bilingual cultures, is one language always dominant? What happens when a language or dialect is distinct from the dominant language or dialect of the greater society? Why did language resurgence efforts fail in Ireland but succeed in Catalonia, Spain? Why does Guarani enjoy greater protection in Paraguay than Mayan dialects in Guatemala? Is it possible to legislate language behavior? The course explores issues of power and solidarity where two languages or dialects are in contact: How are these cultural identities expressed through choice of language? The geographical areas studied include the US, Canada, Latin America, Europe, and Africa. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed Spanish 0926.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

SPAN 0831. Immigration and the American Dream. 3 Credit Hours.

As a Temple student, you go to school and live in a city full of immigrants. Perhaps your own relatives were immigrants to the United States. But have you ever listened to their stories? With an historical and sociological framework as a basis, we will take an in-depth and more personal look at the immigrant experience as expressed through the immigrants' own voices in literature and film. Topics explored include: assimilation, cultural identity and Americanization, exploitation and the American Dream, ethnic communities, gender, discrimination and stereotyping. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0831, CRIT 0831, History 0831, Italian 0831/0931, Russian 0831, SOC 0831, or SPAN 0931.

Course Attributes: GD, SI

Repeatability: This course may not be repeated for additional credits.

SPAN 0837. Eating Cultures. 3 Credit Hours.

You are what you eat, they say, but what, precisely, determines our eating habits and what, exactly, do they say about us? How do these habits influence our relations with others in our communities and beyond? Eating is an activity common to all human beings, but how do the particularities and meanings attributed to this activity vary across different times and places? Using literature, visual media, cookbooks, food-based art, and advertisements as our starting point, we will examine how food perception, production, preparation, consumption, exchange, and representation structure individual and communal identities, as well as relations among individuals and communities around the globe. Our focus on this most basic of needs will allow us to analyze how food conveys and limits self-expression and creates relationships as well as delimits boundaries between individuals and groups. Materials will be drawn from a wide range of disciplines including, but not limited to, literary and gender studies, psychology, anthropology, history, sociology, and economics. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed English 0837 or Spanish 0937.

Course Attributes: GB, SI

Repeatability: This course may not be repeated for additional credits.

SPAN 0854. Latino Immigration. 3 Credit Hours.

In order to examine Latino immigration today, it is necessary to understand the long-term, complex relations between the USA and Latin America. From this perspective, we analyze past and present immigration laws and policies and their impact on immigrants and their countries of origin; the changing push/pull factors involved in immigration; the immigration history and situation of Latino immigrants in Philadelphia and beyond; reactions towards Latino immigrants; the impact of immigration on every aspect of daily life. Students will discuss, compare and evaluate USA and Latin American news sources on current, often controversial, topics each week and will have the opportunity to learn about Philadelphia agencies that work with Latino immigrants. Course materials include analytical documents, case histories, films and literature by and about Latin American immigrants. NOTE: Students cannot receive credit for this course if they have successfully completed LAS 0854.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

SPAN 0868. World Society in Literature & Film. 3 Credit Hours.

Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, Spanish, Latin American, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Spanish, Russian, Hindi, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0968.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

SPAN 0926. Honors Bilingual Communities. 3 Credit Hours.

What is the relationship between language and identity? How do bilinguals sort between their two languages and cultures to form their identity? In bilingual cultures, is one language always dominant? What happens when a language or dialect is distinct from the dominant language or dialect of the greater society? Why did language resurgence efforts fail in Ireland but succeed in Catalonia, Spain? Why does Guarani enjoy greater protection in Paraguay than Mayan dialects in Guatemala? Is it possible to legislate language behavior? The course explores issues of power and solidarity where two languages or dialects are in contact: How are these cultural identities expressed through choice of language? The geographical areas studied include the US, Canada, Latin America, Europe, and Africa. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed Spanish 0826.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GB, HO

Repeatability: This course may not be repeated for additional credits.

SPAN 0931. Honors Immigration and the American Dream. 3 Credit Hours.

As a Temple student, you go to school and live in a city full of immigrants. Perhaps your own relatives were immigrants to the United States. But have you ever listened to their stories? With an historical and sociological framework as a basis, we will take an in-depth and more personal look at the immigrant experience as expressed through the immigrants' own voices in literature and film. Topics explored include: assimilation, cultural identity and Americanization, exploitation and the American Dream, ethnic communities, gender, discrimination and stereotyping. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0831, CRIT 0831, History 0831, Italian 0831/0931, Russian 0831, SOC 0831, or SPAN 0831.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GD, HO, SI

Repeatability: This course may not be repeated for additional credits.

SPAN 0937. Honors Eating Cultures. 3 Credit Hours.

You are what you eat, they say, but what, precisely, determines our eating habits and what, exactly, do they say about us? How do these habits influence our relations with others in our communities and beyond? Eating is an activity common to all human beings, but how do the particularities and meanings attributed to this activity vary across different times and places? Using literature, visual media, cookbooks, food-based art, and advertisements as our starting point, we will examine how food perception, production, preparation, consumption, exchange, and representation structure individual and communal identities, as well as relations among individuals and communities around the globe. Our focus on this most basic of needs will allow us to analyze how food conveys and limits self-expression and creates relationships as well as delimits boundaries between individuals and groups. Materials will be drawn from a wide range of disciplines including, but not limited to, literary and gender studies, psychology, anthropology, history, sociology, and economics. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed English 0837 or Spanish 0837.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GB, HO

Repeatability: This course may not be repeated for additional credits.

SPAN 0968. Honors World Society in Literature & Film. 3 Credit Hours.

Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, Spanish, Latin American, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Spanish, Russian, Hindi, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. (This is an Honors course.) NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GG, HO

Repeatability: This course may not be repeated for additional credits.

SPAN 1001. Basic I. 4 Credit Hours.

Basic Spanish I is an introductory Spanish course for students with little or no previous Spanish experience. The course will develop basic skills for speaking, listening, reading, and writing as well as introduce students to the richness and diversity of Spanish-speaking cultures. Note: Daytime sections on Main Campus will meet in-person for the lecture component of class for three contact hours and all students must participate in an additional contact hour of asynchronous online work including videos, voice recording activities, dialogues and other assignments. These sections and the fully online sections require access to high-speed internet and a webcam. Other sections (offered in the evening, and/or at Ambler or Center City campus) will provide all instruction in a traditional classroom setting.

Course Attributes: LA

Repeatability: This course may not be repeated for additional credits.

SPAN 1002. Basic II. 4 Credit Hours.

Basic Spanish II is a continuation of the work begun in Basic I. The course further develops basic skills for speaking, listening, reading, and writing, and it continues the introduction to the richness and diversity of Spanish-speaking cultures. Note: Daytime sections on Main Campus will meet in-person for the lecture component of class for three contact hours and all students must participate in an additional contact hour of asynchronous online work including videos, voice recording activities, dialogues and other assignments. These sections and the fully online sections require access to high-speed internet and a webcam. Other sections (offered in the evening, and/or at Ambler or Center City campus) will provide all instruction in a traditional classroom setting.

Course Attributes: LA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 1001, SPAN 1901, 'C1002' in LCSP, 'B1002' in LCSP, 'C1003' in LCSP, 'B1003' in LCSP, or 'EXMPT' in LCSP)

SPAN 1003. Intermediate. 3 Credit Hours.

Intermediate Spanish is a communicative course. More sophisticated grammatical concepts will be introduced and students will continue to develop speaking, listening, reading, and writing competencies. Class work will include discussions, videos, and writing. Students will take a more active role in their own learning process by using computer technology out of class to hone grammar skills and explore the multi-faceted world of Hispanic culture.

Course Attributes: LB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 1002, SPAN 1902, 'C1003' in LCSP, 'B1003' in LCSP, or 'EXMPT' in LCSP)

SPAN 1011. Heritage Spanish I. 3 Credit Hours.

Designed for the needs of heritage speakers of Spanish with little or no formal training in Spanish. Spelling, accentuation, and standard sentence-level grammar plus opportunities for Spanish conversation. NOTE: Prior to summer 2015, the course title was "Language Skills for Spanish Speakers."

Repeatability: This course may not be repeated for additional credits.

SPAN 1076. Intensive Practice in the Four Skills. 9 Credit Hours.

Intensive practice in Spanish. Methods, materials, and small class sections are tailored to the varied linguistic needs of the students. Given in conjunction with Latin American Studies 2101 (0100), Latin America through Film and Fiction; and Sociology 2163 (0163), Area Studies. This combination of language study, area study (taught in Spanish), and a field trip opportunity to use Spanish in a total-immersion atmosphere affords a unique opportunity for personal enrichment and language acquisition.

Repeatability: This course may not be repeated for additional credits.

SPAN 1901. Honors Basic I. 4 Credit Hours.

Basic Spanish I is an introductory Spanish course for students with little or no previous Spanish experience. The course will develop basic skills for speaking, listening, reading, and writing as well as introduce students to the richness and diversity of Spanish-speaking cultures. Daytime sections on Main Campus will meet in-person for the 3-credit, lecture component of class, while the lab component (the 4th credit) will be earned through asynchronous online work including videos, voice recording activities, dialogues and additional assignments. These sections and the fully online sections require access to high-speed internet and a webcam. Other sections provide all instruction in the regular classroom.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, LA

Repeatability: This course may not be repeated for additional credits.

SPAN 1902. Honors Basic II. 4 Credit Hours.

Basic Spanish II is a continuation of the work begun in Basic I. The course further develops basic skills for speaking, listening, reading, and writing, and it continues the introduction to the richness and diversity of Spanish-speaking cultures. Daytime sections on Main Campus will meet in-person for the 3-credit, lecture component of class, while the lab component (the 4th credit) will be earned through asynchronous online work including videos, voice recording activities, dialogues and additional assignments. These sections and the fully online sections require access to high-speed internet and a webcam. Other sections provide all instruction in the regular classroom.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, LA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 1001, SPAN 1901, 'C1002' in LCSP, 'B1002' in LCSP, 'C1003' in LCSP, 'B1003' in LCSP, or 'EXMPT' in LCSP)

SPAN 1903. Honors Intermediate. 3 Credit Hours.

Intermediate Spanish is a communicative course. More sophisticated grammatical concepts will be introduced and students will continue to develop speaking, listening, reading, and writing competencies. Class work will include discussions, videos, and writing. Students will take a more active role in their own learning process by using computer technology out of class to hone grammar skills and explore the multi-faceted world of Hispanic culture.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, LB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 1002, SPAN 1902, 'C1003' in LCSP, 'B1003' in LCSP, or 'EXMPT' in LCSP)

SPAN 2001. Conversational Review. 3 Credit Hours.

The main thrust of this course is oral practice with grammar review for the purpose of improving the non-native student's oral communication skills.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 1003, SPAN 1903, or 'EXMPT' in LCSP)

SPAN 2002. Hispanic Readings. 3 Credit Hours.

This course devotes time to speaking and writing skills, but the main emphasis is reading comprehension and interpretation of texts in Spanish.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 1003, SPAN 1903, or 'EXMPT' in LCSP)

SPAN 2011. Spanish for Heritage and Bilingual Speakers. 3 Credit Hours.

This course is designed for heritage/bilingual speakers of Spanish, that is, for students who grew up speaking Spanish at home or in non-academic environments, and whose schooling has been primarily in English. The main aim of this course is the development of students' bilingual range to achieve communicative, linguistic, and sociolinguistic competence, with a focus on Spanish reading, writing, and grammar. Emphasis will be given to the development of Spanish skills for formal, academic, and professional contexts. Students will expand their biliteracy skills through the study of relevant sociopolitical and cultural issues pertaining to Spanish-speaking communities in the US. Note: There are no prerequisites for this course. NOTE: Prior to summer 2015, the course title was "Advanced Skills for Spanish Speakers". Prior to spring 2019, the course title was "Spanish Heritage II." Students who took this course under those titles will not receive additional credits. **Repeatability:** This course may not be repeated for additional credits.

Repeatability: This course may not be repeated for additional credits.

SPAN 2096. Composition. 3 Credit Hours.

This course devotes time to reading comprehension and oral expression, but the main thrust of the course is written expression using appropriate Spanish grammar and orthography. NOTE: Prior to fall 2009, the course title was "Composition and Conversation."

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 2001, SPAN 2901, SPAN 2002, or SPAN 2902)

SPAN 2098. Advanced Intensive Practice in the Four Skills. 9 Credit Hours.

The nine-credit Advanced Intensive Practice in the Four Skills course of the Latin American Studies Semester (LASS) is designed to help students develop writing skills through a variety of analytical and creative assignments. To accomplish this goal the course reviews grammatical structures previously studied and introduces other new structures. Students will work on strategies for correcting errors, and on improving the organization and clarity of their own writing. Oral participation in this class is very important: we will discuss the texts we read in order to analyze their content, structure, and aesthetics. These texts will also help students to expand their vocabulary and improve their spelling. Only Spanish will be spoken in class. Duplicate Credit warning: Previously known as Spanish 2076.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

SPAN 2201. Catalan Language for Spanish Speakers. 3 Credit Hours.

This course is devoted to the study of Catalan language. The goal of the course is to introduce students to the vocabulary, grammar and language usage of Catalan. It is a comprehensive overview of Catalan grammar, in combination with the development of listening, reading, writing and oral communication skills. Moreover, it introduces students to the richness and diversity of Catalan culture. It is intended for students with a background in Spanish (i.e., they have completed four semesters of instructional Spanish or have native or native-like command of the language). Thus, it is a transition course between the two languages.

Repeatability: This course may not be repeated for additional credits.

SPAN 2222. Salsa, Samba, Selena. 3 Credit Hours.

What can Salsa, Samba and Selena teach us about relationships between the Global South and Global North? How do these case studies illustrate the impact socio-political events have on cultural products? How do cultural practices evolve and change in relation to their surroundings? To answer these questions, this course weaves concert clips, music videos, television series, musical examples, and embodied practice to study topics ranging from how the Cuban Revolution led to Latin Jazz to enjoying PhillyBlanco's batucadas to how TikTok and Instagram keep Selena alive.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 1003 or SPAN 1903)

SPAN 2901. Honors Conversational Review. 3 Credit Hours.

The main thrust of this course is oral practice with grammar review for the purpose of improving the non-native student's oral communication skills.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 1003, SPAN 1903, or 'EXMPT' in LCSP)

SPAN 2902. Honors Hispanic Readings. 3 Credit Hours.

This course devotes time to speaking and writing skills, but the main emphasis is reading comprehension and interpretation of texts in Spanish.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 1003, SPAN 1903, or 'EXMPT' in LCSP)

SPAN 3001. Advanced Composition & Conversation. 3 Credit Hours.

Continued development of conversation and writing skills. Special attention is given to advanced areas of Spanish grammar appropriate for oral argumentation and expository writing and also to distinctions between formal and informal usage.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 2096 or SPAN 2098)

SPAN 3002. Hispanic Readings II. 3 Credit Hours.

Themes in Hispanic culture in the context of short prose readings, including the short story and the short novel. Emphasis on tools for advanced reading: vocabulary recognition, comprehension of idiomatic expressions, and knowledge of advanced grammar. Includes writing and oral discussion.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 2096 or SPAN 2098)

SPAN 3003. Advanced Grammar for Communication. 3 Credit Hours.

Emphasizes advanced grammar (including distinctions of tense, aspect and mood; reflexive and passive usage; and pronoun selection). Attention is paid to Spanish/English contrasts. Grammar skills are developed in conversation and in reading and writing. Students are also introduced to linguistic concepts that will help them make their own judgments about grammar and pronunciation. NOTE: Prior to summer 2015, the course title was "Advanced Grammar and Linguistic Concepts."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 2096 or SPAN 2098)

SPAN 3096. Advanced Analysis and Writing Skills. 3 Credit Hours.

Students read short stories and other brief narrative texts, plays, poems and essays in order to facilitate their acquisition of critical skills and to identify basic ideological and formalistic issues within the texts being studied. This course teaches how to become a careful reader and writer. Reading comprehension and writing are its essential aspects. Compositions are written and revised. The course is a prerequisite for most advanced Spanish offerings. This is a critical thinking course and a capstone writing course. NOTE: Cornerstone to the Spanish major and capstone writing course.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 2096 or SPAN 2098) and any SPAN course numbered 3000 to 4999.

SPAN 3121. Introduction to the Literature of Spain. 3 Credit Hours.

Examination of major works of Spanish literature. NOTE: Prior to fall 2009, the course title was "Introduction to Spanish Literature." Prior to summer 2015, the course title was "Masterpieces of Spanish Literature."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 2096 or SPAN 2098)

SPAN 3141. Introduction to the Literature of Latin America. 3 Credit Hours.

Examination of major works of Spanish American literature. NOTE: Prior to fall 2009, the course title was "Introduction to Spanish American Literature." Prior to summer 2015, the course title was "Masterpieces of Spanish American Literature."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 2096 or SPAN 2098)

SPAN 3142. Puerto Rican Readings. 3 Credit Hours.

This course entails the study of selected works by major Puerto Rican writers.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 2096 or SPAN 2098)

SPAN 3160. Special Topics I. 3 Credit Hours.

A study of language, literature, culture or other areas of special interest in the Hispanic world. NOTE: Prior to summer 2015, the course title was "Special Topics in Spanish and/or Spanish American Literature."

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (SPAN 2096 or SPAN 2098)

SPAN 3201. Catalan Culture and Civilization. 3 Credit Hours.

This course is devoted to the study of Catalan culture. The term "Catalan culture" in the strictest sense refers to the various artistic, intellectual and popular manifestations of the social interactions encountered in those geographical lands populated by Catalan-speaking peoples (located on the eastern part of the Iberian Peninsula and parts of France and Italy). Through the analysis of original texts, films and visual artifacts, the course will incorporate discussions on the history, politics, society, cinema, anthropology and the arts of the Catalan-speaking regions. The course is intended to strengthen the students' reading skills, to broaden their vocabulary, and to increase cultural and literary awareness by reading, discussing and writing about the various cultural topics introduced in class. The course will be taught in Catalan.

Repeatability: This course may not be repeated for additional credits.

SPAN 3204. Latin America through Film. 3 Credit Hours.

This course is designed to present a multicultural view of Latin American life through Latin American film. It includes the artistic appreciation and the critical analysis of the films viewed.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 2096 or SPAN 2098)

SPAN 3221. The Cultures of Spain. 3 Credit Hours.

The Spanish character as revealed in its language, literature, architecture, history, art, music, and ethnic traditions. Geography and sociology of Spain. Lectures, readings, and discussions. NOTE: Prior to summer 2015, the course title was "Spanish Culture and Civilization."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 2096 or SPAN 2098)

SPAN 3222. Spain through Film. 3 Credit Hours.

This course develops Spanish-language skills in their application to the study of the culture of Spain through film. It includes the artistic appreciation and analysis of the films viewed. NOTE: Prior to fall 2009, the course title was "Contemporary Spain through Film."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 2096 or SPAN 2098)

SPAN 3229. Latin American and Latinx Philosophy. 3 Credit Hours.

This course surveys central ideas and debates in the Latin American and Latinx philosophical traditions. We will pay special attention to the impact of European colonialism in the production and reception of philosophical ideas in Latin America and Latinx communities in the US. This survey ranges from pre-colonial indigenous philosophy to the present. We will discuss classical and contemporary Andean and Mesoamerican indigenous philosophies and why they are often not treated on par with Western forms of knowledge. We will also cover philosophical debates in colonial and post-colonial Latin America. We will examine how the colonial experience shaped Latin American philosophers' ideas around race, gender, nationhood, education, progress, and authenticity. We will also reflect on aspects of the lived experience of Latinxs in the United States, such as immigration and the controversies around Latinx identity. NOTE: This course is regularly cross-listed with LAS 3229 and PHIL 3229. Students may receive credit for only one of the following: PHIL 3229, LAS 3229, or SPAN 3229.

Repeatability: This course may not be repeated for additional credits.

SPAN 3241. The Cultures of Latin America. 3 Credit Hours.

Study of the Spanish-American people through their literature, history, architecture, art, music, and European/indigenous traditions and institutions. NOTE: Prior to summer 2015, the course title was "Spanish-American Culture and Civilization."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 2096 or SPAN 2098)

SPAN 3243. The Culture of Puerto Rico. 3 Credit Hours.

An examination of topics and themes of Puerto Rican culture and civilization in the context of literary and non-literary texts. NOTE: Prior to summer 2015, the course title was "Puerto Rican Culture and Civilization."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 2096 or SPAN 2098)

SPAN 3261. The Hispanic World. 3 Credit Hours.

This course examines what is different about Hispanic society and its multifaceted mentality. To address these questions, it focuses on topics including ethnic struggle, linguistic diversity, and intellectual and artistic creativity, as well as on the relationship between Spain, Latin America, and Latino society in the U.S. Spanish language skills are developed through conversation and writing. NOTE: Prior to summer 2015, the course title was "The Hispanic Mind."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 2096 or SPAN 2098)

SPAN 3401. Translation Skills. 3 Credit Hours.

Translation skills through familiarity with different types of language taken mainly from Spanish newspapers: reporting, sports, columns, advertisements, correspondence, etc. Models of each and their inherent problems in translation. Essays on translation to examine theories of translation.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 2096 or SPAN 2098) and any SPAN course numbered 3000 to 4999.

SPAN 3402. Interpretation Skills in Translation. 3 Credit Hours.

Style, techniques, and mechanics of translation focusing on texts relating to the subject areas of law, business, social issues, public health, and education. NOTE: Prior to fall 2009, the course title was "Translation Skills II."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 2096 or SPAN 2098) and any SPAN course numbered 3000 to 4999.

SPAN 3501. Spanish for Business Professions. 3 Credit Hours.

An introduction to aspects of the Spanish language and Hispanic culture for business students and business professionals. Emphasis on the development of vocabulary and conversation skills.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 1003, SPAN 1903, or 'EXMPT' in LCSP)

SPAN 3502. Business Spanish I. 3 Credit Hours.

An introduction in Spanish to basic business concepts (relating to company structure, accounting, banking, etc.) with a focus on Spanish vocabulary and writing skills for business. Attention to applications in Spanish-speaking countries.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 2096 or SPAN 2098)

SPAN 3601. Spanish for Health Professions. 3 Credit Hours.

This course assists medical and related human-services personnel and students in interacting and communicating effectively with Spanish-speaking people. Conversation skills, cultural information, and medical and social-services terminology are integrated as they apply to real situations. Students practice verbal and non-verbal skills in simulated role-playing situations. Moreover, the course is designed to assist medical personnel in the acquisition of Spanish medical vocabulary. The delivery of services to the Hispanic community is of foremost importance. NOTE: Prior to summer 2015, the course title was "Spanish for Health and Human Services."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 1003 or 'EXMPT' in LCSP)

SPAN 3602. Medical Spanish. 3 Credit Hours.

This course is designed to assist medical personnel in the acquisition of Spanish medical vocabulary, strategies of communication and cultural knowledge to assist in the delivery of services to the Hispanic community.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 2096 or SPAN 2098)

SPAN 3701. Spanish for the Legal Professions. 3 Credit Hours.

This course provides students and legal professionals with technical vocabulary and communicative skills in a legal context. Special emphasis is paid to oral and written communication, and aural comprehension in a variety of legal contexts.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in SPAN 1003.

SPAN 3801. Spanish for Professionals in Criminal Justice and Social Services. 3 Credit Hours.

This course will address the diverse language needs of personnel working with Spanish-speaking clients in the criminal justice system. Practical and relevant vocabulary will be acquired through simulation and real world activities such as role-plays, case studies and basic translation / interpretation tasks, increasing students' oral skills and word accuracy. Readings, videos and interviews will enable students to acquire an understanding of the linguistic and cultural diversity of the Spanish-speaking community and to observe, understand and interpret norms within it.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 2096 or SPAN 2098)

SPAN 3960. Honors Special Topics. 3 Credit Hours.

A study of language, literature, culture or other areas of special interest in the Hispanic world. NOTE: Prior to summer 2015, the course title was "Honors Special Topics in Spanish Literature."

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

SPAN 3996. Honors Advanced Analysis and Writing Skills. 3 Credit Hours.

Students read short stories and other brief narrative texts, plays, poems and essays in order to facilitate their acquisition of critical skills and to identify basic ideological and formalistic issues within the texts being studied. This course teaches how to become a careful reader and writer. Reading comprehension and writing are its essential aspects. Compositions are written and revised. This is a critical thinking course and an honors writing course. (This course is the honors version of Spanish 3096.)

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 2096 or SPAN 2098) and any SPAN course numbered 3000 to 4999.

SPAN 4060. Special Topics. 3 Credit Hours.

A comprehensive study of language, literature, culture or other areas of special interest in the Hispanic world.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4121. Survey of Spanish Literature. 3 Credit Hours.

Survey of selected periods and themes in Spanish literature.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4123. 16th & 17th Century Spanish Literature. 3 Credit Hours.

This course is devoted to the study of the literature produced during what has been called the Golden Age of Spanish Literature. Although there is special emphasis on the genre of prose, emblematic texts from various genres will be included: chivalric and pastoral novels, Renaissance dialogues, picaresque treatises, and women's texts.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4126. Cervantes. 3 Credit Hours.

An in-depth study of Miguel de Cervantes' life and selected works. NOTE: Prior to fall 2009, the course title was "Cervantes' Don Quijote."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4127. 18th and/or 19th Century Spanish Literature. 3 Credit Hours.

This course is devoted to the study of Spanish literature during the 18th and/or 19th century. NOTE: Prior to fall 2009, the course title was "Poetry and Drama of the 19th Century."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4128. Hispanic Modernism. 3 Credit Hours.

Using significant works by leading authors (i.e., Martí, Unamuno, Valle-Inclán, Casal, Gutiérrez Nájera, Machado and/or Jiménez), this course explores aspects of Modernity in Spain and/or Spanish America. NOTE: Prior to fall 2009, the course title was "Generation of 1898."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4132. 20th &/or 21st Century Spanish Literature. 3 Credit Hours.

This course is devoted to the study of Spanish literature during the 20th and/or 21st century. NOTE: Prior to fall 2009, the course title was "Contemporary Spanish Novel."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4133. Hispanic Women in Literature. 3 Credit Hours.

The study of the presence of women as authors and/or characters in Spanish and/or Spanish American literature. NOTE: Prior to fall 2009, the course title was "The Female Presence in Peninsular Literature."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4141. Survey of Spanish American Literature. 3 Credit Hours.

Survey of selected periods and themes in Spanish American literature.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4142. Spanish American Short Story. 3 Credit Hours.

The evolution of the Spanish American short story.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4143. Spanish American Novel. 3 Credit Hours.

This course explores aspects of the Spanish American novel across time, and highlights trends introduced and developed in different texts. NOTE: Prior to fall 2009, the course title was "Latin American Novel."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4144. Spanish American Poetry. 3 Credit Hours.

Trends in Spanish American poetry through representative poems and poets. NOTE: Prior to fall 2009, the course title was "Latin American Poetry."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4146. National Literatures of Spanish America. 3 Credit Hours.

The study of literature in its cultural context focusing on texts from a selected country or countries of Spanish America. NOTE: The country of choice will vary according to the instructor's preference.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4148. Latin American Literature of Social Conflict. 3 Credit Hours.

The study of class, ethnic, gender, and other social conflicts in Latin American literature.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4149. Literature of Colonial Spanish America. 3 Credit Hours.

The study of the literature of Colonial Spanish America. NOTE: Prior to fall 2009, the course title was "Literature of Colonial America."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4151. Literature of the Caribbean. 3 Credit Hours.

A comparative study of representative literary works from Cuba, the Dominican Republic, Puerto Rico and non-Spanish-speaking nations of the Caribbean. NOTE: Prior to summer 2015, the course title was "Comparative Caribbean Literature."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4152. U.S. Latino/a Studies. 3 Credit Hours.

An exploration of literature, history, race, ethnicity, gender and language among Latinos/as in the United States. NOTE: Prior to summer 2015, the course title was "U.S. Latino Literature."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4161. Hispanic Literature through Art. 3 Credit Hours.

Comparative study of Hispanic literature in the context of trends and styles in the history of Art.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4182. Independent Study. 1 to 4 Credit Hour.

An independent-study course arranged each semester. Please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4183. Directed Readings. 3 to 6 Credit Hours.

Guided readings in Spanish, at the 4000 level, focusing on themes and topics in Hispanic culture, literature and/or linguistics. NOTE: By arrangement with appropriate professor and special permission of department chair.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4221. The Art of Spain. 3 Credit Hours.

A panoramic view of the art of Spain from two perspectives: the chronological and the geographic. The chronological perspective includes artistic and architectural work from the paleolithic period (the Caves of Altamira) to the present time. The geographic perspective examines work from Asturias, in the north, to Sevilla and Granada in the south and Barcelona on the Mediterranean coast of Spain.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 2096 or SPAN 2098)

SPAN 4240. Topics in Hispanic Popular Cultures. 3 Credit Hours.

The study of manifestations of Hispanic popular culture.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4242. Hispanic Influences in the U.S.. 3 Credit Hours.

This course examines contemporary U.S. Latino literature and writers. Students will examine the evolution of Latino literature and its themes, and examine the experiences of Latino writers and their impact on U.S. culture. Coursework will include lectures, readings, films, papers and class discussions.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4301. The Sounds of Spanish. 3 Credit Hours.

An articulatory study of the sounds of Spanish with attention to regional variation and comparisons with English. NOTE: Prior to summer 2015, the course title was "Spanish Phonetics."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4302. Introduction to Spanish Linguistics. 3 Credit Hours.

Concepts and procedures of linguistic description applied to sounds, words, and sentence patterns of the Spanish language.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4303. Spanish/English Bilingualism. 3 Credit Hours.

A contrastive linguistic study of Spanish and English sound and grammatical systems. Appropriate for students and teachers of Spanish in the context of the U.S. NOTE: Prior to summer 2015, the course title was "Spanish / English Contrasts."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4304. Spanish Applied Linguistics. 3 Credit Hours.

This course will explore a number of theories accounting for language learning from classical times to the present. Students will examine not only the teaching of Spanish in accordance with these theories, but also the acquisition of Spanish by the second language learner.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4305. Evolution of the Spanish Language. 3 Credit Hours.

A study of chronological developments in the linguistic and social history of Spanish. NOTE: Prior to summer 2015, the course title was "History of the Spanish Language."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4306. Spanish Sociolinguistics. 3 Credit Hours.

This course will provide an introduction to the study of language in society as represented in sociolinguistic research from Spain, Latin America, and the United States. Emphasis is on linguistic variation.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4307. Language and Gender. 3 Credit Hours.

An examination of the relationship between language use and social gender, i.e., of women's and men's speech. Language is examined from the perspectives of sounds, grammatical structures, semantic positioning, and conversational strategies with illustrations based on the use of Spanish and other languages.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4401. Advanced Translation and Interpretation. 3 Credit Hours.

Advanced specialized textual translation and interpretation. NOTE: Prior to summer 2015, the course title was "The Art of Translation."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4449. Medieval Spanish Literature. 3 Credit Hours.

Analysis of Spanish texts written during the Middle Ages. NOTE: Prior to fall 2009, the course title was "Medieval Spanish Text."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 3096 or SPAN 3996)

SPAN 4885. Internship. 3 Credit Hours.

Work on site in the Spanish-speaking community combined with in-class discussion of the work experience and of readings focusing on the Spanish language in the U.S. and Latino culture. NOTE: This course was previously named "Service Learning" - students who received credit under this title will not earn additional credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SPAN 2096 or SPAN 2098)

Special Education (SPED)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

SPED 2128. Assistive Technology and Universal Design for Learning. 3 Credit Hours.

This course will provide students with an extensive background regarding the various types and uses of assistive and accessible technology and how the principles of Universal Design for Learning apply to the inherent flexibility of technology as a pathway toward attainment of educational goals.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

SPED 2201. Language Development and Communication Strategies. 3 Credit Hours.

With an emphasis on the connection between language and literacy, we will explore language development and language disorders within the context of specific disabilities. The course is designed to help pre-service teachers to acquire knowledge about language, language development, language disorders, and evidence-based practices for enhancing language skills that will enable them to become more effective teachers. Student vignettes, teacher perspectives, activities, and literacy sections foster the application of concepts to real classroom situations. The Response to Intervention (RtI) model is used as the framework for classroom-based language assessment and instructional methods related to language development and instructional strategies to support communication development. Expanded discussions of emerging teaching technologies and the latest research literature are included.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Repeatability: This course may not be repeated for additional credits.

SPED 2231. Introduction to Special Education. 3 Credit Hours.

This course examines Special Education practices in relation to both the history of the field and current laws governing the education and employment of individuals with disabilities. A focus on the categories of disabilities will include an examination of teaching strategies and accommodations that are used in meeting the needs of diverse learners.

Repeatability: This course may not be repeated for additional credits.

SPED 3187. Integrated Literacy and Special Education Practicum. 3 Credit Hours.

This integrated practicum experience will provide opportunities for students to apply theoretical models and research-based instructional strategies in the area of literacy to middle grades students in inclusive classrooms. Focus will be placed on developmental, cognitive, physical, social, behavioral, processing and learning needs of students and how these needs relate to comprehending written text, specifically for students having disabilities. Particular emphasis will be focused on ways to connect information from the co-requisite literacy methods course and apply this knowledge to students with disabilities in the middle grades classroom. Differentiated instruction, response to intervention, appropriate curricular modification, and authentic assessment related to appropriate instructional decision-making are themes that run throughout this learning experience. NOTE: Background clearances required.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may not be repeated for additional credits.

SPED 3201. Effective Instructional Strategies for Students with Moderate to Significant Disabilities. 3 Credit Hours.

This course is an introduction to effective instruction and strategies for teaching students with moderate to significant disabilities from pre-kindergarten through twelfth grade. The purpose of this course is to identify and understand specific evidence-based strategies that will positively impact student success particularly in the inclusive setting and across additional educational settings.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: SPED 3287.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in SPED 2231.

SPED 3211. Effective Instructional Strategies for Students with Disabilities. 3 Credit Hours.

This course is an introduction to effective instruction and strategies for teaching young students with disabilities from pre-kindergarten through twelfth grade. The purpose of this course is to identify and understand specific evidence-based strategies that will positively impact student success in the inclusive setting. Emphasis will be placed on strategies and activities specific to young learners, collaboration and communication strategies among professionals, technology in the classroom, and ways to address family participation and diversity in today's classroom.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in SPED 2231.

SPED 3287. Practicum for Diverse Learners. 3 Credit Hours.

Practicum experience that provides opportunities for students to apply theories of learning and development.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: SPED 3201.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in SPED 2231.

SPED 3304. Effective Teaching Strategies and Academic Interventions. 3 Credit Hours.

This course overviews assessment and intervention strategies for learners with skill deficits. Learners with a diverse set of needs will be discussed in the course (e.g., neurotypical, autism, intellectual disability, emotional and behavioral disturbance, among others). The link between assessment and intervention will be emphasized throughout the course, with attention to effective practices for learners with diverse needs. Students enrolled in the course will learn how to select, administer, score, interpret, and report results for a variety of behavioral assessment methods that will be related to selecting interventions, monitoring student progress, and making decisions based upon data.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Repeatability: This course may not be repeated for additional credits.

SPED 3312. Methods and Curriculum for Students with Moderate to Severe Disabilities. 3 Credit Hours.

An examination of the assessment and remediation processes required in the education of individuals with moderate to severe disabilities. A special focus is the developmental and ecological assessment of this population and how this information can be used to develop instructional programs. NOTE: Students must register concurrently for SPED 3312, 3332, and 3487.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: SPED 3332, SPED 3487.

Repeatability: This course may not be repeated for additional credits.

SPED 3332. Assessing and Teaching Students with Mild Disabilities. 3 Credit Hours.

This course will examine the assessment and intervention in the academic subject areas of students with mild learning problems. An emphasis will be on the understanding of learning differences and how to teach learning strategies that can accommodate those with learning differences. NOTE: Students must register concurrently for SPED 3312, 3332, and 3487.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: SPED 3312, SPED 3487.

Repeatability: This course may not be repeated for additional credits.

SPED 3487. Practicum in Special Education. 3 Credit Hours.

Prerequisite for Special Education students with no background in education. Practicum meets half days during the regular semesters and full days in the summer. Must be admitted to the Certification program. NOTE: Students must register concurrently for SPED 3312, 3332, and 3487.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: SPED 3312, SPED 3332.

Repeatability: This course may be repeated for additional credit.

SPED 4103. Classroom Management and Positive Behavior Support. 3 Credit Hours.

This course provides an in-depth presentation of Positive Behavior Support (PBS) and its application in classroom systems to prevent challenging behavior and academic failure. Infused throughout the course will be intervention strategies that will allow for the accommodation of all children in the general-education system. The emphasis of the course will be proactive, constructive strategies that prevent, rather than react to, classroom difficulties.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in SPED 2231.

SPED 4105. Assessment in Special Education. 3 Credit Hours.

This course is designed to provide students with an understanding of assessment theory, the purposes of assessment and specific assessment techniques as they relate to the education of struggling students and students with disabilities. Emphasis is placed both on how assessment is used to identify students with disabilities and how assessment can be used to plan and monitor the effectiveness of instructional practices related to student learning and development in the classroom. We use a problem-solving approach in this course.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may not be repeated for additional credits.

SPED 4106. Literacy Instruction for Young Children with Disabilities. 3 Credit Hours.

The focus of this course is to provide an understanding of how to identify and provide interventions for children who are having difficulty learning to read. This course begins with focusing on problems that may arise with the development of foundational literacy skills that include oral language development, phonological sensitivity, recognition and discrimination of print, and knowledge of letters. The course then focuses on problems that arise as children begin to learn to crack the code and begin identifying words. Finally issues regarding fluency and comprehension are addressed. The goal of the class is provide classroom teachers with strategies to understand a) the types of reading difficulties that children with special needs may experience and b) the various research-based intervention strategies that could be used to facilitate children's learning to read. Emphasis will be placed on understanding theories and interventions that surround literacy development for children in Pre-Kindergarten to grade 4 settings, with an additional exploration of how language and literacy are impacted by diversity, various disabilities and atypical behaviors. An equally important theme will be how to actually implement this knowledge in inclusive classrooms through appropriate assessment practices, research validated literacy interventions, developmental reading programs, evidence-based instructional practices, and content area materials. Other integral parts of literacy and language development, and writing, such as text production, spelling, and composition, co-teaching, collaboration with paraprofessionals and other related support staff, spoken language, communication skill development through assistive technology, and universal design in inclusive classrooms will be examined at the instructor's discretion. NOTE: Background clearances required.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: SPED 4105.

Repeatability: This course may not be repeated for additional credits.

SPED 4109. Educating Students with Disabilities in Inclusive Settings. 3 Credit Hours.

This course is an introduction to effective strategies for teaching students with disabilities across age levels and content areas. Additional skills (e.g, study skills and self-determination) will be thoroughly discussed to demonstrate how these critical skills could be taught across content areas. The purpose of this course is to identify specific strategies that will aid in student success in the inclusive setting. Emphasis will be placed on evidence-based strategies and activities specific to elementary students, technology in the classroom, and ways in which to address diversity in today's classroom. This course has a field-based component which is designed to provide students with an understanding of assessment theory, the purposes of assessment and specific assessment techniques as they relate to the education of children with special needs. Emphasis will be placed both on how assessment is used to identify children with disabilities as well as how assessment can be used to plan and monitor the effectiveness of instructional practices as they relate to student learning and development in the classroom. A problem-solving approach will be employed. Students will be provided with the opportunity to apply the knowledge learned in the course in the classroom. NOTE: Background clearances required.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may not be repeated for additional credits.

SPED 4196. Literacy Instruction for Students with Disabilities. 3 Credit Hours.

The focus of this course is to provide knowledge of a developmental language framework for pre-service early childhood, elementary grade, and special education teachers that will be the foundation for effective literacy instruction for struggling readers in inclusive settings including students with a wide range of abilities and disabilities. Emphasis is placed on understanding theories and interventions that surround language acquisition and literacy development for students in pre-kindergarten to grade 8 settings, with an additional exploration of how language and literacy are impacted by diversity and various disabilities.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: SPED 4105.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

SPED 4198. Literacy Instruction and Assessment in Special Education. 3 Credit Hours.

This course is designed to provide students with an understanding of reading and assessment theory and skills. The skills and techniques from this class will help students develop the foundation for assessment of effective literacy instruction for struggling readers in inclusive settings including students with a wide range of abilities and disabilities. Emphasis is placed both on how assessment is used to identify students with disabilities in reading and other areas and how assessment can be used to plan and monitor the effectiveness of instructional practices related to student learning and development in the classroom. Moreover, students will learn how to use effective reading techniques and strategies to help struggling readers and students with other disabilities. In addition, this course has been designated as a writing intensive course. This means that the course has a specific instructional focus on professional writing related to teaching and assessing literacy of students with disabilities. Specifically, in this course students will learn how to (a) organize their writing for clear and professional communication; (b) incorporate technical terminology into their writing to describe students' current levels of performance, assessment results, and recommendations for instruction; and (c) write for varying audiences, including teachers, related services providers, administrators, and parents of children with disabilities. The writing assignments in the course are designed to teach students writing skills they will need to be successful as teachers who support students with disabilities in their development of literacy skills.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: ECED 4187, ECED 4802, SPED 4103.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

SPED 4201. Effective Transition for Students with Disabilities. 3 Credit Hours.

The focus of this course is to provide knowledge and skill development in the areas of transition planning, self-determination, and collaboration among professionals, families, and students with disabilities in academic, vocational, and community settings. Emphasis will be placed on evidence-based practices in transition to enhance post-school outcomes, including assessment, instructional strategies, and identified predictors of post-school outcomes. Special attention will be given to knowledge about pre-K, elementary, middle school, and secondary transition to postsecondary education and employment, along with information on such important topics as transition-related legislation; local, state, and national resources; inclusive secondary education; self-determination, family involvement, interagency collaboration, and transition Individualized Education Programs (IEPs).

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may not be repeated for additional credits.

SPED 4331. Family and Interdisciplinary Collaborative/Consultation Skills. 3 Credit Hours.

This course will focus on the context, processes, and content for collaboration and consultation. The course will focus on the roles and responsibilities of special educators in collaborative and inclusion settings. The main theme of "teacher as decision maker" serves as the framework for teachers as they learn new skills/content to become effective collaborators and consultants. The core of the course will focus on building communication and partnerships skills so that educators can become better collaborators, team-teachers, and consultants. This includes serving as an advocate for students with disabilities and culturally diverse students in educational settings. Various components will also focus on how teachers can become more effective in their communication with parents/legal guardians.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Repeatability: This course may not be repeated for additional credits.

SPED 4801. Senior Seminar and Performance Assessment in Special Education. 3 Credit Hours.

Students will be involved in experiences that prepare them for making the transition from college to the practice setting, and engage in activities that foster professionalism in school and community settings. The senior performance assessment, a requirement for teacher certification students, is also a part of the course. NOTE: This is a required course for all teacher certification candidates, which is taken during the student teaching semester.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: SPED 4888.

Repeatability: This course may not be repeated for additional credits.

SPED 4888. Student Teaching in Special Education. 9 Credit Hours.

The special education student teaching experience is taken during the final semester of study before completion of the special education teacher preparation program requirements. Eligibility for graduation and recommendation for PreK-12 Special Education certification is contingent on the successful completion of this practicum. Students are provided with an opportunity to be in a classroom for 12 weeks full time and to put into practice what they have learned in their special education courses. Over the course of the semester, students will experience, in depth, the full role and meaning of teaching in special education and/or an inclusive classroom. Experiences include planning and organizing for instruction, developing classroom teaching competencies and skills, evaluating pupil progress, participating in extra-class activities, participating in the development of IEPs, working collaboratively with other school personnel, and utilizing school and community resources in the instructional program.

College Restrictions: Must be enrolled in one of the following Colleges: Education & Human Development.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Co-requisites: SPED 4801.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: minimum GPA of 3 in: courses numbered 0700 to 4999.

Sport and Recreation Management (SRM)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

SRM 1115. Student Athlete Development and Professionalism. 3 Credit Hours.

Student Athlete Development and Professionalism is a three-credit course that introduces first-year students to the opportunities and rigors of higher education, as well as to the skills needed to use academic resources successfully in college. Many of the topics covered in this course not only apply to your growth as a student, but also to your social and professional development. The course further provides an introduction to the personal brand development of athletes. Students will learn about the importance of personal brand development, associated brands, personal finance, and compliance in relation to monetizing student athlete name, image, and likeness. Overall, the goal of this course is to provide students with an understanding of the importance of professionalism and personal development.

Repeatability: This course may not be repeated for additional credits.

SRM 1211. Sport, Entertainment and Society. 3 Credit Hours.

This course is an introduction to the sociological dimensions of sport and entertainment by addressing the ways ideology is immersed into our industries, as well as analyzing relevant historic and current issues in sport and entertainment. Through interrogating sociological topics such as gender, race, social class, age, ability, religion, and sexuality in relation to their interconnectedness within sport and entertainment, students will obtain the critical thinking skills and cultural competence tendencies to become forward-thinkers in our industries of sport and entertainment. Note: Prior to Fall 2023, this course was titled "Sport and Society."

Class Restrictions: May not be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

SRM 1220. Special Topics in Sport and Recreation Management. 3 Credit Hours.

Variable content course. See the course schedule for specific topics offered in a given semester.

Repeatability: This course may be repeated for additional credit.

SRM 2212. Law and Ethics in Sport and Recreation. 3 Credit Hours.

This course is designed to address the legal and ethical aspects of sport, recreation, park resources, and leisure services. The course will address legal foundations and the legislative process; contracts and tort law; regulatory agents and methods of compliance; the principles and practices of safety, emergency, and risk management related to sport, recreation, park resources, and leisure services; ethical principles and professionalism in sport and recreation management; environmental ethics; legal issues and trends; and professional competence and professional development related to law and ethics in sport and recreation management.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Sport Tourism Hospitality Mgt.

Repeatability: This course may not be repeated for additional credits.

SRM 2213. Budget and Finance Systems in Sport and Recreation. 3 Credit Hours.

Accounting trends as they relate to the sport and recreation industries will be covered. Financial decision-making, including cash management; ratio analysis; asset management; leverage; short, intermediate, and long-term financing will be the course focus. Economic theory will be applied to sport and recreation settings/organizations. Current trends in revenue production, including sponsorships, will be noted. Different types of budgets will be reviewed and students will learn the budget preparation and approval process.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Sport Tourism Hospitality Mgt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BA 2104 or STHM 1115) and (ACCT 2101, ACCT 2501, or ACCT 2901)

SRM 2217. Research in Sport and Recreation. 3 Credit Hours.

This course will examine ways that research helps solve practical industry problems in recreation and sports. Topics will include problem identification, the logic of research, research designs, information search strategies, questionnaire development, and data analysis. Written and oral communication skills, as well as the use of data analysis software, will be stressed.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Sport Tourism Hospitality Mgt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BA 2104 or STHM 1115)

SRM 3211. Management in Sport and Recreation. 3 Credit Hours.

Provides the knowledge required to formulate and manage effectively the resources in a sport or recreation operation. Human resource administration will be a major focus; managerial history, organizational needs, job designs, recruitment process, hiring/firing process, discipline and grievance procedures, motivation and performance appraisals are included. The course will expose the students to the additional associated management functions of budgets and accounting, facility management, risk management, customer service, community relations, and fund raising.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (HRM 1101 or HRM 1901)

SRM 3214. Marketing Management in Sport and Recreation. 3 Credit Hours.

An analysis of essential marketing, promotion and sales principles as currently applied in the sport and recreation industries. Guidelines for formulating marketing goals and strategies, inclusive of target marketing, will be included. The marketing mix will be evaluated in terms of specific applications set in both industry segments. Trends, issues and problems influencing the industry will also be examined. Principles of salesmanship, sales techniques, sales strategies, and evaluation of sales performance in light of goal planning and objectives will be covered.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

SRM 3215. Stadium/Arena Design and Management. 3 Credit Hours.

The Stadium/Arena Design and Management course will require that students closely examine, condense, and digest information on planning, design, construction, and maintenance of stadiums and arenas which may be employed in athletics, leisure, sport, entertainment, recreation, and physical education. The students will prepare materials for class presentations, topics, and problems for discussion and analysis. The class will visit representative facility sites within the area.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

SRM 3216. Economics of Sport and Recreation. 3 Credit Hours.

This course examines the sport and recreation industries using microeconomic theory for analysis. The topics include league structure, organizational decision making, labor relations, incentive structures and facility financing.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ECON 1101 or ECON 1901)

SRM 3218. Organizational Strategy in Sport and Recreation. 3 Credit Hours.

This course focuses on the strategic challenges confronting firms that compete in the global economy within the sport and recreation industries. It provides students a forum in which to apply and integrate business theories, practices and skills in a global environment. The course examines opportunities for entrepreneurs in the industry through business plan development.

Repeatability: This course may not be repeated for additional credits.

SRM 3220. Special Topics in Sport and Recreation Management. 3 Credit Hours.

Variable content course. See the course schedule for specific topics offered in a given semester.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may be repeated for additional credit.

SRM 3221. Athletics Administration. 3 Credit Hours.

The course covers the organization and implementation of college athletics. Theory, principles, and problem areas will be addressed. Goals and policies associated with the administration of college athletics will also be covered, along with the approaches to planning, organizing, directing, controlling, budgeting, and evaluating college athletic programs.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

SRM 3222. Global Sport Management. 3 Credit Hours.

This course will cover the various governance structures of international sport with an emphasis on sport structures and governance models in areas other than the United States of America including how sport is organized, managed, funded, and governed globally. Students will gain a global perspective through the study of sport and its economic, cultural, sociological, and political role in Canada, Mexico, Central and South America, Asia, Australia/Oceania, Europe, the Middle East, and Africa.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

SRM 3223. Applied Sport Analytics. 3 Credit Hours.

Sports analytics applies data and quantitative methods to measure performance and make decision within the sport industry. This course will analyze various components, such as measuring and predicting team and player performance, recruitment and decision-making strategy, and sports betting and fantasy sports. As such, you will be learning common analytic concepts standard in the sports industry as well as the tools to help analyze these concepts.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

SRM 3224. Media and Communications in Sport and Recreation. 3 Credit Hours.

The purpose of this class is to give an overview of sports information and media relations as they pertain to collegiate and professional sports. The class will go into detail on how professional teams and institutions deal with the media, including: strategic planning, placement of stories, holding media conferences, writing press releases, oversight of web sites, handling sensitive situations, and game operations.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Sport Management, Sport & Recreation Management.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

SRM 3225. Recreation and Leisure Service Management. 3 Credit Hours.

This course will provide the knowledge required to formulate and manage effectively the resources in a public or private recreation or leisure service operation. Coordination of resources, inclusive of human, financial, physical, and technological, will be discussed. The course will expose the students to the typical programs and services provided by recreation and leisure service agencies. Emphasis will be placed on career opportunities and professional development.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

SRM 3226. Consumer Behavior in Sport and Recreation. 3 Credit Hours.

Marketing strategies designed to increase and sustain consumer demand for sport and recreation products and services rely upon an understanding of the individual consumer. This course will examine a variety of personal, psychological and socio-environmental factors that influence attendance and participation in sport and recreation and related consumption behaviors of media usage, purchase of merchandise, and travel. The course will also explore processes that operate within the consumer to understand how individuals make decisions to spend available resources of time and money on sport and recreation consumption activities.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

SRM 3227. Advanced Marketing for Sport and Recreation. 3 Credit Hours.

Sport marketing has changed dramatically as the result of increasing competition and environmental change. This course takes a system approach and is designed to extend students' knowledge and experience in marketing of sport and athletic events by first understanding the nature of competition within the industry; second, by understanding the role of information technology; and third, by developing extensive analytic skills. NOTE: SRM 3296 (formerly STHM 3296): Marketing Management in Sport and Recreation is strongly recommended prior to taking this course.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Sport Tourism Hospitality Mgt.

Repeatability: This course may not be repeated for additional credits.

SRM 3228. Sales Management in Sport and Recreation. 3 Credit Hours.

This course will examine the diverse and complex nature of sales within sport and recreation settings. We will introduce basic sales and customer satisfaction concepts and techniques, and then see how they are applied in sport and recreation organizations. Students will be exposed to the sales process through lectures, readings, and assignments.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

SRM 3231. Leadership in Sport and Recreation. 3 Credit Hours.

This interactive course aims to develop and enhance students' leadership skills. Using a comprehensive perspective of leadership, students will engage in a review of leadership theory, and explore common leadership approaches within sport. Through this combination of theory and leadership lessons with "real world" application, students will develop their own leadership philosophy and work to effectively communicate with their team and community members.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

SRM 3233. Esports Management and Industry Trends. 3 Credit Hours.

This course is an introduction to the nature, scope, and significance of the esports industry. In this course we will examine vital components of the esports ecosystem including key publishers, titles, teams, platforms, technology, and revenue sources. In addition, students will learn a variety of topics relevant to the business of esports, including esports consumers, professional and collegiate esports, legal and ethical concerns, as well as careers and future directions in the industry. The goal of this course is to give students a better understanding of the overall esports ecosystem, its trends, drivers of change, key stakeholders, and monetization.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

SRM 3234. Esports: Legal and Ethical Challenges. 3 Credit Hours.

This course is an introduction to the legal and ethical challenges of the esports industry. In this course, we will examine legal issues related to intellectual property, governance and regulatory frameworks, negotiating player contracts, and investment strategies. In addition, the course will explore ethical issues relevant to the business of esports, including legalized gambling, violence in video games, sexual discrimination, gaming addiction, and cheating. The goal of the course is to expose students to legal and ethical issues faced by those who operate in the esports industry and how to anticipate and address issues that present themselves in practice. The course will emphasize classroom participation.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

SRM 3235. Esports Social Media Management and Fan Engagement. 3 Credit Hours.

This course is designed to give students a foundation on the various digital media platforms, fan engagement strategies, and content production and management practices relevant to esports organizations and consumers. The skills learned in this course will enable students to create and develop relevant esports social media engagement strategies and related content creation and management strategies to engage esports consumers and optimize for each social media platform. This course contains an overview of (1) esports digital media management and consumer engagement; (2) esports fan engagement strategy and planning; (3) esports content management: image and video creation and management; (4) esports gaming content distribution platforms and fan engagement strategies: Twitch, Facebook Gaming, and YouTube Gaming; (5) esports communication and online community platforms and fan engagement strategies: Discord, TeamSpeak, Reddit, and Twitter; (6) customizing content for platforms and social media sharing sites: Instagram, Snap Chat, and Twitter; and (7) measuring social media engagement.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

SRM 3236. Esports Revenue Production. 3 Credit Hours.

One of the fastest growing forms of entertainment in the world is esports, which are simply video game competitions. With over 2 billion video game players in the world, the video game industry is already bigger than the North America film and sports industries combined. Several esports professional teams have valuations like teams in the major pro sports. The esports industry needs revenue to flourish. Many of esports' revenue sources mirror traditional sports, while some are unique. We will examine current revenue sources, as well as spotlight emerging and potential future sources of income. Many traditional sports are beloved for keeping change to a bare minimum, whereas esports is in a constant state of evolution, expansion, and reaction to the exponentially changing media consumption habits of today's tech-thirsty younger generations.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

SRM 3237. Personal Branding of Athletes: Name, Image, and Likeness. 3 Credit Hours.

This course provides an introduction to the personal brand development of athletes. Students will learn about the process of developing a unique and powerful personal brand for athletes in relation to associated brands within the sport brand ecosystem. Students will learn about the role of digital media and technology in the branding process, as well as how to monetize personal brands in compliance with regulations. Therefore, the course is relevant to student athletes, athletes, agents, and those who are interested in careers working directly with athletes or organizations that employ athletes. Overall, the goal of this course is to give students a better understanding of the sport brand ecosystem with a specific focus on athlete branding and monetization.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

SRM 3296. Marketing Management in Sport and Recreation. 3 Credit Hours.

An analysis of essential marketing, promotion and sales principles as currently applied in the sport and recreation industries. Guidelines for formulating marketing goals and strategies, inclusive of target marketing, will be included. The marketing mix will be evaluated in terms of specific applications set in both industry segments. Trends, issues and problems influencing the industry will also be examined. Principles of salesmanship, sales techniques, sales strategies, and evaluation of sales performance in light of goal planning and objectives will be covered.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Sport Tourism Hospitality Mgt.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MKTG 2101 or MKTG 2901)

SRM 4220. Special Topics in Sport and Recreation Management. 3 Credit Hours.

Variable content course. See the course schedule for specific topics offered in a given semester.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may be repeated for additional credit.

SRM 4222. Current and Ethical Issues in Sport Management. 3 Credit Hours.

This course is designed to provide students with an in-depth analysis of the current and ethical issues facing sport and recreation management. The course will address some of the major issues facing sport and recreation managers in the areas of youth sports, interscholastic athletics, intercollegiate athletics, amateur sports, and professional sports. In addition, the course will address the major issues facing sport and recreation managers in public, private, commercial, and voluntary agencies providing sport and recreation programs; and in specialized agencies providing campus recreation, military recreation, industrial recreation, and residence-connected sport and recreation programs. The course will build on the competencies students have already developed in their earlier courses, which introduced them to current issues; professional ethics, rights, and responsibilities; concepts of morality; theories of ethics; ethical behavior; and ethical codes. Given their working knowledge, students will be called upon in class to identify solutions to current issues and to make ethical decisions when confronted with ethical dilemmas.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Sport Tourism Hospitality Mgt.

Co-requisites: STHM 4112.

Repeatability: This course may not be repeated for additional credits.

SRM 4296. Current and Ethical Issues in Sport and Recreation Management. 3 Credit Hours.

The purpose of this course is to examine current issues that are of concern to sport and recreation administrators. The student will gain a basic understanding of these issues and develop appropriate strategies for effectively dealing with these issues/problems. Students will be encouraged to take advocacy positions on certain issues that are addressed. The course will build on the competencies students have already developed in their earlier courses, which introduced them to current issues; professional ethics, rights, and responsibilities; concepts of morality; theories of ethics; ethical behavior; and ethical codes. Given their working knowledge, students will be called upon in class to identify solutions to current issues and to make ethical decisions when confronted with ethical dilemmas.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Sport Tourism Hospitality Mgt.

Co-requisites: STHM 4112.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in SRM 3296.

Sport, Tourism and Hospitality Management (STHM)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

STHM 0827. Dimensions of Diversity: What's Brewing in the Melting Pot?. 3 Credit Hours.

Are we really living in a melting pot? How important are the differences and similarities among individuals? The purpose of this course will be to focus on a variety of issues related to the nature of personal and cultural identity within a diverse American society. Specifically, this course will explore critical factors that shape one's place or standing in society (e.g., race, disability, age, gender, and sexuality). The meaning and significance of these dimensions will be explored as they relate to the societal and technological complexities of the 21st Century. The best practice and research in racism, inequality, and social injustice in industries such as sport, leisure, tourism and healthcare will be explored. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core.

Course Attributes: GD

Repeatability: This course may not be repeated for additional credits.

STHM 0857. Sport & Leisure in American Society. 3 Credit Hours.

Explore the complexity and diversity of American society through the study of sport and leisure. To what extent does the way we play or spectate sports, the way we plan or experience leisure time, reflect American values? As we trace a brief history of the United States through the lens of sport and leisure, we will observe how concepts of freedom, democracy and equality are tested through time. Issues of race, ethnicity, gender, age, disability, and socio-economic class will be prominent as we observe American ideals both upheld and contradicted in the context of the way Americans recreate. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Student cannot receive credit for STHM 0857 if they have successfully completed AAAS 0857, AAS 0857, SOC 0857 or REL 0957.

Course Attributes: GU

Repeatability: This course may not be repeated for additional credits.

STHM 1001. STHM First Year Seminar. 1 Credit Hour.

The first few weeks of college can feel overwhelming with new responsibilities to manage. This course will assist new students in transitioning to the college learning environment by providing access to experts, resources and important skill sets. This course is designed as an intensive, seven-week course that meets weekly with a focus on student self-reflection, awareness and discussion.

Class Restrictions: Must be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

STHM 1113. Foundations of Experience Design and Management. 3 Credit Hours.

This course is an introduction to the nature, scope, and significance of the experience industries and design through the context of sport, hospitality, events, tourism, and related industries. The course will address the conceptual foundations, basic analytical tools, economic significance, current trends, and socio-cultural impacts of the experience economy. Students will be introduced to and learn how to use basic experience design techniques in sport, hospitality, events, tourism, and related contexts. Note: Prior to Fall 2023, this course was titled "The Business of Leisure."

Repeatability: This course may not be repeated for additional credits.

STHM 1115. Foundations of Excel for Sport and Tourism. 1 Credit Hour.

The purpose of this course is to provide a foundational understanding of Excel. This course will prepare students to utilize the tools and features of Excel for their sport, recreation, tourism, hospitality, events, and entertainment courses, internships, and careers. Specifically, students will learn how to use Excel's calculation/computation capabilities, graphing tools/pivot tables, and advanced statistical capabilities with data from the sport, recreation, tourism, hospitality, events, and entertainment industries.

Repeatability: This course may not be repeated for additional credits.

STHM 1220. Special Topics. 1 to 3 Credit Hour.

Variable content course with course titles and description subject to change.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

STHM 2001. Career Exploration and Development Seminar. 1 Credit Hour.

The Career Exploration and Development course will prepare students to search and apply for their Internship I course, develop skills and readiness for the professional workplace, and explore career possibilities in the fields related to sport, recreation, tourism, and hospitality management.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

College Restrictions: Must be enrolled in one of the following Colleges: Sport Tourism Hospitality Mgt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in STHM 1113.

STHM 2114. Leisure and Tourism for a Diverse Society. 3 Credit Hours.

This course emphasizes leisure, sport, recreation, tourism, and hospitality services for a multi-cultural, multi-racial, multi-ethnic society, as well as for persons with disabilities. As the course explores the significance of play, recreation, and leisure throughout the life span, it will focus on the impact of leisure delivery systems on diverse populations within our society. Implications of personal biases will be a thread throughout the course.

College Restrictions: Must be enrolled in one of the following Colleges: Sport Tourism Hospitality Mgt.

Repeatability: This course may not be repeated for additional credits.

STHM 2401. Foundations of Event and Entertainment Management. 3 Credit Hours.

This course provides an in-depth and comprehensive analysis of the global events and entertainment industries. Topics will include the feasibility, viability and sustainability of the event process, the strategic planning process, business development, human resource management, finance and budgeting, event creation and event orchestration, communications, and career development aspects of event leaders.

Repeatability: This course may not be repeated for additional credits.

STHM 3185. Internship I. 3 Credit Hours.

Internship I is a part-time practical work experience that STHM students complete after reaching sixty (60) credits. The minimum 180-hour internship is a supervised industry-specific (i.e. sport, recreation, events, tourism and/or hospitality) experience that coincides with the full length of the academic semester. The experience provides students the opportunity to apply classroom learning theory to a practical workplace setting related to their major; to immerse themselves in a professional work environment; and gain valuable industry experience that will prepare them for entry into their senior internship and beyond. Internships are coordinated and approved in collaboration with the STHM Center for Industry Engagement (CIE). Students must gain approval from the CIE prior to beginning the internship process.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Sport Tourism Hospitality Mgt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in STHM 2001 and (BA 2104 or STHM 1115)

STHM 3411. Program and Special Event Planning. 3 Credit Hours.

This course presents a sequential model of the program and event planning process with particular focus upon the role of the servant leader. The course includes a strong theoretical foundation, formulation of philosophy and goals; needs assessment; selection and design of special program and/or one-time event elements; implementation; and evaluation. Different program and special event formats, including fairs, family reunions, festivals, recreation events, sporting events, meetings, conferences, social events, and grand openings, with different levels of leadership involvement will be discussed.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Sport Tourism Hospitality Mgt.

Repeatability: This course may not be repeated for additional credits.

STHM 3420. International/Domestic Travel Immersion Experience. 3 Credit Hours.

This is a specially designed course that includes educational/experiential trips to sport and tourism destinations. It offers students a unique opportunity to study characteristics and issues specific to the international aspects of the local tourism and hospitality, sport and recreation management industries and destination marketing associations. While abroad, students will visit businesses, companies, and universities; meet leading executives and government/tourism officials; visit sport and recreation facilities; and participate in cultural tours (to museums, theaters, dance performances, the performing arts, and historic parks, trade and art/craft exhibitions). In addition to entertainment, it would indulge students to experience the cultural heritage, ambiance, hospitality, leisure lifestyles, and excitement of the world's great countries and cities globally. The course will help students to develop a better understanding of the global marketplace environments, local cultures, and their identities. (The ideal student would draw upon the body of knowledge based on the concepts of sustainability, global issues and cultural awareness, as well as management and marketing.)

Course Attributes: SI

Repeatability: This course may be repeated for additional credit.

STHM 3424. Business of Social Events and Weddings. 3 Credit Hours.

In the Global Event Industry, over 7 million social events and weddings take place every year. While event operations remain consistent, the success of these events relies heavily on the creative and design process. This course, through a creative and designer lens, will focus on the planning and cultural significance of social life-cycle events (graduations, engagement parties, etc.), social events (galas, golf outings), and weddings.

Repeatability: This course may not be repeated for additional credits.

STHM 3425. Event and Entertainment Operations. 3 Credit Hours.

The execution of events follows a very complex model with many moving parts. This course analyzes the process for executing an event from concept and pre-production to implementation and onsite logistics management and measurability. The course content builds on a planning and project management framework and considers elements of logistics, risk management and sustainability.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in STHM 2401.

STHM 3426. Entrepreneurship in Sport, Recreation, Tourism, and Hospitality. 3 Credit Hours.

Examines the management of private business ventures, including an in-depth examination of commercial enterprises as a profit-making business and a survey of small business components. A completed business proposal will be required.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Sport Tourism Hospitality Mgt.

Repeatability: This course may not be repeated for additional credits.

STHM 3428. Event and Entertainment Revenues. 3 Credit Hours.

The financial sustainability of an event requires the adoption of a complex revenue model that extends beyond traditional sources of income (e.g., ticket sales). Consideration of alternate revenue sources such as sponsorship, fundraising and ancillary incomes are a requirement for successful event execution. This course will educate and apply principles of alternate revenue development. Revenue sources including sponsorship, fundraising and ancillary income will be presented and discussed. Throughout this course, students will learn through practical scenarios from real-life case studies, readings, lectures, discussions and industry professionals as guest speakers.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

STHM 3429. Entertainment Management. 3 Credit Hours.

For many events, live performances (e.g. orchestra, band, dance, theater, etc.) are a core or key element of the event program. Event planners need to understand aspects of live performance production and the skills needed for success. The primary focus of this course, therefore, will be agency negotiations, contract and rider management, staff management as well as audiovisual management.

Repeatability: This course may not be repeated for additional credits.

STHM 3482. Independent Study. 1 to 3 Credit Hour.

This course provides an opportunity for students to engage in systematic investigations, under the direction of a faculty advisor.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Sport Tourism Hospitality Mgt.

Repeatability: This course may be repeated for additional credit.

STHM 4112. Senior Professional Development Seminar. 3 Credit Hours.

Senior Professional Development Seminar leverages previous professional development experiences in personal skill assessment, networking, industry hours, and Internship I. In this course students will critically analyze advance workplace issues, evaluate skill sets for diverse career options, and strategically utilize and apply career technology tools. Other course topics include the importance of group dynamics, emotional intelligence, and creativity and innovation in the workplace.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Sport Tourism Hospitality Mgt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in STHM 3185.

STHM 4185. Internship II. 3 to 12 Credit Hours.

Internship II is the second internship requirement completed as a culminating practical experience. Students complete a full-time, school-supervised, and industry-specific internship (i.e. sport, recreation, event, tourism and/or hospitality) that aligns with the full length of the semester. This experiential learning component links classroom theory through the acquisition of knowledge in an applied work environment. The internship must provide, at minimum, an entry-level, managerial-preferred, career-specific experience that develops workplace competencies sought by employers when hiring and recruiting talent. Internships are coordinated and approved in collaboration with the STHM Center for Industry Engagement (CIE). Students must gain approval from the CIE prior to beginning the internship process.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Sport Tourism Hospitality Mgt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in STHM 3185.

STHM 4191. Senior Project. 3 Credit Hours.

The culminating written project agreed upon by the University and agency supervisors.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Sport Tourism Hospitality Mgt.

Co-requisites: STHM 4185.

Repeatability: This course may not be repeated for additional credits.

STHM 4401. Digital Portfolio Creation. 3 Credit Hours.

Students will create an online digital portfolio. A portfolio showcases both student achievement and student learning over their time at STHM. The Digital Portfolios will provide a window into student learning of both theory and experiential projects.

Repeatability: This course may not be repeated for additional credits.

STHM 4415. The Event Experience. 3 Credit Hours.

This experience-based course will implement the principles of event and entertainment management. This course will provide students comprehensive insight into the facilitation of hands on event management. The experience course provides an experiential learning opportunity as students will develop, plan and execute an official STHM school event.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Sport Tourism Hospitality Mgt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in STHM 2401 and STHM 3425.

Statistics (STAT)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

STAT 0826. Statistics in the News. 4 Credit Hours.

Ever feel overwhelmed by the amount of information we have access to? Not sure whom to believe? This course provides students with the skills and knowledge to discern truth from fiction (and what lies in between) as they engage in rich discussions on current events. Students learn how to understand, evaluate, and criticize information from surveys and scientific studies encountered in newspapers, magazines, textbooks, and scholarly journals. They learn how to distinguish between informative and misleading uses of statistics and make informed decisions in the face of complexity and uncertainty. The focus is on understanding statistics and statistical ideas, not on statistical methodology (although this is also part of the course). Numerous supportive examples taken from a variety of fields in the social, behavioral, and natural sciences accompany each method and concept. NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core.

Course Attributes: GQ

Repeatability: This course may not be repeated for additional credits.

STAT 0827. Statistical Reasoning & Games of Chance. 4 Credit Hours.

This is a beginning course in probability and statistics with special emphasis on the critical analysis of games of chance. The objectives of the course are to introduce several quantitative concepts with real-life applications. These applications are related to situations that involve fallacies in reasoning, equity markets and games of chance. NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core.

Course Attributes: GQ

Repeatability: This course may not be repeated for additional credits.

STAT 1001. Quantitative Methods for Business I. 3 Credit Hours.

Fundamentals of mathematics and Excel are necessary for a student to pursue their degree at the Fox School of Business and Management. Topics and illustrations are specifically directed to applications in business and economics throughout this course. The overarching theme of this class is to solidify foundational quantitative and Excel skills and use those skills to solve relevant business applications.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Business Basics, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Horticulture, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Pre Business, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt, Undeclared-University Studies.

Course Attributes: QA

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (any MATH course numbered 0701 to 0702, 'Y' in STA1, 'Y' in STA2, MATH 1011, MATH 1021, 'Y' in ST1A, 'Y' in ST2A, or SCTC 1021)

STAT 1102. Quantitative Methods for Business II. 4 Credit Hours.

Fundamentals of mathematics and Excel are necessary for a student to pursue their degree at the Fox School of Business and Management. Topics and illustrations are specifically directed to applications in business and economics throughout this course. The overarching theme of this class is to prepare students to be proficient in areas of quantitative analysis, and to use those skills to solve relevant business applications. The course will also include broader and deeper applications of the topics from STAT 1001. Excel will be used to reinforce topics and present solutions.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Pre Business, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt, Undeclared-University Studies.

Course Attributes: QB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1022, STAT 1001, 'Y' in STA2, 'Y' in STT2, or 'Y' in ST2A)

STAT 1902. Honors Quantitative Methods for Business II. 4 Credit Hours.

Fundamentals of mathematics and Excel are necessary for a student to pursue their degree at the Fox School of Business and Management. Topics and illustrations are specifically directed to applications in business and economics throughout this course. The overarching theme of this class is to prepare students to be proficient in areas of quantitative analysis, and to use those skills to solve relevant business applications. The course will also include broader and deeper applications of the topics from STAT 1001. Excel will be used to reinforce topics and present solutions.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Undeclared-Business & Mngt, Undeclared-University Studies.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, QB

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1022, STAT 1001, 'Y' in STA2, 'Y' in STT2, or 'Y' in ST2A)

STAT 2103. Statistical Business Analytics. 4 Credit Hours.

This course will cover the fundamentals of data description, data analysis, and graphical methods with applications to business problems. Topics include random variables, discrete and continuous distributions, estimation of parameters, and hypothesis testing. Students will gain proficiency in simple and multiple regression models and forecasting. Excel will be used for data analysis and to reinforce topics taught in class.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Facilities Management, Actuarial Science, Business Management, Business, Construction Engr Tech, Construction Mgt Tech, Career and Technical Education, Economics, Economics, Entrprnrship & Innovation Mgt, Engineering, Engineering Technology, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Intrnl Bus - TUJ, Law & Business, Legal Studies, Management Information Systems, Marketing, Pre Business, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Statistics, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1022, STAT 1001, 'Y' in STA2, 'Y' in STT2, MATH 1021, or 'Y' in ST2A) and (STAT 1102, STAT 1902, MATH 1031, MATH 1041, MATH 1941, MATH 1038, 'Y' in STT3, or 'Y' in MATW)

STAT 2104. Selected Topics in Statistical Business Analytics. 1 Credit Hour.

Statistics 2104 is a one credit hour course that covers probability rules, joint and conditional probability, inference, confidence intervals, hypothesis tests, two sample design, simple linear regression, inference for regression, and multiple regression. NOTE: This course is designed for transfer students who have successfully completed a 3 credit hour introductory statistics course. This one credit hour course will bridge the gap between a 3 credit hour introductory statistics course taken at another institution, and the 4 credit hour Statistics 2103 (Business Statistics) course at Fox. Prior to fall 2014, the title of STAT 2104 was "Selected Topics in Business Statistics."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (STAT 2101, STAT 2901, MATH 1013, CEE 3048, PSY 1167, SOC 1167, STAT 2512, PSY 2168, or ECE 3522)

STAT 2501. Quantitative Foundations for Data Science. 3 Credit Hours.

This course will cover topics in probability, statistics, and other quantitative concepts for data science. This course will allow students to acquire knowledge necessary in understanding concepts in statistical theory and methods. Students will apply quantitative analysis, critical thinking and interpretation to real-life problems in diverse areas, like business, engineering, healthcare, etc.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MATH 1041, 'Y' in MATW, or 'Y' in CRMA08) and (MATH 1042, 'Y' in MATW, or 'Y' in CRMA09)

STAT 2512. Intermediate Statistics. 3 Credit Hours.

This course covers the basics of statistical estimation theory, in preparation for further study in regression, time series analysis, and forecasting (as tested on the SOA/CAS Course 4 professional examination). Topics include: classical point estimation methods; construction of confidence intervals; tests of statistical hypotheses; and basic analysis of categorical data. NOTE: This course replaces the Statistics 2102 (0022) Business Core requirement for Actuarial Science majors.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Statistics, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (AS 2101, AS 2505, MATH 3031, STAT 2103, STAT 2903, or STAT 2104)

STAT 2521. Data Analysis and Statistical Computing. 3 Credit Hours.

This course presents practical applications of statistical methods using software. The emphasis is on giving students experience in solving real life problems using appropriate statistical methods. Statistical techniques studied include organization and presentation of data, statistical testing, multiple regression, Chi-Square tests and logistic regression. Case studies and projects, with applications, are used to show the application of statistical methods to business problems. Through this course students should be able to select, utilize and apply quantitative statistical methods to real life problems, and get familiar with data analysis using statistical software. The main statistical software we use is SPSS. Students will also be exposed to other packages, such as Excel and R.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistics + Data Science, Statistical Sci + Data Analyt, Statistics, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (STAT 2103, STAT 2903, MATH 3031, STAT 2104, SOC 1167, CEE 3048, PSY 1167, PSY 2168, AS 2101, AS 2505, ECE 3522, SOC 0825, ANTH 0825, POLS 0825, PSY 0825, PSY 1003, 'Y' in CRST03, 'Y' in CRST06, 'Y' in CRMA16, 'Y' in CRSO02, 'Y' in CRCE01, 'Y' in CRAS02, 'Y' in CREE01, 'Y' in CRSO01, 'Y' in CRPO01, 'Y' in CRPS02, 'Y' in CRST08, or 'Y' in CRPS05)

STAT 2522. Survey Design and Sampling. 3 Credit Hours.

This course presents the principal applications of sample surveys, survey design, criteria of a good sample design, and characteristics of simple random sampling, stratified random sampling, and cluster sampling. Case studies are used where appropriate to illustrate applications of survey sampling. Emphasis will be placed on both the theory and methodology of surveying and include sampling principles, sample design, questionnaire construction, and response problems.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistics + Data Science, Statistical Sci + Data Analyt, Statistics, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (STAT 2103, STAT 2903, MATH 3031, STAT 2104, SOC 1167, CEE 3048, PSY 1167, PSY 2168, AS 2101, AS 2505, ECE 3522, SOC 0825, ANTH 0825, POLS 0825, PSY 0825, PSY 1003, 'Y' in CRST03, 'Y' in CRST06, 'Y' in CRMA16, 'Y' in CRSO02, 'Y' in CRCE01, 'Y' in CRAS02, 'Y' in CREE01, 'Y' in CRSO01, 'Y' in CRPO01, 'Y' in CRPS02, 'Y' in CRST08, or 'Y' in CRPS05)

STAT 2523. Design of Experiments and Quality Control. 3 Credit Hours.

The first part of this course provides students with insight into statistically designed experiments and related topics. The course covers the fundamental statistical concepts required for designing efficient experiments to answer real questions. The fundamental concepts of replication, blocking, and randomization are examined. Topics covered include block designs, balanced incomplete block designs, and Latin Square designs. Additional topics include factorial experiments, fractional factorial designs, and orthogonal arrays. The course also introduces students to response surface methodology, mixture designs, and conjoint analysis. Quality improvement can be accomplished using experimental design principles. The second part of the course covers the core principles of the management of quality in the production of goods and services. Statistical quality control techniques are used in the implementation of these principles. Topics covered include control charts, cusum procedures, and Taguchi methods.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistics + Data Science, Statistical Sci + Data Analyt, Statistics, Undeclared-Business & Mngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (STAT 2103, STAT 2903, MATH 3031, STAT 2104, SOC 1167, CEE 3048, PSY 1167, PSY 2168, ECE 3522, SOC 0825, ANTH 0825, POLS 0825, PSY 0825, AS 2101, AS 2505, PSY 1003, 'Y' in CRST03, 'Y' in CRST06, 'Y' in CRMA16, 'Y' in CRSO02, 'Y' in CRCE01, 'Y' in CRAS02, 'Y' in CREE01, 'Y' in CRSO01, 'Y' in CRPO01, 'Y' in CRPS02, 'Y' in CRST08, or 'Y' in CRPS05)

STAT 2903. Honors Statistical Business Analytics. 4 Credit Hours.

This course provides students with the fundamental concepts and tools needed to understand the role of statistics and business analytics in organizations. It covers basic descriptive statistics, probability, and statistical inference. Topics include probability distributions, random sampling and sampling distributions, point and interval estimation, and hypothesis testing. The course also covers hypothesis testing for several populations, correlation, simple linear regression, multiple regression, and an introduction to data mining. Use of Excel for data analysis and inference. NOTE: This course is a four credit hour course which will substitute for Statistics 2101 (C021) and 2102 (0022) for Fox School students. Prior to fall 2014, the title of STAT 2903 was "Honors Business Statistics."

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Facilities Management, Actuarial Science, Business Management, Business, Construction Mgt Tech, Career and Technical Education, Economics, Economics, Entrprnrship & Innovation Mgt, Engineering, Engineering Technology, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistical Sci + Data Analyt, Statistics, Undeclared-Business & Mnngt.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1022, STAT 1001, 'Y' in STA2, 'Y' in STT2, MATH 1021, or 'Y' in ST2A) and (STAT 1102, STAT 1902, MATH 1031, MATH 1041, MATH 1941, MATH 1038, 'Y' in STT3, or 'Y' in MATW)

STAT 3501. Statistics for Engineers. 3 Credit Hours.

Not to be taken by School of Business and Management students; open only to Engineering students. Descriptive statistics, inference, regression and correlation, and experimental design. Engineering applications.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MATH 1041, MATH 1941, MATH 1038, or 'Y' in MATW)

STAT 3502. Regression and Predictive Analytics. 3 Credit Hours.

The course covers a variety of statistical methods useful in interdisciplinary research, such as simple and multiple regression analysis, ANOVA, analysis of covariance, logistic regression, and predictive models. Emphases are placed on rationales, assumptions, techniques, and interpretation of results from computer packages.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (STAT 2103, STAT 2903, MATH 3031, STAT 2104, SOC 1167, CEE 3048, PSY 1167, PSY 2168, AS 2101, AS 2505, ECE 3522, SOC 0825, ANTH 0825, POLS 0825, PSY 0825, PSY 1003, 'Y' in CRST03, 'Y' in CRST06, 'Y' in CRMA16, 'Y' in CRSO02, 'Y' in CRCE01, 'Y' in CRAS02, 'Y' in CREE01, 'Y' in CRSO01, 'Y' in CRPO01, 'Y' in CRPS02, 'Y' in CRST08, or 'Y' in CRPS05) and (STAT 2501 or 'Y' in CRST09)

STAT 3503. Applied Statistics and Data Science. 3 Credit Hours.

The course will provide a sound treatment on core topics in applied statistics using modern data science techniques. Some basic theory will be reviewed, but the course will emphasize applications. R will be used as the main statistical software package for this course. Upon completing this course, students should be able to demonstrate the knowledge of fundamental concepts and properties in applied statistics such as multiple linear regression, hypothesis testing, model diagnostic and selection and the ability to select proper statistical tools and justify different needs.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Economics, Entrprnrship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Statistics + Data Science, Statistical Sci + Data Analyt, Statistics, Undeclared-Business & Mnngt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (STAT 2103, STAT 2903, MATH 3031, STAT 2104, AS 2505, SOC 1167, CEE 3048, PSY 1167, PSY 2168, SOC 3201, ECE 3522, SOC 0825, ANTH 0825, POLS 0825, PSY 0825, PSY 1003, 'Y' in CRST03, 'Y' in CRST06, 'Y' in CRMA16, 'Y' in CRSO02, 'Y' in CRCE01, 'Y' in CRSO03, 'Y' in CREE01, 'Y' in CRSO01, 'Y' in CRPO01, 'Y' in CRPS02, 'Y' in CRST08, or 'Y' in CRPS05)

STAT 3504. Time Series and Forecasting Models. 3 Credit Hours.

This time series analysis and forecasting models course with interdisciplinary applications covers important univariate and multivariate time series methods, including ARIMA models, further forecasting methods (logistic regression, ARIMA), centered and training Moving Average (MA). Students will apply the body of theoretical knowledge to analyzing real-life data sets.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (STAT 2103, STAT 2903, MATH 3031, STAT 2104, SOC 1167, CEE 3048, PSY 1167, PSY 2168, AS 2101, AS 2505, ECE 3522, SOC 0825, ANTH 0825, POLS 0825, PSY 0825, 'Y' in CRST03, 'Y' in CRST06, 'Y' in CRMA16, 'Y' in CRSO02, 'Y' in CRCE01, 'Y' in CRAS02, 'Y' in CREE01, 'Y' in CRSO01, 'Y' in CRPO01, or 'Y' in CRST08) and (STAT 2501 or 'Y' in CRST09)

STAT 3505. Introduction to SAS for Data Analytics. 3 Credit Hours.

This course is an introduction to programming for statistical analysis using the SAS Software System. Students will learn data set creation by data transformation to/from SAS using Import and Export functions. Concatenation, merging and subsetting data, as well as data restructuring and new variable construction using arrays and SAS functions will be taught. Simple procedures to clean and perform quality control of data, as well as procedures for calculating descriptive statistics, plots, and print outs will be covered. Laboratory exercises and homework assignments include brief exercises as well as manipulation and analysis of real data sets.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (STAT 2103, STAT 2903, MATH 3031, STAT 2104, SOC 1167, CEE 3048, PSY 1167, PSY 2168, AS 2101, AS 2505, ECE 3522, SOC 0825, ANTH 0825, POLS 0825, PSY 0825, SOC 3201, PSY 1003, 'Y' in CRST03, 'Y' in CRST06, 'Y' in CRMA16, 'Y' in CRSO02, 'Y' in CRCE01, 'Y' in CRAS02, 'Y' in CREE01, 'Y' in CRSO01, 'Y' in CRPO01, 'Y' in CRSO03, 'Y' in CRPS02, 'Y' in CRST08, or 'Y' in CRPS05)

STAT 3506. Nonparametric and Categorical Data Analysis. 3 Credit Hours.

This course covers estimation and testing of hypotheses when the functional form of the population distribution is not completely specified. The topics also include sampling models and analyses for discrete data: Fisher's exact test, logistic regression, ROC analysis, log-linear models and Poisson regression, conditional logistic regression, Cochran-Mantel-Haenszel test, measures of agreement between observers, quasi-independence, multinomial logit models, proportional odds model, association models, generalized estimating equations (GEE). Students work with R and SAS throughout the semester.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (STAT 2103, STAT 2903, MATH 3031, STAT 2104, SOC 1167, CEE 3048, PSY 1167, PSY 2168, AS 2101, AS 2505, ECE 3522, SOC 0825, ANTH 0825, POLS 0825, PSY 0825, 'Y' in CRST03, 'Y' in CRST06, 'Y' in CRMA16, 'Y' in CRSO02, 'Y' in CRCE01, 'Y' in CRAS02, 'Y' in CREE01, 'Y' in CRSO01, 'Y' in CRPO01, 'Y' in CRST08, or 'Y' in CRPS05) and (STAT 2501 or 'Y' in CRST09)

STAT 3507. Intermediate Statistics. 3 Credit Hours.

This course covers the basics of statistical estimation theory, in preparation for further study in regression, time series analysis, and forecasting (as tested on the SOA/CAS Course 4 professional examination). Topics include: classical point estimation methods; construction of confidence intervals; tests of statistical hypotheses; and basic analysis of categorical data.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (AS 2101, AS 2505, MATH 3031, STAT 2103, STAT 2903, or STAT 2104)

STAT 3508. Data Management, Missing Data, and Outlier Analysis. 3 Credit Hours.

Significant advances in technology have resulted in most organizations collecting enormous amounts of data both deliberately and incidentally in the course of doing business. Managing data on this scale and converting it into knowledge to facilitate decision making presents exciting new challenges. Although data is ubiquitous, real data is also often "dirty", corrupted with various forms of errors, or missing. Regardless of whether data is "clean", it may not be in the proper format for analysis, or data from multiple places may need to be merged in order for analysis to take place. Thus, the first step in generating good information from data is almost always to clean, process, and validate the data. The goal of this course is to explore tools and techniques for managing data, cleaning data (fixing errors, identifying outliers, etc.), extracting subsets or samples of data, merging and combining datasets, summarizing data, and dealing with the most common problems that may arise with data.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (STAT 2103, STAT 2903, MATH 3031, STAT 2104, SOC 1167, CEE 3048, PSY 1167, PSY 2168, AS 2101, AS 2505, ECE 3522, SOC 0825, ANTH 0825, POLS 0825, PSY 0825, SOC 3201, PSY 1003, 'Y' in CRST03, 'Y' in CRST06, 'Y' in CRMA16, 'Y' in CRSO02, 'Y' in CRCE01, 'Y' in CRAS02, 'Y' in CREE01, 'Y' in CRSO01, 'Y' in CRPO01, 'Y' in CRSO03, 'Y' in CRPS02, 'Y' in CRST08, or 'Y' in CRPS05)

STAT 3580. Special Topics - Statistics. 3 Credit Hours.

Special topics in current developments in the field of statistics.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

STAT 3582. Independent Study. 1 to 6 Credit Hour.

Readings, papers and/or laboratory work under supervision of a faculty member.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

STAT 4596. Capstone: Statistical Science and Data Analytics. 3 Credit Hours.

The purpose of the capstone project is for the students to apply theoretical knowledge acquired during the program to a real project involving actual data in a realistic setting. During the project, students engage in the entire process of solving a real-world data science project: from collecting and processing actual data, to applying a suitable and appropriate analytic method to the problem. Both the problem statements for the project assignments and the datasets originate from real-world domains similar to those that students might typically encounter within industry, government, NGO, or academic research. The project will culminate with both an in-class presentation and final research paper.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- (except where noted) in (STAT 2521 (C or higher) or 'Y' in CRST05) and (BA 2196 or BA 2996)

Strategic Management (SGM)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

SGM 0827. Creativity and Organizational Innovation. 3 Credit Hours.

Being creative is about solving problems or approaching opportunities in novel and valuable ways. This course is designed to help ALL students better harness their full creative potential - whether you think: "I am not creative" or "I already have more ideas than I can handle", this class will help you come up with more creative ideas that offer more value and have greater impact on the world. Although creativity has been studied by nearly every professional domain, this course focuses on creativity as a driver of organizational innovation - from non-profits to small businesses and large corporations to students' own entrepreneurial startups, creativity and innovation are critical to providing value and ensuring long-term survival. Throughout this course students will develop important life skills while learning to creatively solve problems through a number of real-world innovation challenges. No matter what career or profession you are going into, being more creative and appreciating how and why modern organizations function the way that they do will help you to be more valuable, more employable, more innovative, and more entrepreneurial.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

SGM 2525. Management Consulting: Principles and Practices. 3 Credit Hours.

Whether your goal as a management consultant is to join a dedicated firm, operate in-house, or launch your own practice, the factors for success are similar. This course focuses on the skills (hard and soft), methods, and practices of successful consultants. Consulting is highly practical; therefore, the course includes many practical exercises with content from experts in the field. Research projects and project simulations will be evaluated by senior practitioners from industry, including the course instructor. A personal assessment and individual development plan will help you identify and map the best path to a career in consulting. [Note: This course would also benefit aspiring entrepreneurs and students preparing for the capstone.]

Repeatability: This course may not be repeated for additional credits.

SGM 3001. Leading and Managing Small Businesses and New Ventures (for non-business students). 3 Credit Hours.

This course is designed to introduce students with limited or no business background to the critical business leadership, management, and strategy tools and perspectives needed to run a small business, enterprise, or organization as well as to launch a new venture and become a successful entrepreneur. Whether you want to move into leadership/management roles, build a consulting or freelance business, start a new for-profit or non-profit venture, or simply want to be more successful working in any organization, understanding the fundamentals of management and strategy will help you achieve these goals. NOTE: Business students are not eligible to register for this course and should consider SGM 3503 Lean Startup instead.

College Restrictions: May not be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may not be repeated for additional credits.

SGM 3002. Planning to Start Your Own Business. 3 Credit Hours.

It's a fact: Entrepreneurs report greater satisfaction with their work. Chief among the reasons for this is the freedom to determine their own destiny and the appreciation of having a direct impact with their work. In the current economic climate, more and more students are finding entrepreneurial career paths offer them better or complementary options to traditional employment. This course provides students with an understanding of how to research, write, and present effective business plans. The business plan is a critical strategic document used to plan the launch, pivot, or growth of an enterprise. Students will learn about the interrelationship among the various aspects of the plan including the industry, target market, competition, marketing strategy, human resources, financial resources, and management team among others. Students will also learn about presenting the business plan as they engage in mock presentations to local entrepreneurs and venture capital investors.

NOTE: We recommend that students already have an idea for a new venture prior to enrolling in this course. Student who do not yet have an idea should consider taking SGM 3501. Students cannot receive credit for both SGM 3002 and SGM 4596; Fox Entrepreneurship Majors should take SGM 4596 instead of this course.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Entrprnrship & Innovation Mgt, Entrepreneurship.

Repeatability: This course may not be repeated for additional credits.

SGM 3501. Entrepreneurial and Innovative Thinking. 3 Credit Hours.

Thinking like an entrepreneur is about seeing opportunities and passionately pursuing them. Anyone can be entrepreneurial -- whether you start the next Facebook, take control of your work-life balance with a lifestyle business, have an impact on the world with a social venture, or drive change and innovation in an existing company. The goal of this course is not to teach students to start a venture nor to manage a business (this is covered in later courses) but to help you understand the hidden value of your ideas. By highlighting the impact of various types of innovation in driving the development of industries and technological fields, we demonstrate the importance of strategy, competitive advantage, core competencies, and value chains to organizations and industries. By training students to identify opportunities and creatively solve problems, we help develop invaluable skills and perspectives that will make anyone more successful in their professional life. Finally, by showing students all the options that entrepreneurship offers as a potential career path, we begin the process of training you to become a successful entrepreneur.

Repeatability: This course may not be repeated for additional credits.

SGM 3503. Lean Startup: Fast and Inexpensive Ways to Test and Launch Your Ideas. 3 Credit Hours.

Have an idea for a new product or service? Want to start your own business, non-profit, or social-impact venture? Ready to innovate in existing organizations? Creating something new doesn't have to require months or years of planning and development. This hands-on course will teach you fast and economical ways to get out of the classroom to test your ideas and launch your business. The Lean Startup or Lean Launchpad approach has transformed the way that entrepreneurship is taught and practiced and has even changed how the most innovative organizations in the world invent new products and services or reinvent themselves via innovation. This course will help you become a more proactive and successful entrepreneur and innovator. No previous experience or courses in business or entrepreneurship required. NOTE: Prior to fall 2018, the course title was "Lean Startup: Fast and Frugal Approaches to High-Impact New Ventures, Product Invention, and Innovation."

Repeatability: This course may not be repeated for additional credits.

SGM 3504. Launch a New Venture in 100 Days. 3 Credit Hours.

Successful entrepreneurs need to adapt to changing circumstances and pivot as they launch, sustain, and grow their ventures. This reality is captured in the mantra--ready, fire, aim--which summarizes a fail-fast, learn, adapt, and succeed model that is taking over nearly all domains of entrepreneurship and innovation (from new venture launch to new product development). This course takes this idea to the streets as students identify an opportunity and work alone or in small teams to launch a business, pivot, and adapt to real-time evidence gathered, and become profitable all during a single semester. Although not all students will launch their dream venture in this short time, you may be able to create a business that provides a primary or secondary income, take part in the growing gig economy, make some money by selling a profitable venture, or save money to start your next venture. However, more than anything the real learning (and fun) begins once you get out of your head and the classroom to actually launch your business.

Repeatability: This course may not be repeated for additional credits.

SGM 3511. Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact. 3 Credit Hours.

These days the boundary between for-profit and social entrepreneurial ventures is increasingly becoming blurred. Every company, large and small, is making the multi bottom line of people-planet-profit an all-important goal. If you work in any organization or want to start a new venture of your own it is critical that you prioritize "purpose" or create "meaning." Organizations that ignore their impact on society and the world miss out on opportunities for innovation as well as the immense competitive advantage to having a positive social impact (i.e., doing good) while you do well. If you make meaning you will make people want to write stories about you, want to work for you, and want to buy from you. This course will explore the various ways the emerging U.S. social enterprise sector is evolving. More broadly, this class examines the ways in which entrepreneurship and business in general is embedded in--and affects--larger social, cultural, ecological, and economic relationships.

Course Attributes: SE, SF, SP, SS

Repeatability: This course may not be repeated for additional credits.

SGM 3521. Pitching and Funding Entrepreneurial Ventures. 3 Credit Hours.

In this course you will learn to tell your story in a compelling way so you can pitch a venture concept to funding sources. This course discusses a range of equity and non-equity financing options available to organizations today. Students will meet real angel and VC investors who will speak as guests in the class and will have a chance to look at the actual pitches that have recently been funded (or not) in the Philadelphia new venture scene. One of the biggest problems for Temple entrepreneurs is financing their ideas. Although securing funding is always difficult, this course helps you appreciate several options you have and the implications for each. A special focus will be paid to the investment decision (i.e., what does it take to persuade an investor to part with their hard earned money) and students will gain insights into factors that influence the viability and financial health of a business as well as the steps that can be taken to increase venture valuation.

Repeatability: This course may not be repeated for additional credits.

SGM 3525. The Consulting Engagement: Managing Projects and Change. 3 Credit Hours.

In management consulting, project management and change management are two sides of the same coin. This course presents both the tools and practices successful consultants use to manage both the process and the people. The engagement management component of the course focuses three critical activities: 1) From RFP to scope to exit interview, managing the client, 2) Project panning across the boundaries that divide consultant and client, and 3) How to analyze, manage and report upon the financial components of a project, including project ROI. The second half of the course addresses the need for leaders to manage employees and other key stakeholders through transformational change, and the role the consultant plays in the process. By understanding the challenges of managing people through complex change, as well as the methodologies, tools and proven approaches of successful consultants, students can ensure enterprise-wide understanding, buy-in and collaboration throughout the transformation process.

Repeatability: This course may not be repeated for additional credits.

SGM 3580. Special Topics - Strategic Management. 3 Credit Hours.

Special topics in current developments in the field of general and strategic management.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

SGM 3582. Independent Study. 1 to 6 Credit Hour.

Readings and/or papers under supervision of a faculty member.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

SGM 3585. Social Impact Internship - Work with Benefit/B-corps, Non-profits, or Multi-bottom-line Ventures. 3 Credit Hours.

Modern organizations increasingly care about their impact - whether they are focused 100% on addressing a social issue or on balancing profit motives with creating a positive impacts on other stakeholders. Multi-bottom-line, benefit or B-corps, non-profits, and other social impact organizations still need a viable strategy, need to be successfully managed, and need to create value in the world (often for multiple stakeholder groups simultaneously). In this internship course students will have the opportunity to work in a Social Impact organization so that they can leverage their energy and expertise to create a positive impact in the world while gaining real-world work experience, building their resume, and networking with social impact professionals. Every semester we have dozens of internships available and students can bring their own opportunities to the class. Please check Banner and contact faculty for more details on available internships.

Course Attributes: SF

Repeatability: This course may be repeated for additional credit.

SGM 3682. Independent Study. 3 Credit Hours.

Readings and/or papers under supervision of a faculty member.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Repeatability: This course may be repeated for additional credit.

SGM 3685. New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder. 3 Credit Hours.

During this semester long course, students will work on a specific high-value project in an entrepreneurial new venture or entrepreneurial support organization (e.g., accelerator, incubator, investment group). In coursework, students will learn practical management approaches necessary for dynamic entrepreneurial settings. Emphasis is placed on helping students understand how they create value for the organization while making sure they learn practical professional skills and approaches to managing themselves, their supervisors, and the projects they are running. Every semester we have dozens of internships available and students can bring their own opportunities to the class. The best internships are typically with smaller, high-growth entrepreneurial companies and organizations - not with large, traditional organizations (and rarely with family or friends or organizations you are already familiar with). Please check Banner and contact faculty for more details on available internships.

Repeatability: This course may be repeated for additional credit.

SGM 4596. Strategic Business Planning: Feasibility Assessment / Business Planning for Entrepreneurial Ventures. 3 Credit Hours.

The business plan is frequently misunderstood and assumed to be most relevant when entrepreneurs seek external funding. In reality, business plans encourage entrepreneurs and managers alike to invest some thought, time, and ink before they risk a great deal more time and resources launching an ill-conceived new venture. In addition, business plans are frequently underappreciated as a vital instrument for existing businesses. When evaluating a new product launch, modified offering, market entry, or making other changes to existing business models, a business plan can help convince internal stakeholders as well as external partners to support the new venture. This course teaches students some very practical skills including how to do a complete market and financial feasibility analysis of a new venture idea as well as how to flesh-out a business concept via a business plan. In addition, all students will present their ideas to experienced entrepreneurs for feedback and have the opportunity to submit their ventures to the Be Your Own Boss Bowl (BYOBB) competition.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (SGM 3501 or SGM 3504), SGM 3503, and (BA 2196 or BA 2996)

Study Away Non-TU Program (STAW)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

STAW 3011. Non-TU Domestic Program. 1 to 12 Credit Hour.

Repeatability: This course may be repeated for additional credit.

STAW 3021. Non-TU Study Abroad. 1 to 12 Credit Hour.

Repeatability: This course may be repeated for additional credit.

STAW 3031. TU Exchange Program. 1 to 12 Credit Hour.

Repeatability: This course may be repeated for additional credit.

STAW 3041. Study Abroad Insurance. 0 Credit Hours.

Repeatability: This course may be repeated for additional credit.

Supply Chain Management (SCM)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

SCM 3505. Lean Six Sigma in Supply Chain Management. 3 Credit Hours.

This course develops students' knowledge and application of different methodologies, systems and tools, to address the managers' drive for efficiency, effectiveness, and quality. By identifying, examining, and improving these gaps through root-cause analysis and continuous improvement methodologies, the supply chain - or any other process - can correct current issues and position itself for future successes. This course introduces students to these critical skills and tools and demonstrates appropriate application to real-world challenges. This course is ideal for any FOX undergraduate student (but especially HRM, Risk, Health Care, Marketing, SCM) and non-Fox students (prerequisite is a 2000-level statistics class) as it applies basic management decision tools to a variety of challenges.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (any 2000-level STAT course or 'Y' in CRST07)

SCM 3506. Project Management. 3 Credit Hours.

This course delivers a strategic overview of Project Management tools, approaches and concepts. It covers both the top-down and detailed practitioner points-of-view by following the life-cycle approach to managing projects. The course progresses through the Phases of Initiation, Planning, Execution, Monitoring and Control, and Closure. (I-P-E-M&C-C). Each phase will be examined to understand its purpose, deliverables, and relevant tools to ensure successful project progression. The focus is to gain an understanding of project management basics, challenges, and solutions for both project and business leaders. A group research project is required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MSOM 3101 (may be taken concurrently) or MSOM 3901 (may be taken concurrently))

SCM 3507. Data Management and Analytics for Business Strategies. 3 Credit Hours.

With significant advances in technology, most organizations collect enormous amounts of data, ranging from markets to customers. Managing data on this scale and converting it into knowledge to facilitate decision making presents exciting new challenges. The underlying principles of data management are often similar, whether used in data analytics and business intelligence, enterprise resource planning (ERP), customer relationship management (CRM), supply chain management (SCM), and other aspects of business. This course provides a practical introduction to the fundamental principles of data management in the context of business strategy. The course focuses first on how to store, extract, and manipulate data in order to answer questions and gain insights from it. Then, in part two, the emphasis shifts to practical, applied, forecasting techniques that begin with realistic types of data, beginning with ETL (extract, transform, load) and move on to produce accurate forecasts from the data that have been obtained.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MSOM 3101 (may be taken concurrently) or MSOM 3901 (may be taken concurrently))

SCM 3515. Principles of Supply Chain Management. 3 Credit Hours.

Operations and Supply Chain Management is the art and science of integrating the flow of products, information and money through the pipeline from the sources to the end customers. The goal of the course is to provide an understanding of the fundamental principles and activities occurring in the supply chain and to prepare students with a basic knowledge of activities within the supply chain.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MSOM 3101 (may be taken concurrently), MSOM 3901 (may be taken concurrently), 'Y' in CRMO01, or 'Y' in CRMO02)

SCM 3516. Transportation and Logistics Management. 3 Credit Hours.

Transportation, distribution, logistics, or supply chain management all refer to the process by which companies move material, parts, and products to their customers. Proper planning and scheduling are crucial to efficient operations and customer satisfaction. Transportation management encompasses planning goods movements across its different modes – truck, rail, water, air and pipeline. This course provides students with a basic familiarity to the important issues, concepts and models for analyzing different transportation functions. The focus will be on presenting information about, and providing access to, available tools and techniques that ensure a smooth flow and distribution of goods in the industry today. The course uses both quantitative and spatial techniques for proper decision making – specifying how, when and where to transport goods; selection of appropriate location of warehouses and distribution points; selection of route and carriers; and understanding of logistics and distribution costs.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MSOM 3101, MSOM 3901, 'Y' in CRMO01, or 'Y' in CRMO02)

SCM 3517. Inventory and Warehouse Management. 3 Credit Hours.

A key decision in manufacturing, retail and some service industry businesses is how much inventory to keep on hand satisfying the customer needs. Inventory is often a business's largest asset and not having enough inventories means losing sales, while holding too much inventory is expensive; therefore an efficient inventory control system is very important in any business. This course develops students' skills for quantitative and analytical thinking in the general areas of Operations, Logistics, Supply Chain Management, and Managing Global and Service Operations by developing analytical skills and an ability to make "data-driven" decisions. This course is a required course for the SCM Major and SCM Minor.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (MSOM 3101, MSOM 3901, 'Y' in CRMO01, or 'Y' in CRMO02)

SCM 3518. Sourcing and Procurement. 3 Credit Hours.

This course introduces students to the fundamental concepts, tools and techniques in purchasing that will make them aware of the demands placed on supply chain managers, understand the strategic nature of purchasing, understand the impact of purchasing on the competitive success and profitability of modern organizations and finally, secure better job prospects and superior on-the-job performance. This course develops students' skills for quantitative and analytical thinking and ability to make "data-driven" decisions. This course is the capstone course for the SCM Major and is required as part of the SCM Minor.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Supply Chain Management.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (SCM 3515 or 'Y' in CRSC01) and (SCM 3516 or 'Y' in CRSC02)

SCM 3580. Special Topics in Supply Chain Management. 3 Credit Hours.

Course addresses current topics in the field of supply chain management.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (MSOM 3101 or MSOM 3901)

SCM 3581. SCM Internship/Co-Operative Experience. 3 Credit Hours.

This internship or co-operative experience is reserved for Supply Chain Management (SCM) majors, having at least a Junior Level Status (completion of core), with 3.0 GPA or better. The course counts as a SCM elective; therefore, a supply-chain focus (as evidenced in the final deliverable) is required. At a minimum, students should have taken SCM 3515 and SCM 3516.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Supply Chain Management.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in SCM 3515 and SCM 3516.

SCM 3582. SCM Independent Study. 1 to 6 Credit Hour.

Independent studies allow students the opportunity to work with an individual professor to take on advanced study in the Supply Chain Management major. Typically, students take independent study(ies) as juniors or seniors after they have completed the majority of the requirements for the major; students should demonstrate a drive for academic excellence (evidenced in a GPA above 3.0). Students need to find a professor who is willing to work with them on the independent study.

Pre-requisites: Minimum grade of C in SCM 3515 and SCM 3516.

SCM 3596. Sourcing and Procurement. 3 Credit Hours.

Globalization and increased competition with fluctuating price and availability of raw materials have increased the need for better supplier management. A company's supply chain consists of various entities, including suppliers, manufacturers, distributors, logistics providers, and retailers to fulfill a customer's demand. Sourcing is identifying potential suppliers or manufacturers for a specific product or service, while procurement involves validating, negotiating, finalizing, and purchasing from the source. Both sourcing and procurement are important activities for any organization as it helps in significantly reducing the overall costs, improving the product quality, and shortening the product time to market.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in SCM 3515 and SCM 3516.

Teaching English to Speakers of Other Languages (TESL)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

TESL 3613. Understanding Multilingual Students' Language and Literacy Development. 3 Credit Hours.

This course focuses specifically on the academic language and literacy skills needed for English learners (ELs) to be successful in U.S. classrooms and beyond. The course includes a thorough review of key theories and principles in first and second language acquisition, with an emphasis on foundational knowledge of language structures (i.e., English phonology, morphology, and syntax). The course also looks at the literacy challenges faced by students at different points in their educations (K through 12 as well as adult education) and the role of disciplinary literacies. With this, students will understand the complexities of reading and writing development in more than one language. The practicum component of the course will give students an opportunity to apply this theoretical knowledge to practice and to conduct hands-on analyses and diagnostic assessments of a learner's reading and writing strengths and needs. Students will use these analyses to address learner needs with instructional methods, strategies, and targeted activities. These experiences will allow students to deepen their understanding of the structure of English, the processes involved in reading and writing development, and the most effective practices in teaching English reading, writing, and grammar.

Repeatability: This course may not be repeated for additional credits.

TESL 3631. Principles and Practice for Teaching English Learners. 3 Credit Hours.

This course provides an introduction to theory, research, and best practices in teaching English Learners (ELs) in the elementary, middle, and secondary grades. The course begins with an overview of sociocultural characteristics of ELs, legal responsibilities, and educational and language policies in the United States. Students will also learn the basic theories and principles associated with second language acquisition. Students will be introduced to state-of-the-art approaches for teaching ELs to meet Common Core Standards. Students also will explore the philosophies of bilingual and ESL education as well as different program models that address the education of linguistically diverse students. As a result, students will gain an understanding of how to design and adapt lessons and assessments for English learners. Students will also develop cross-cultural competence through interactions with ELs, parents, teachers, and school staff. Through a practicum component, students will learn to design lessons and assessments for small-group and whole-class differentiated instruction. Students will also develop cross-cultural competence through interactions with ELs, teachers and school staff.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY.

Repeatability: This course may not be repeated for additional credits.

TESL 4442. Strategies for Teaching English as an Additional Language. 3 Credit Hours.

This course introduces students to the most current approaches to teaching English as a second language. Drawing on contemporary research, the course will focus on creating optimal learning environments that engage, motivate, and support English language learners through meaningful and age/level appropriate activities. This hands-on course provides practical strategies and ideas for designing and teaching effective language lessons that integrate reading, writing, listening and speaking. Additionally, by participating in the required field experience, students will have multiple opportunities to apply and reflect upon particular approaches, building essential skills as a (future) language educator.

Repeatability: This course may not be repeated for additional credits.

TESL 4443. Teaching English World-Wide. 3 Credit Hours.

This course explores language as a social form, focusing on the connections between language, culture, perception and linguistic globalization. Against a sociolinguistic backdrop, the course aims to raise students' consciousness to the political, socio-cultural and ethical aspects of the global spread of English. The topics covered will equip students with the basic, critical concepts needed to examine the pros and cons of the internationalization of English worldwide. At a practical level, students will be guided to reflect on and incorporate these concepts in their approaches to teaching English in the US and abroad. Through readings, discussions, international conversation partners, and reflection assignments, students will (re)conceptualize how English is taught as an international language, problematizing the issues related to "Standard English" and "NES/NNES dichotomy." Individually and collectively, the class will deconstruct notions of "one-size fits all" approach to teaching (i.e. English language as a standardized language) and explore pedagogies that take into consideration multiple varieties of Englishes. From start to finish, students will be encouraged to draw on their own experiences, link theory to practice, and collect resources to support their future careers.

Repeatability: This course may not be repeated for additional credits.

TESL 4444. English Language Teaching: Curriculum and Assessment. 3 Credit Hours.

This course will guide you in understanding and applying principles of curriculum design and teacher-based assessment. Course readings, assignments and class discussions will guide you through thinking about how to best teach English language learners by adapting a curriculum that has been handed to you (i.e. a mandated curriculum), by building upon existing curricula in your instructional setting, or by creating a curriculum from scratch. In this course, curriculum is conceived of as an instructional process which includes planning, instructing and assessing. A foundational principle of this course is assessment can and should be integrated into instruction. As such, you will learn how to sequence interrelated lessons in response to students' performance on a variety of authentic assessments. You will also learn approaches to environment and needs analysis and will experience how these analyses can inform teaching and curriculum design. Toward the end of the course, the Continua of Biliteracy will be used as an organizing framework that will guide you toward taking a critical stance when reflecting upon the curriculum you have created.

Repeatability: This course may not be repeated for additional credits.

Temple University Japan (TUJ)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

TUJ 0879. The History of Japanese Design: Anonymity, Desire, Shadows and Sports. 3 Credit Hours.

This course will examine Japanese design as an expression of both local and global manifestations of cultural identity. Each semester, focus will be on aspects of how Japanese design emerged in the Modern period out of Japanese arts and crafts, as well as the influence of other cultures on Japanese design. Exploration of cultural identity will begin with an overview of modern design, and modernity itself, as a utopian social and cultural project. Attention will then shift to the birth of design in Japan through the Meiji (1868-1912), Taisho (1912-1926), Showa (1926-1989) and Heisei (1989-2019) eras; how each era's political, social, and cultural climate affected the designed output of Japanese society; and what these historical factors mean for the contemporary Reiwa (2019-present) era. Field trips to museums dedicated to design and crafts will be included to further illustrate the philosophical and theoretical aspects of the class, helping to connect the theory and practice of design in Tokyo today. Additionally, coursework will include readings designed to help students understand modernity and postmodernity; how Japanese literature approaches materials and design; the study of visual and material culture; how gender norms are in large part designed; and the import and export of aesthetics from Japan to the world via fashion, the Olympics, objects, and attitudes. The class will help students develop a robust understanding of design within the Japanese cultural context and an enhanced sense of design history and theory from both a Japan-centric and globally-oriented perspective.

Course Attributes: GA

Repeatability: This course may not be repeated for additional credits.

TUJ 1001. TUJ Bridge Seminar 1. 1 Credit Hour.

This one-credit course introduces Bridge Program students to the opportunities and rigors of higher education, as well as to the skills needed to use academic resources successfully in college. This course is designed to help students make a successful transition to university life and learn to function as members of their academic community.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: TUJ Bridge Program.

Repeatability: This course may not be repeated for additional credits.

TUJ 1002. Bridge Seminar 2: Academic Research. 2 Credit Hours.

This two-credit course introduces TUJ Bridge Program students to university-level research skills. Students will learn about the purpose and processes of academic research in different areas of study, and plan, develop, and complete an independent research project during the semester. This course aims to develop information literacy skills students need in General Education and major courses at an American university. Course is restricted to TUJ Bridge Students only.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: TUJ Bridge Program.

Repeatability: This course may not be repeated for additional credits.

Theater (THTR)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

THTR 0805. Dramatic Imagination: The Performing Arts in Society. 3 Credit Hours.

Theater is a universal form of human expression - found in almost every society throughout history. We use it not only for entertainment, but also to explore the deepest questions about ourselves and our society. But do we know how it works? Can we identify the techniques that playwrights, actors, directors and designers use to create meaning on the stage? And what is unique about experiencing a performance live? In this class, you will take advantage of Philadelphia's rich theater community to see professional productions - as well as those on our own campus - and hear from theater artists talking about their work. At the end of the semester, you will have a richer understanding and appreciation of this universal art form. This course fulfills the Arts (GA) requirement for students under GenEd and the Arts (AR) requirement for students under Core. If you have previously completed Theater C110/1002, The Collaborative Art, you cannot get duplicate credit for this course.

Course Attributes: GA

Repeatability: This course may not be repeated for additional credits.

THTR 0807. The Creative Spirit: A Multidisciplinary View. 4 Credit Hours.

Man is the animal who creates, but why and how? What is happiness? Whether we are making art or making dinner, creativity ultimately makes a difference in our lives and the lives of others. In this course we will view Creativity through the lens of the Arts and investigate the primary relationship of the creative process to the pursuit of happiness. Students will master the fundamental concepts of creativity and engage with artists, performers and working professionals to discover the central role creativity plays in their work and in their daily lives. Apply your personal creativity in weekly hands-on group workshop sessions. Embark upon field assignments to experience Philadelphia's finest theater, dance and music events and the visual arts. Follow your bliss; discover the importance of intrinsic motivation as a key to developing a passion for life-long learning. NOTE: This course fulfills the Arts (GA) requirement for students under Gen Ed and the Arts (AR) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed Theater 0907.

Course Attributes: GA

Repeatability: This course may not be repeated for additional credits.

THTR 0813. From Page to Stage. 3 Credit Hours.

Learn how a theatrical play progresses from a concept to a fully-realized production. Students begin by learning how theater, movies and television reflect human psychology and society, move on to analyzing scripts, and finally explore how storytelling artists bring those scripts to life. In this asynchronous on-line course, students will learn about set, light, costume and sound design as well as script writing and directing by creating fun, hands-on, assignments to help them understand the work behind the theater, film and television they love! NOTE: This course fulfills the Arts (GA) requirement for students under GenEd.

Course Attributes: GA

Repeatability: This course may not be repeated for additional credits.

THTR 0825. The Art of Acting. 3 Credit Hours.

Whether you have some or no experience in theater, this course will open new doors and provide a firm understanding of the actor's craft. We will start with improvisatory exercises to explore basic principles of acting, which will help you expand your expressive capabilities, imagination and spontaneity, and give you greater confidence on stage and in front of people. At the same time, you will use your growing knowledge of the craft to analyze the work of actors on stage and film. Finally, you will work on assigned scenes from dramatic literature, giving you the basic tools of text analysis, the principal tool with which an actor figures out a text. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed Theater 0925, 1201 or C025.

Course Attributes: GA

Repeatability: This course may not be repeated for additional credits.

THTR 0841. Classics of African American Theater. 3 Credit Hours.

In part because of its development, initially, as a consequence of enslavement, African American theater is both entertaining and potentially volatile. We will look at some of the most important African American plays from the late 1700's through to the present, and explore the problems, contestations and the nature of race, class, and gender as exemplified in these dramatic texts. From Ira Aldridge's "The Black Doctor" in 1847, through to August Wilson's "Radio Golf" (2007), we will investigate the historical emergence and institutionalization of race thinking and practice on the American stage. As we consider this span of performance literature, we will analyze debates about race and social justice, investigate the collaborative nature of theater and develop oratory skills in provocative discussions. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core.

Course Attributes: GD

Repeatability: This course may not be repeated for additional credits.

THTR 0842. Race on the Stage. 3 Credit Hours.

A unique taste of artistic diversity, this course combines traditional and interdisciplinary content with the rich experience of "live art." Learn how conventions of the past contribute to arts production and the dramatic presentation of race, gender, sexuality, class and disability today, and how those presentations continue to inform notions of identity. As you read classic and contemporary dramatic texts and critically analyze actual performances, you will be looking at diversity from multiple perspectives and acquiring the kind of understanding of "difference" and "tolerance" that will prepare you to live and work in a global world. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core.

Course Attributes: GD

Repeatability: This course may not be repeated for additional credits.

THTR 0852. World Performances. 3 Credit Hours.

Dance, puppetry, theater, opera - these are performance forms that are part of the cultures of the world. From the earliest religious rituals to modern interpretations of ancient traditions, performances are as varied and diverse as the cultures from which they arise. You are probably familiar with performances arising from western cultures, but the Noh Drama of Japan, the Water Puppetry of Viet Nam, the Koothu Patari folk performances of India, the Beijing Opera in China, the Capoeira Martial Arts performances of Brazil--these might be new to you. Explore world performances through live class presentations, lectures, video and attendance at international performances in Philadelphia. You might also have the chance to perform yourself! NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed Theater 0952.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

THTR 0907. Honors The Creative Spirit: A Multidisciplinary View. 4 Credit Hours.

Man is the animal who creates, but why and how? Whether we are making art or making dinner, creativity ultimately makes a difference in our lives and the lives of others. In this course we will view creativity through the lens of the arts and explore the broader manifestations of the creative spirit in a variety of related fields and disciplines. Students will learn the fundamental concepts of creativity and engage with artists, performers and working professionals exploring the central role creativity plays in their work. Explore your creativity in weekly hands-on group sessions augmented by periodic field visits to see performances, concerts, galleries, etc. Be creative, follow your bliss and develop a passion for life-long learning! NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and the Arts (AR) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed Theater 0807.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GA, HO

Repeatability: This course may not be repeated for additional credits.

THTR 0925. Honors Art of Acting. 3 Credit Hours.

Whether you have some or no experience in theater, this course will open new doors and provide a firm understanding of the actor's craft. We will start with improvisatory exercises to explore basic principles of acting, which will help you expand your expressive capabilities, imagination and spontaneity, and give you greater confidence on stage and in front of people. At the same time, you will use your growing knowledge of the craft to analyze the work of actors on stage and film. Finally, you will work on assigned scenes from dramatic literature, giving you the basic tools of text analysis, the principal tool with which an actor figures out a text. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed Theater 0825, 1201 or C025.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GA, HO

Repeatability: This course may not be repeated for additional credits.

THTR 0952. Honors World Performances. 3 Credit Hours.

Dance, puppetry, theater, opera - these are performance forms that are part of the cultures of the world. From the earliest religious rituals to modern interpretations of ancient traditions, performances are as varied and diverse as the cultures from which they arise. You are probably familiar with performances arising from western cultures, but the Noh Drama of Japan, the Water Puppetry of Viet Nam, the Koothu Patari folk performances of India, the Beijing Opera in China, the Capoeira Martial Arts performances of Brazil--these might be new to you. Explore world performances through live class presentations, lectures, video and attendance at international performances in Philadelphia. You might also have the chance to perform yourself! NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed Theater 0852.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GG, HO

Repeatability: This course may not be repeated for additional credits.

THTR 1002. Theater: The Collaborative Art. 3 Credit Hours.

Live professional theater performances serve as the basis for the study of contemporary theater: its elements, its ideas, and its creators. Lecture/demonstrations of the elements of theater art presented by the artists/teachers of the theater faculty. If you have previously completed Theater 0805: Dramatic Imagination, you cannot get duplicate credit for this course. NOTE: This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. If you have previously completed Theater 0805: The Dramatic Imagination, you cannot get duplicate credit for this course.

Course Attributes: AR

Repeatability: This course may not be repeated for additional credits.

THTR 1003. Creativity: Basic. 3 Credit Hours.

The introductory course to creativity in theater. Techniques to encourage creative self-expression and ways of presenting ideas and materials. NOTE: Restricted to majors, Creativity is the matrix course for all theater students and leads to the various emphasis programs.

Repeatability: This course may not be repeated for additional credits.

THTR 1008. Poetry as Performance. 3 Credit Hours.

This theater course takes the poem off of the printed page, from mere recitation to performance. It teaches theater tips and helpful techniques used in one of the hottest mediums in performance art today, rekindling love of poetry, from Robert Frost, to T.S. Eliot, to Ezra Pound, from Sterling Brown, to Langston Hughes to Sonia Sanchez.

Repeatability: This course may not be repeated for additional credits.

THTR 1087. Production Practicum. 1 Credit Hour.

Participation required in at least one departmental production activity, by fulfilling a production contract. It is preferred that students do at least one contract in each area of the four production areas. NOTE: For theater majors only. Theater 1087 is required every semester the student is a full-time major. If Theater 1087 is not successfully completed, Theater 1187 must be taken concurrently with Theater 1087 the following semester.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Acting, Musical Theater, Stage Management, Theater and Comm Engagement, Theater Education, Theater, Tech Prod + Mgmt, Voice and Speech for the Actor.

Repeatability: This course may be repeated for additional credit.

THTR 1096. Introduction to Theater Process. 3 Credit Hours.

Methods of study of dramatic text. Principles of dramatic form; cultural context of modern realistic drama; readings and projects. NOTE: Required of all majors. Recommended to non-majors who intend to work with drama professionally in television or film, or as critics. Theater majors must pass Theater 1096 with a grade of C or better.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater, Theater-Acting, Theater-Directing, Theater-Design, Theater Education, Theater, Tech Prod + Mgmt.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

THTR 1141. Voice I for Musical Theater. 1 Credit Hour.

A beginning study of audition methods including material selection, role preparation, and musical, dramatic and vocal analysis and presentation. The course will address facets of auditioning including: how to work with a pianist, working with a mike, how to mark musical audition selections, monologue/song selection and analysis, and audition etiquette and decorum. Students will work in both instructional and mock audition settings. The class will align itself with the learning outcomes of the voice department to prepare each student to participate and succeed in their jury performance at the end of the Spring semester.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater.

Repeatability: This course may not be repeated for additional credits.

THTR 1142. Voice II for Musical Theater. 1 Credit Hour.

A continued study of audition, performance and interpretive methods including material selection, role preparation, and musical, dramatic, vocal analysis and presentation. The course will continue to address facets of auditioning/performance including: how to work with a pianist, working with a mike, how to mark musical audition selections, monologue/song selection and analysis, and audition/performance etiquette and decorum. Students will work in both instructional and mock audition settings. This class will also focus on interpretive, historical and stylistic elements of performance/process. The class will align itself with the learning outcomes of the voice department to prepare each student to participate and succeed in their jury performance at the end of the semester.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in THTR 1141.

THTR 1187. Production Practicum. 1 Credit Hour.

Same as Theater 1087. Theater 1187 and Theater 1087 must be taken concurrently the semester following receipt of the grade F for Theater 1087. NOTE: Required in the event that a student is unsuccessful in the completion of Theater 1087.

Repeatability: This course may be repeated for additional credit.

THTR 1202. Fundamentals of Voice and Movement. 3 Credit Hours.

This course is designed to teach the basics of the human form and how that form inhabits space. The course will increase the students' awareness of their own bodies and will teach the fundamentals of their bodies' anatomy. As the students move their bodies through space, and begin to explore various movement patterns and shapes, they will also engage their voices in order to learn how physical postures change the quality, the tone, and/or the emotional expression of the vocal instrument. In addition, the course will ask each student to analyze his/her movement and vocal patterns and habits through a series of in-class exercises, and the students will explore variations of movement and voice in an effort to expand upon these habitual practices. In order to teach the often-complicated concepts discussed in this course, the instructor will use anatomical vocabulary, in-class exercises focusing on breath, body and movement, performance movement theory, and the student's own self-designed movement project.

Repeatability: This course may not be repeated for additional credits.

THTR 1211. Fundamentals of Acting. 3 Credit Hours.

This course is intended for the student who wants more than a basic introduction to acting but may not be able to major in theater. Exercises, scene study, script analysis. NOTE: Ideally this course would be a continuation of work done in Theater 0825: The Art of Acting. Prior to spring 2009, the course title was "Basic Acting II."

Repeatability: This course may not be repeated for additional credits.

THTR 1231. Acting I. 3 Credit Hours.

The actor explores techniques in relaxation, improvisation, and concentration using Uta Hagen's Basic Object exercises as a foundation. These techniques will be applied to one scene and one monologue taken from contemporary American dramatic literature. Prior to fall 2009, the course title was "Introduction to Acting."

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Acting, Musical Theater, Stage Management, Theater and Comm Engagement, Theater Education, Theater, Tech Prod + Mgmt, Voice and Speech for the Actor.

Repeatability: This course may not be repeated for additional credits.

THTR 1232. Jacques Lecoq Technique Part 1. 3 Credit Hours.

This course introduces students to the Jacques Lecoq technique, which uses the body as a starting point for performance. Using the body to create space, characters, emotions and relationships among others, the class will use improvisation and ensemble work as key tools to create physical theater rather than psychological. This course is the first part of a longer journey, which goes from the Neutral Mask to Clown and an approach to various European classical styles.

Repeatability: This course may not be repeated for additional credits.

THTR 1411. Welcome Backstage. 3 Credit Hours.

This course is an introduction to all things technical in theater. Students will learn the vocabulary of the theater, where it relates to techniques, materials, equipment and the machinery that make theater a physical reality. NOTE: Theater majors must pass Theater 1411 with a grade of C or better. Prior to spring 2009, the course title was "Technical Theater Production."

Repeatability: This course may not be repeated for additional credits.

THTR 1511. Stagecraft. 3 Credit Hours.

In this course, students will develop their skills in various areas of theater production. They will be trained in scenic carpentry and scene shop operations, lighting technology, sound technology, projections technology, sewing and costume shop operations, and theater rigging. The focus in this class will be on safety, 'industry best practices', efficiency, as well as craft.

Department Restrictions: Must be enrolled in one of the following Departments: CA:Theater.

Repeatability: This course may not be repeated for additional credits.

THTR 2001. Introduction to Hip Hop Theater. 3 Credit Hours.

This course is designed to introduce students to the principles and techniques characteristic of Hip Hop theater and dance. Students will examine the impact Hip Hop is having on the professional theater in the United States, study the genesis and history of Hip Hop culture, and become acquainted with and execute Hip Hop movement combinations. Emphasis will be placed on Hip Hop's growing influence on American Theater. Through lecture and performance opportunities, students will gain an appreciation for the contributions of the art form to theater and become familiar with the demands of Hip Hop in performance. Movement fundamentals of alignment, flexibility, endurance, dynamic range, and strength will be addressed.

Repeatability: This course may not be repeated for additional credits.

THTR 2003. Stage to Screen. 3 Credit Hours.

Stage to Screen is a study of plays that have been made into films, some successfully, others not so. This course will focus on similarities and differences between plays and films and what is gained or lost when a play is adapted to film.

Repeatability: This course may not be repeated for additional credits.

THTR 2008. Poetic Ethnography. 3 Credit Hours.

"Poetic Ethnography" is a second level Theater Literature and Performance course meant as a companion to "Poetry as Performance" (Theater 1008). As a performance technique, the choreopoem is a genre of narrative theater that has increased in popularity alongside Hip Hop and Spoken Word. As an advanced compliment to "Poetry as Performance," this class creates a space for social engagement. "Poetic Ethnography" seeks to further develop our understanding of the use of choreopoem.

Repeatability: This course may not be repeated for additional credits.

THTR 2085. Theater Internship. 3 or 6 Credit Hours.

This course offers hands-on, organized, professional work under supervision in a professional theater or a leader in the entertainment industry. Permission of the instructor is necessary. Course registration must occur prior to actual internship work.

Repeatability: This course may be repeated for additional credit.

THTR 2101. Ballet I for Musical Theater. 1 Credit Hour.

Development of technical skills in ballet, including safe, efficient alignment and clear articulation of movement vocabulary is a necessity for a musical theater actor to excel in the professional world. This course is the Musical Theater student's first in a series of semesters of dance training.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater.

Repeatability: This course may not be repeated for additional credits.

THTR 2121. Ballet II for Musical Theater. 1 Credit Hour.

Further development of technical ballet skills increases students' core strength and provides a basic skill set that will be added to in succeeding semesters. Ballet is the primary building block of dance training and the Temple Musical Theater student benefits from continuous study of the discipline.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater.

Repeatability: This course may not be repeated for additional credits.

THTR 2131. Music Theory/Sightsinging: Basic. 2 Credit Hours.

Basic fundamentals of music theory, including key signatures, rhythm, melody, harmony, and dynamics, are examined in order to strengthen the actor's ability to learn music, and prepare music for auditions and performance. The course includes the study of sight singing, basic keyboard skills, rhythm in simple meters, accidentals, major scales, key signatures, major and perfect intervals, solfege and rhythmic reading drills. These fundamentals are obligatory for success for Musical Theater Concentration students.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater.

Repeatability: This course may not be repeated for additional credits.

THTR 2141. Voice III for Musical Theater. 1 Credit Hour.

A continued/advanced study of audition, performance and interpretive methods including material selection, role preparation, and musical, dramatic, vocal analysis and presentation. The course will address facets of auditioning/performance including: how to work with a pianist, how to mark musical audition selections, monologue/song selection and analysis, and audition/performance etiquette and decorum. Students will work in both instructional and mock audition settings. This class will also focus on interpretive, historical and stylistic elements of performance/process. The class will align itself with the learning outcomes of the voice department to prepare each student to participate and succeed in their jury performance at the end of the semester.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in THTR 1142.

THTR 2142. Voice IV for Musical Theater. 1 Credit Hour.

A continued/advanced study of audition, performance and interpretive methods including material selection, role preparation, and musical, dramatic, vocal analysis and presentation. The course will address facets of auditioning/performance including: how to work with a pianist, how to mark musical audition selections, monologue/song selection and analysis, and audition/performance etiquette and decorum. Students will work in both instructional and mock audition settings. This class will also focus on interpretive, historical and stylistic elements of performance/process, on-camera audition techniques, new work, sight reading, and additional music skills. The class will align itself with the learning outcomes of the voice department to prepare each student to participate and succeed in their jury performance at the end of the semester.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in THTR 2141.

THTR 2150. Ballet for Musical Theater. 1 Credit Hour.

Ballet is the primary building block of dance training and provides a basic skill set and vocabulary that will be utilized throughout various styles and in choreography. This course is designed to broaden and accelerate student's understanding of classical ballet vocabulary, movement principles, and to improve and develop technical skills and artistry. In each class, students participate in movement exercises and dance phrases (consisting of a full and dynamic ballet barre; center floor, adage, pirouette combinations, across-the-floor exercises, petite and grand allegro) which will evolve from simple to more complex as the semester progresses.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater.

Repeatability: This course may be repeated for additional credit.

THTR 2201. Acting Styles. 3 Credit Hours.

The objective of this course is to undertake the challenges of heightened language and period style while maintaining commitment to objectives, detailed given circumstances and truthful listening and reacting. This is the third and final acting course available to students who are not enrolled in the Acting Concentration.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (THTR 1211, THTR 1231, 'Y' in CRTH02, or 'Y' in CRTH12)

THTR 2210. Special Topics. 2 to 3 Credit Hours.

This course is reserved for intensive study of a particular aspect of theater. NOTE: For Majors only. Permission of the instructor is necessary.

Repeatability: This course may be repeated for additional credit.

THTR 2221. Voice for the Actor. 3 Credit Hours.

Fitzmaurice Technique applied to increase the power, range and expressivity of the voice. Through Yoga and bioenergetics the actor achieves relaxation. Through rib, diaphragmatic and abdominal exercises, the actor finds the freedom of the voice possible in strength and structure. NOTE: Required for Acting Concentration.

Repeatability: This course may be repeated for additional credit.

THTR 2231. Speech for the Actor. 3 Credit Hours.

In this course students will learn the fundamentals of speech for the performer. Students will learn how to read and interpret the chart of the International Phonetic Alphabet (IPA) and will be taught the IPA symbols associated with the English language. Utilizing both play and practice students will learn the anatomy of articulation in order to understand where and how language sounds are formed. Through this course of study students will improve their ability to hear and speak a variety of language sounds in order to broaden their own vocal flexibility and clarity for use both on and off the stage.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater, Theater-Acting, Theater-Directing, Theater-Design, Theater Education, Theater.

Repeatability: This course may not be repeated for additional credits.

THTR 2232. Jacques Lecoq Technique Part 2. 3 Credit Hours.

This class is the next step to the Lecoq method. We will be using the tools acquired from Theater 1232 to create performance pieces inspired by different, very specific theatrical styles such as melodrama, bande mimee, Commedia Dell' Arte, and clown.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in THTR 1232.

THTR 2233. Advanced Speech for the Actor. 3 Credit Hours.

In Advanced Speech for the Actor, students are encouraged to apply the skills they have learned in Speech for the Actor to a wider variety of texts. They will hone their ability to hear and create a range of language sounds through warm-ups and spoken exercises at the top of each class, and they will practice their versatility in speaking and creating characters by working on scripts from different eras and styles for graded performances.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater, Theater-Acting, Theater-Directing, Theater.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (THTR 2231 or 'Y' in CRTH04)

THTR 2241. Basic Movement. 3 Credit Hours.

Introduces the student actor to basic skills, concepts and techniques of movement for the actor. Modern dance, improvisation and physicalization of dramatic text are integral parts of the course. NOTE: Required for Acting Concentration.

Repeatability: This course may be repeated for additional credit.

THTR 2251. Dance for the Actor. 3 Credit Hours.

Experience in various dance idioms including modern, social, jazz, and character choreodram especially designed for the actor.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (THTR 2241 or 'Y' in CRTH05)

THTR 2252. Alexander Technique. 3 Credit Hours.

The goal of this class is to teach actors to recognize when they interfere with the natural functioning of their physical and vocal instruments and to introduce them to a practical method of working with themselves that they can apply to their performance activities. NOTE: Prior to spring 2009, the course title was "Movement for the Actor II."

Repeatability: This course may not be repeated for additional credits.

THTR 2261. Acting II. 3 Credit Hours.

The actor applies techniques gained in Theater 1231 to scene work. Exploration of scenes from 20th and 21st century American dramatic literature with particular focus on defining beats and playing objectives. NOTE: Required for Acting, Directing, and Musical Theater Concentrations. Prior to fall 2009, the course title was "Basic Acting Technique."

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater, Theater-Acting, Theater-Directing, Theater-Design, Theater.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (THTR 1231 or 'Y' in CRTH02), (THTR 2221, MUSC 1201, or 'Y' in CRTH13), and (THTR 2231 or 'Y' in CRTH04)

THTR 2262. Improvisation. 3 Credit Hours.

This course is designed to develop spontaneity and increase listening skills. It will begin with exercises in trust building, listening and ensemble building. You will then progress to short form scenes to increase skill, and by the end of the semester you will learn to do long form work that may include a performance.

Repeatability: This course may not be repeated for additional credits.

THTR 2271. Dialects for the Actor. 3 Credit Hours.

The study of dialects most commonly used in the American theater. Each student has the opportunity to work with an additional dialect of particular interest. Application of the International Phonetic Alphabet, as well as ear-training are fundamental to learning new dialects.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (THTR 2231 or 'Y' in CRTH04)

THTR 2411. Introduction to Design. 3 Credit Hours.

A project oriented class covering the language of basic composition and how it translates into the language of theatrical design. Script analysis of a play is realized in a series of projects in costume, lighting and set design. NOTE: Theater Majors must pass 2411 with a grade of C or better.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (THTR 1411, THTR 1511, or 'Y' in CRTH03)

THTR 2421. Creative Sound Technique. 3 Credit Hours.

Practical techniques for theater sound design.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater, Theater-Acting, Theater-Directing, Theater-Design, Theater Education, Theater, Tech Prod + Mgmt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (THTR 1411, THTR 1511, or 'Y' in CRTH03) and (THTR 2411 (may be taken concurrently) or 'Y' in CRTH08)

THTR 2431. Lighting and Sound Technology. 3 Credit Hours.

This class is a hands-on skills based course in the study of the technology and equipment used in Lighting and Sound Design. Topics covered include paperwork, troubleshooting and problem solving, maintenance, and budgeting. Skills can be applied to careers as Master Electricians and Sound Engineers.

Repeatability: This course may not be repeated for additional credits.

THTR 2441. Stage Management I. 3 Credit Hours.

This course will be a thorough analysis of the technical and organizational aspects as well as the typical responsibilities of stage management. The focus of the course is the stage manager's and/or assistant stage manager's process. Topics include, but are not limited to: preparing for and running rehearsals, communication and paperwork skills, and leadership and team building methods. Work on a Temple Theaters production, serving in a stage manager or Assistant Stage Manager capacity is not required, but strongly encouraged.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (THTR 1411, THTR 1511, or 'Y' in CRTH03)

THTR 2442. Propcraft. 3 Credit Hours.

This course explores the theory and practice of properties design and prop-mastery. Students will learn the process involved in properties research, organization, design, and construction and will gain practical experience by working on specific projects within the Department Production season. Students will learn how to communicate and collaborate with a design team, production staff and stage management. The course could lead to becoming a props master on an upcoming production.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (THTR 1411, THTR 1511, or 'Y' in CRTH03)

THTR 2501. Theater Safety and Management. 3 Credit Hours.

This class will cover the workplace safety and health for the theater industry and federal and state OSHA guidelines. Students will receive their 30 hour General Industry Safety and Health Training Card from OSHA at the successful completion of the course. All students will investigate safety issues in and around the theater, and present their findings for industry-specific hazards. They will also develop an industry-specific accident prevention program. The knowledge learned can be used in present and future employment and will provide technical directors and managers with a safe workplace for their staff, actors, and crews.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Theater-Design, Theater, Tech Prod + Mgmt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (THTR 1411, THTR 1511, or 'Y' in CRTH03)

THTR 2512. Lighting Design I. 3 Credit Hours.

The basics of Lighting Design for the theater are introduced and explored. Students will work with theatrical lighting equipment in the light lab. Projects range from recreating paintings with light, to lighting staged scenes from three different scripts.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (THTR 1411, THTR 1511, or 'Y' in CRTH03) and (THTR 2411 or 'Y' in CRTH08)

THTR 2611. Make-Up. 3 Credit Hours.

This course will meet once a week for three hours in the theater's Make-Up lab. This course will cover basic skincare, light and shadow relating to the face, the basics of theatrical make-up application, "glamour" make-up, period make-up styles, prosthetics, and specialty make-up such as scars, bruises and blood. A hands-on studio class, students will learn to create make-up designs on themselves and others.

Repeatability: This course may not be repeated for additional credits.

THTR 2612. Costume Design I. 3 Credit Hours.

This one semester course is an introduction to Costume Design for the stage. Students begin by learning how to read a play script looking for clues to character. Students discover how to explore character through a series of exercises including character/scene breakdowns, research of period costume, collage and sketching techniques as well as developing costume design through the exploration of line, form, color and texture. NOTE: Graphic projects required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (THTR 1411, THTR 1511, or 'Y' in CRTH03) and (THTR 2411 or 'Y' in CRTH08)

THTR 2711. Drawing and Rendering for the Theater I. 3 Credit Hours.

This course introduces students to a wide variety of drawing, painting and mixed media techniques in a hands-on studio environment. The Fall semester will be an exploration of all types of drawing media, including graphite pencil, charcoal, conte crayon, pastel, India ink and fiber tipped pens. The Spring semester will build upon what was learned in the fall and will introduce students to a wide variety of painting techniques and mixed media including watercolor, gouache, collage and acrylics. NOTE: This is a drawing course, and students will be expected to purchase art supplies during the semester.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (THTR 1411, THTR 1511, or 'Y' in CRTH03)

THTR 2712. Drawing and Rendering for the Theater II. 3 Credit Hours.

This Painting laboratory empowers set, costume and lighting designers by providing them with a deeper understanding of the manipulation of color for the stage. Students learn color theory and color palettes as well as how to render a variety of surfaces including costumes, properties and architecture. Painting exercises are completed in and out of doors, from life and from research. Media includes watercolor, gouache, pastel, acrylic, markers, pencil, airbrush and collage. NOTE: This is a drawing course, and students will be expected to purchase art supplies during the semester.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (THTR 1411, THTR 1511, or 'Y' in CRTH03)

THTR 2713. Design Drafting. 3 Credit Hours.

By learning the mechanical and conceptual methods of drafting, students develop the skills needed to produce graphic representation of scenic and lighting design for the theater. Students learn to draft precise, attractive, and thorough drawings based upon industry standards. Utilizing skills acquired through written texts, lecture, and class discussion, students complete, inside and outside of class, drafting projects (ground plans, elevations, sections, isometrics, etc.) based on samples given by the instructor. Students present projects in class for critique and discussion, and the course culminates in final project presentations.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (THTR 1411, THTR 1511, or 'Y' in CRTH03)

THTR 2721. Scene Design I. 3 Credit Hours.

This course continues the development begun in Basic Design and Technical Theater classes. It is project oriented with the class time devoted to discussion and presentation. The focus is on interpretation of script, basic research, development of visual metaphor with an emphasis on the power and manipulation of space. The course begins with design of sculpture and moves through increasingly complex solutions to the creation of stage environments. Drafting, rendering and model building skills are developed.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (THTR 1411, THTR 1511, or 'Y' in CRTH03) and (THTR 2411 or 'Y' in CRTH08)

THTR 3001. History of the Theater I. 3 Credit Hours.

This course studies the development of theatrical modes of presentation, playwrights, plays, architecture, actors, producing agents, and audiences from the beginnings of theater to 1800. Relationships are drawn between the developing theater and the political and social history of the times.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater, Theater-Acting, Theater-Directing, Theater-Design, Theater Education, Theater, Tech Prod + Mgmt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (THTR 1096 or 'Y' in CRTH01) and (THTR 1411, THTR 1511, or 'Y' in CRTH03)

THTR 3002. History of the Theater II. 3 Credit Hours.

This course studies the development of theatrical modes of presentation, playwrights, plays, architecture, actors, producing agents, and audiences from 1800 to today. Relationships are drawn between the developing theater and the political and social history of the times.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater, Theater-Acting, Theater-Directing, Theater-Design, Theater Education, Theater, Tech Prod + Mgmt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (THTR 1096 or 'Y' in CRTH01) and (THTR 1411, THTR 1511, or 'Y' in CRTH03)

THTR 3011. Methods of Teaching Artistry. 3 Credit Hours.

An exploration of the theory and practice of teaching artistry, students will examine how to engage young people, in partnership with a classroom teacher, in and through theater. A hands-on course, students will acquire practical methods, strategies, and a repertoire of exercises, through which theater can be used as a teaching and learning tool in K-12 classroom settings. Students will learn from each other through observation and discussion of the Teaching Artist methods implemented in class. Students will also learn from professional Teaching Artists and Education Directors from Philadelphia's many professional theaters who will share their work and experience in the field. NOTE: This is a required course for students in the Theater Education Concentration within the Department of Theater.

Repeatability: This course may not be repeated for additional credits.

THTR 3012. American Musical Theater. 3 Credit Hours.

The course examines the history of the American Musical Theater, including the many entertainment genres influential to its creation. A study of musicals ranging from the late 19th century to the present as well as significant composers, lyricists, choreographers and other contributors to the art form. NOTE: Theater majors must pass Theater 3012 with a grade of C or better.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater.

Repeatability: This course may not be repeated for additional credits.

THTR 3013. Methods of Teaching Theater. 3 Credit Hours.

An exploration of the theory and practice of teaching, students will examine how to engage young people in and through theater classes in the public school setting. Students will learn practical methods, classroom management strategies, a repertoire of exercises, and be guided through curricular development and implementation of lessons in K-12 classroom settings. Throughout the course, students will apply the methods learned in their Temple classroom and during observations in school district classrooms. NOTE: This is a required course for students in the Theater Education Concentration within the Department of Theater.

Repeatability: This course may not be repeated for additional credits.

THTR 3031. Lighting, Sound and Video Technology. 3 Credit Hours.

The class will acquaint students with a broad range of techniques, processes, and technologies as they relate to lighting, audio and video for live events. Through lectures, class discussions, projects, and hands on applications of this information, students will be introduced to lighting, audio, and video control technology, signal flow, system networking, and trouble shooting.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (THTR 1411, THTR 1511, or 'Y' in CRTH03)

THTR 3051. Modern Directions. 3 Credit Hours.

The dramatic literature, criticism, and theater history of the modern period studied in appropriate cultural contexts. NOTE: Theater majors must pass Theater 3051 with a grade of C or better.

Repeatability: This course may not be repeated for additional credits.

THTR 3052. Theater of Protest. 3 Credit Hours.

Behind nearly every successful social movement, thwarted military coup or insurgent political revolution, there has always been the Theater of Protest. A unique, cross-culturally distinct genre, the plays, the performers and oftentimes, even the playwrights themselves, that have added their political bent to the discourse on the Theater of Protest, have put their lives on the line as resistance warriors in cultural movements, sometimes even paying the ultimate price for their art.

Repeatability: This course may not be repeated for additional credits.

THTR 3053. Women in Theater. 3 Credit Hours.

This course examines the contribution of women in the theater from the renaissance to the present. Playwrights, actors, directors and designers are considered.

Repeatability: This course may not be repeated for additional credits.

THTR 3054. African-American Theater. 3 Credit Hours.

This course examines thematic concerns and dramatic techniques of African American theater from the Harlem Renaissance to the present.

Repeatability: This course may not be repeated for additional credits.

THTR 3055. Performance Art. 3 Credit Hours.

An introduction to performance art. Lecture and discussion of the history and aesthetics of the form. Students will create projects that may combine music, art, dance and theater. The course culminates in an original performance piece presented to the Theater Department at the end of the semester.

Repeatability: This course may not be repeated for additional credits.

THTR 3056. Shakespeare on Film. 3 Credit Hours.

"Shakespeare on Film" provides students the opportunity to develop an historical perspective of how the plays of William Shakespeare have been adapted to film. Students become familiar with the important 20th century figures who have been instrumental in the adaptation of Shakespeare to film, develop a critical understanding and appreciation of the film adaptations of Shakespeare's plays, and gain an appreciation of the breadth and influence of Shakespeare as seen in films of the last two decades.

Repeatability: This course may not be repeated for additional credits.

THTR 3057. Queer Theater. 3 Credit Hours.

Through the examination of seminal queer plays of the 20th and 21st centuries, from Sholom Asch's "God of Vengeance" to Mart Crowley's "The Boys in the Band" to Douglas Carter Beane's "The Little Dog Laughed," the students obtain an appreciation of the contribution of theater on the emergence of a visible and viable queer presence in society.

Repeatability: This course may not be repeated for additional credits.

THTR 3058. Community Engaged Theater. 3 Credit Hours.

This course will look at the use of theater and performance to examine and combat institutional, social, cultural, interpersonal, and personal oppressions. We will look at the various definitions of Theater for Social Change/Community Engaged Theater by reading essays and articles about the history of such work. We will engage in discussions about the ethical and practical challenges to doing this kind of work and develop our own ethical philosophies as practitioners. We will primarily use the work of Augusto Boal, founder of Theatre of the Oppressed, to develop our own performances that respond to local (expanding out to global) issues which most interest the members of the course. The course will combine theory and practice. This is a PRACTICAL course that will involve theater games, class participation and performance.

Repeatability: This course may not be repeated for additional credits.

THTR 3070. Seminar in Drama. 3 Credit Hours.

Intensive research into a specialized topic in dramatic literature, criticism, or theater history. Written and/or oral presentation required.

Repeatability: This course may be repeated for additional credit.

THTR 3080. Special Topics. 2 to 4 Credit Hours.

Advanced study in special topic areas under the direction of an area specialist. NOTE: Theater majors only. Permission of a faculty member.

Repeatability: This course may be repeated for additional credit.

THTR 3082. General Study. 1 to 3 Credit Hour.

Arranged each semester, please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

THTR 3085. Practice Teaching in Theater I. 1 to 3 Credit Hour.

This course is intended for upperclassmen Theater Education majors or Theater Education Certificate students who arrange a teaching position for grades seven through twelve in the public or private school setting. Placement in a school outside of official student teaching (arranged through the College of Education and Human Development) must be approved by Head of Theater Education prior to registering for this course. NOTE: This is an elective course for students in the Theater Education +1 Program within the Department of Theater, and requires permission from Head of Theater Education.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Theater Education.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in THTR 3011.

THTR 3086. Practice Teaching in Theater II. 3 Credit Hours.

Active internships in the Education Department of a regional theater designed to edify the Theater Education Concentration student in the artistry and mechanics of the Education Department of a professional theater's activities. NOTE: This is a required course for students in the Theater Education Concentration within the Department of Theater.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Theater Education.

Repeatability: This course may be repeated for additional credit.

THTR 3096. Classical Tradition. 3 Credit Hours.

The dramatic literature, criticism, and theater history of ancient Greece and Rome and their influence on Western theatrical development, studied in appropriate cultural contexts. NOTE: Theater majors must pass Theater 3096 with a grade of C or better.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

THTR 3097. Romantic Tradition. 3 Credit Hours.

The dramatic literature, criticism, and theater history of the Renaissance in England and subsequent developments in Europe in the late 18th and early 19th centuries studied in appropriate cultural contexts. NOTE: Theater majors must pass Theater 3097 with a grade of C or better.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

THTR 3101. Jazz I for Musical Theater. 1 Credit Hour.

This course is designed to introduce the student to principles and techniques characteristic of Jazz dance. Students will execute movement combinations in a variety of jazz styles. Emphasis will be placed on movement fundamentals of alignment, flexibility, endurance, dynamic range, and strength. Offerings in Jazz dance are essential to the Temple Musical Theater student's development.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater.

Repeatability: This course may not be repeated for additional credits.

THTR 3121. Jazz II for Musical Theater. 1 Credit Hour.

An intermediate level dance technique course designed to continue the student's development in the techniques of Jazz dance and acquaint the student with the origins and evolution of Jazz dance technique in America.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater.

Repeatability: This course may not be repeated for additional credits.

THTR 3130. Jazz for Musical Theater. 1 Credit Hour.

This course is designed to further the principles and techniques characteristic of Jazz dance. Students will learn and execute: a technical warm-up based on jazz, ballet, and modern techniques, physical conditioning and anatomy exploration, center and across the floor sequences and movement combinations in a variety of jazz styles. Emphasis will be placed on fundamentals of alignment, mind-body awareness, use of space, flexibility, endurance, dynamic range, strength, poise, musicality, style and expressive presentation.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater.

Repeatability: This course may be repeated for additional credit.

THTR 3131. Advanced Jazz for Musical Theater. 1 to 3 Credit Hour.

An intermediate/advanced dance level technique course designed to continue the musical theater student's development in the technique of jazz dance. Combinations, leaps, and turning sequences become more complex with emphasis on technical proficiency, alignment fundamentals, use of space, strength, agility, endurance, weight placement, musicality, terminology, etiquette, and expression.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in (THTR 2101, THTR 2121, THTR 3101, and THTR 3121)

THTR 3132. Musical Theater Voice & Acting. 3 Credit Hours.

Advanced work in the application of performance techniques to specific songs from the American Musical Theater. Through exercises, analysis, critique and performance of musical theater compositions, students strengthen vocal technique and performance skills. Accordingly, the examination of composers, genres and styles provides a greater appreciation for the development of American musical theater. The incorporation of truthful acting with attention to given circumstances and objectives is blended with principles of healthy singing.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Musical Theater.

Repeatability: This course may not be repeated for additional credits.

THTR 3151. Ballet III for Musical Theater. 1 Credit Hour.

The development of ballet techniques learned in Ballet I and II is continued. Barre combinations move faster and become more complex. Center exercises are longer and require more memorization and stamina. Different rhythms are introduced. Turnout based on individual ability and strength continues to be emphasized along with posture and core strength. More types of pirouettes and jumps are learned and embellished (multiple turns, beats). Proper placement is reinforced by students applying those concepts to the exercises and movements they learn. Head and arm movements are coordinated and synchronized. Memorization of steps and musicality are further developed. Precision of movement is stressed. The historical and social context of specific ballet movements is explained. Prerequisites are Ballet I and II, or by permission of instructor.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in THTR 2101 and THTR 2121.

THTR 3191. Research. 1 to 3 Credit Hour.

Arranged each semester, please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

THTR 3210. Theater Workshop. 3 Credit Hours.

Special Topics in Acting: Intensive study of a specific theater discipline as it applies to acting, voice, speech, singing and/or movement.

Repeatability: This course may be repeated for additional credit.

THTR 3220. Theater Workshop. 3 Credit Hours.

Special Topics in Acting: Intensive study of a specific theater discipline as it applies to acting, voice, speech, singing and/or movement. A continuation of Theater 3210.

Repeatability: This course may be repeated for additional credit.

THTR 3221. Advanced Voice for the Actor. 3 Credit Hours.

Focus on structuring the voice while maintaining relaxation and centeredness acquired in destructuring. Use rib-reserve and abdominal support/transverse measures. Apply to monologues, poetry and scenes. NOTE: For majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Theater.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (THTR 2221 or 'Y' in CRTH13) and (THTR 2231 or 'Y' in CRTH04)

THTR 3230. Theater Workshop. 3 Credit Hours.

Special Topics in Acting: Intensive study of a specific theater discipline as it applies to acting, voice, speech, singing and/or movement.

Repeatability: This course may be repeated for additional credit.

THTR 3231. Acting for Commercials, Industrials and Voice-Overs. 3 Credit Hours.

This course is intended to introduce students to multiple aspects of different commercial markets within the acting profession. Through hands-on exposure to various commercial, industrial, and voice over copy, audition techniques, and prompting tools, this course will train students in the proficiency of how to successfully audition, self tape, and use their acting skills within this medium, while also navigating the business side of the profession.

Repeatability: This course may not be repeated for additional credits.

THTR 3241. Combat & Stunts for the Actor. 3 Credit Hours.

These classes will focus on the art and skill of stage and stunt violence. The actors will be trained in unarmed fake fighting so that they will be able to perform violence for film, television or stage with safety and precision. From punches and slaps, blocks and kicks or just falling safely, these classes help keep the actor safe long after the class is over. NOTE: Prior to spring 2009, the course title was "Stage Combat."

Repeatability: This course may not be repeated for additional credits.

THTR 3261. The Job Market. 1 to 3 Credit Hour.

This course will prepare Theater students from all areas of study to better market and brand themselves both in person and digitally through activities, exercises, and projects based on industry standards and aesthetically pleasing products. Students will identify strategies and trends in elements of portfolio creation and presentation, successfully gather and organize materials highlighting their work, and create a brand unique to their identity and skillsets. The course will focus not only on establishing, but also maintaining, a career in the entertainment industry.

Department Restrictions: Must be enrolled in one of the following Departments: CA:Theater.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (THTR 1411, THTR 1511, or 'Y' in CRTH03) and (THTR 2411 or 'Y' in CRTH08)

THTR 3262. Improvisation 2. 3 Credit Hours.

This course builds on the foundational skills explored in Improvisation, and continues the exploration of Actor's Improv. Short-form games and exercises are revisited to review and build skills in listening, being present and adaptable, and creating successful scene work. Students continue to develop skills as simultaneous playwright/director/actors in creating realistic, relationship-based scenes with a variety of emotionally-grounded truth-inspired characters. Several long-form formats and devices are explored. Students work with Instructor to create a trusting ensemble of spontaneous actors able to perform a variety of improvised forms in both comic and dramatic tone. End of semester includes a performance.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (THTR 2262 or 'Y' in CRTH07)

THTR 3278. Acting for the Camera. 3 Credit Hours.

This course is a technique-based class designed to develop approach and skills for acting for the camera. Students work from actual Television and Film scripts, past and present, analyzing texts and applying a specific technical approach of intention, circumstance, listening and discovery-all in the experience of the moment of cinematic acting. The goal is to prepare students for auditions and for work in all media platforms in front of the camera. Individual exercises in how to self-tape, vulnerability and sense memory are also explored.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Theater.

Repeatability: This course may be repeated for additional credit.

THTR 3279. Acting III. 3 Credit Hours.

The goal of this course is to assist the actor in negotiating the challenges of heightened language and period style while maintaining a commitment to objectives, detailed given circumstances, and truthful listening and reacting. The content of this course will focus on such writers as Shakespeare, Moliere, the Greeks, and Restoration. Requires intensive outside preparation of exercises and scenes for presentation in class. NOTE: Required for Acting Concentration and BFA Musical Theater.

Department Restrictions: Must be enrolled in one of the following Departments: CA:Theater.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater, Theater-Acting, Theater-Directing, Theater-Design, Theater.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (THTR 1231 or 'Y' in CRTH02), (THTR 2221, MUSC 1201, or 'Y' in CRTH13), (THTR 2231 or 'Y' in CRTH04), (THTR 2261 or 'Y' in CRTH06), and (THTR 1202, THTR 2241, THTR 2251, or 'Y' in CRTH05)

THTR 3301. Introduction to the Director's Art. 3 Credit Hours.

A comprehensive introduction to the art and craft of directing in the spirit of the Collaborative process. Emphasis is on responsibility first to how we tell a story, and creating an approach to telling that story through the specifics of the scene event, the actor's relationship to the director's process, the importance of communication with a creative team, and visual leadership. Students will direct two scenes working with actors, and explore the fundamental process and tools of directing, including text and character analysis, staging techniques and composition theory; core rehearsal methods, status, and the relationship between language and active choices.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (THTR 1096 or 'Y' in CRTH01), (THTR 1231 or 'Y' in CRTH02), (THTR 1411, THTR 1511, or 'Y' in CRTH03), and (THTR 2411 or 'Y' in CRTH08)

THTR 3321. Rehearsal & Performance. 2 to 4 Credit Hours.

The focus of this class will be on advancing the actor's storytelling techniques of script analysis and concept work by working with directors and culminating in the presentation of a one-act play or one act of a full-length play. Awareness of design elements as well as application of voice and movement techniques allow the actor to fully realize the character in the physical world of the play. This prepares the actor for the audition and rehearsal process in which the actor makes choices, brings something to the table and learns to collaborate with the director.

Repeatability: This course may be repeated for additional credit.

THTR 3385. Diamond Peer Teachers – Internship I. 1 Credit Hour.

The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

Department Restrictions: Must be enrolled in one of the following Departments: CA:Theater.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Theater.

Repeatability: This course may be repeated for additional credit.

THTR 3386. Diamond Peer Teachers – Internship II. 1 Credit Hour.

The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

Department Restrictions: Must be enrolled in one of the following Departments: CA:Theater.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Theater.

Repeatability: This course may be repeated for additional credit.

THTR 3421. Technical Direction for the Theater. 3 Credit Hours.

This course is designed to give students a solid introduction to the processes involved in successful technical direction. The technical director is part engineer, part manager, part designer and full-time problem solver. We'll delve into problem solving (making the magic happen), budgeting (of time, money and talent), structural design (how to make things not fall down, unless you want them to), drafting (it's different for technical directors) and project management (how to plan an effective build, load-in and strike). Student will serve as Assistant Technical Directors for our mainstage shows, and some production work will be involved. This class will serve as a production contract for students enrolled in THTR 1087.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in THTR 2713.

THTR 3422. Structural Design for the Stage. 3 Credit Hours.

"Structural Design for the Stage" is a scenery engineering course. The scope of this one-semester course is appropriate for undergraduate Technical Directors, Stage Managers, and Production Managers to help them understand forces, stresses, and structures they interact with every day working backstage. It will cover the basics of beam and column design, truss design, geometric properties, plywood design, and rigging mathematics.

Department Restrictions: Must be enrolled in one of the following Departments: CA:Theater.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in THTR 3421.

THTR 3431. Scene Painting I. 3 Credit Hours.

This course introduces the basics of scene painting for the theater including the varieties of media. Projects will develop an understanding of executing painter's elevations, layout techniques, color mixing and traditional "old world" methods of application. This hands-on course meets for a three hour session once a week. Some class projects will include scenic painting for realized productions for the Theater Department season.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (THTR 1411, THTR 1511, or 'Y' in CRTH03)

THTR 3432. Scene Painting II. 3 Credit Hours.

While continuing the development of traditional skill sets, this course focuses on various means of application and materials which new technology has made available. Real textures, controlled accident, chemical processes and non-traditional means of application are investigated. This hands-on course meets for a three hour session once a week. Some class projects will include scenic painting for realized productions for the Theater Department season.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in THTR 3431.

THTR 3442. Theater Management I. 3 Credit Hours.

This introductory course provides the opportunity to examine the key role of management and the manager in theater, and the skills, knowledge, and relationships necessary to successfully manage. Students will explore, discuss, and practice areas of theater management including Company, Stage and House Management, Production Management and Shop Management; Finance, Budgeting, and Logistics; Resource Development; and Leadership.

Repeatability: This course may not be repeated for additional credits.

THTR 3613. History of Decor. 3 Credit Hours.

This is a survey course, examining the trends in architecture, furniture, and period motifs and how they can be interpreted in theatrical design. Lectures include discussions of the decorative arts in relation to political and socioeconomic developments. The goal is to give a general understanding and a greater appreciation of the historical periods and how they relate to each other. The successful student will be able to differentiate general periods and have an understanding of the western civilization's historic timeline.

Repeatability: This course may not be repeated for additional credits.

THTR 3621. Costume Production. 3 Credit Hours.

This course is an introduction to the process of costume construction from the designer's sketch to the finished garment. This course will cover basic skills necessary to construct a garment and create costume props and accessories. Sewing skills, fabric identification and basic pattern layout are some of the topics included.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in THTR 2612.

THTR 3622. Draping and Flat Pattern Drafting. 3 Credit Hours.

This course entails the development of a pattern using "slopers," draping and flat pattern drafting. The course is geared for patterning and construction period costumes for theatrical use. Topics include methods to achieve a period silhouette, where to go for pattern resources, how to fit period garments and construction techniques specific to theater.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in THTR 3621.

THTR 3623. Costume Crafts. 3 Credit Hours.

This class covers materials, techniques and alternative applications used in creating costume pieces that are crafted rather than sewn. Projects will include mask making, millinery and other costume accessories used in theatrical productions.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in THTR 2411.

THTR 3624. Draping and Flat Pattern Drafting 2. 3 Credit Hours.

This course entails advanced flat pattern drafting and draping techniques needed to construct period garments for theatrical productions. The focus of the projects will be on period men's garments, tailoring techniques and advance pattern drafting.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in THTR 3622.

THTR 3625. History of Fashion. 3 Credit Hours.

This is a survey course, examining the global history of dress from the Ancient Middle East to present day western cultures. The course focuses on what is worn, and why it is worn, correlating socioeconomic, religious and political influences on dress and fashion. The goal is to give a general understanding and a greater appreciation of the historical periods and how they relate to each other. The successful student will be able to differentiate general periods of dress and have an understanding of the western civilization's fashion timeline.

Repeatability: This course may not be repeated for additional credits.

THTR 3641. Theatrical Model Making. 3 Credit Hours.

Model building skills are used in theatrical design, architecture, interior design and the film and television industry. This is a skills based studio course, with a concentration on skills, and individual progress as opposed to finished design and concept work. Concepts covered include construction materials and techniques; surface finishes and paint techniques; and research duplication.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (THTR 1411, THTR 1511, or 'Y' in CRTH03) and (THTR 2411 or 'Y' in CRTH08)

THTR 3741. Design for TV and Film. 3 Credit Hours.

This is a design based studio course with highlighted components in research and presentation. Topics covered include the camera; production nomenclature; survival tactics and the market; production visuals; and a brief history of art directors and production design. Major design projects are based in an original film script, multi camera sitcom, and non-fiction informational programming.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (THTR 1411 or 'Y' in CRTH03) and (THTR 2411 or 'Y' in CRTH08)

THTR 3801. Playwriting. 3 Credit Hours.

This course is designed to introduce basic playwriting, in particular elements of the playwright's craft: dramatic action, plot, characterization and theatricality. The course functions as a playwriting workshop with students presenting exercises in class to be discussed by their peers. Utilizing techniques learned, students will complete a draft of a one-act play.

Repeatability: This course may not be repeated for additional credits.

THTR 4003. Production Dramaturgy. 2 to 4 Credit Hours.

This course engages the student in the process of providing comprehensive production dramaturgy to better enhance and support the creative process of mounting and marketing a theatrical production.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (THTR 4097, CMST 2111, 'Y' in CRTH11, or 'Y' in CRCM02)

THTR 4097. World of the Play. 3 Credit Hours.

This course is intended to provide an overview of the dramaturgical research process. It is the prerequisite for an advanced elective course in Production Dramaturgy, where the students will be assigned to serve as actual production dramaturges for our six main stage productions, providing research materials for the cast, the creative team, and for publicity/marketing purposes. Included will be approaches to creating study guides for both audiences and for educational purposes.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater, Theater-Acting, Theater-Directing, Theater-Design, Theater Education, Theater, Tech Prod + Mgmt.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

THTR 4101. Tap for Musical Theater. 1 Credit Hour.

This course develops knowledge and skill in the fundamental techniques of tap dance. Tap is a dance form consistently utilized by choreographers and training in the form is a requirement for Musical Theater students.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater.

Repeatability: This course may be repeated for additional credit.

THTR 4121. Musical Theater Dance Techniques. 1 Credit Hour.

An intensive study of dance vocabulary, styles, and combinations utilized in auditions and performances for the professional musical theater stage. This course is designed to explore the unique principles and techniques characteristic of Theater Dance, as well as an approach to the audition process, storytelling, characterization, and self-expression through movement. This course also explores the significance and historical/cultural impact of the art form of musical theater, focusing on the choreographic element. Prior dance experience and fundamentals of dance technique are required. Students will execute a ballet and jazz based warm-up, conditioning, technical skills, and various combinations drawing from the musical theater repertoire of the 1920's through today.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater.

Repeatability: This course may be repeated for additional credit.

THTR 4131. Musical Theater Scene Study. 3 Credit Hours.

Practical work in the application of performance techniques to specific scenes from the American Musical Theater. Vocal and acting skills are combined with the development of character in musical play scene-work including both song and dialogue. Students spend the semester in collaboration with fellow students on notable and challenging scenes from the musical theater.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College, Theater, Film & Media Arts.

Repeatability: This course may not be repeated for additional credits.

THTR 4132. Senior Cabaret Workshop. 3 Credit Hours.

A semester-long study of, and practice in, the art of cabaret singing enhances the training of Musical Theater students as individual performers. The course culminates in a performance showcase highlighting the students' efforts. Students accomplish extensive song repertoire study and collaborate with the instructor and accompanist to create specific medleys and/or song arrangements that complement their vocal abilities. A semester-long examination of contemporary cabaret artists also occurs as well as weekly in-class performance opportunities. NOTE: Graduating seniors only - May or December.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

THTR 4133. Musical Theater: Dress Rehearsal. 3 Credit Hours.

An intensive audition, role study and performance workshop specially designed to prepare students for the rigorous demands of auditioning for and performing in professional musical theater. Throughout the semester, visiting guest professionals also provide valuable insight into the realities of acting in the musical theater as a profession.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater.

Repeatability: This course may not be repeated for additional credits.

THTR 4134. Directing for the Musical Stage. 2 to 4 Credit Hours.

The focus of this class will be on advancing the student director's skill as pertains to the American Musical Theater repertoire. The course will address the myriad challenges of directing a musical work: including heightened stakes and storytelling techniques, intensified scheduling and management requirements of musical productions, and collaboration with musical directors and choreographers. Students will also apply and enhance acquired skills in script analysis, concept work, staging, working with actors and design elements by applying them to a challenging variety of material from the American Musical Theater.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in THTR 3301.

THTR 4173. Writing Lyrics. 3 Credit Hours.

Students examine classic and contemporary examples of musical theater pieces, as well as works from other genres, and write their own scenes and lyrics. Students learn how to make jokes "land," how to incorporate a turn, and how to write in the present tense and "in the moment." They also are familiarized with various musical styles and learn to communicate with future collaborators. This course serves the Temple Theater student interested in the creation and writing of musical theater.

Repeatability: This course may not be repeated for additional credits.

THTR 4212. Acting IV. 3 Credit Hours.

Exploration of the physical life of the character using psycho-physical techniques derived from the acting teacher Michael Chekhov. The actor is introduced to the concepts of the Invisible Body, the Center, Psychological Gesture, and Atmospheres, among others. These concepts are applied to scenes from 20th- and 21st-century dramatic literature. NOTE: Required for Acting Concentration.

Department Restrictions: Must be enrolled in one of the following Departments: CA:Theater.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater, Theater-Acting, Theater-Directing, Theater-Design, Theater.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (THTR 1231 or 'Y' in CRTH02), (THTR 2221, MUSC 2201, or 'Y' in CRTH13), (THTR 2231 or 'Y' in CRTH04), (THTR 2261 or 'Y' in CRTH06), (THTR 3279 or 'Y' in CRTH16), and (THTR 1202, THTR 2241, THTR 2251, or 'Y' in CRTH05)

THTR 4221. Theater as a Profession. 3 Credit Hours.

This course is designed for Theater majors who have completed most of their theater requirements and expect to work in the profession. The course provides information about the business of show business as well as instruction in auditioning, resume preparation, business expenses, showcase preparation and artistic longevity. Projects for students in all areas will be included.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater, Theater-Acting, Theater-Directing, Theater-Design, Theater Education, Theater.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (THTR 1231 or 'Y' in CRTH02) and (THTR 2261 or 'Y' in CRTH06)

THTR 4222. Acting V. 3 Credit Hours.

This course is intended for students in the Acting Concentration who have completed the full Acting sequence. The student will apply all of the acting techniques and craft skills learned in their studies to carefully chosen monologues and/or scenes. In addition, the student will gain experience with the skill of cold-readings essential for the audition process. NOTE: Prior to fall 2009, the course title was "URTA Preparation Class."

Department Restrictions: Must be enrolled in one of the following Departments: CA:Theater.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater, Theater-Acting, Theater.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (THTR 1231 or 'Y' in CRTH02), (THTR 2221 or 'Y' in CRTH13), (THTR 2231 or 'Y' in CRTH04), (THTR 2261 or 'Y' in CRTH06), (THTR 3279 or 'Y' in CRTH16), (THTR 4212 or 'Y' in CRTH15), and (THTR 2241, THTR 2251, or 'Y' in CRTH05)

THTR 4241. Swordplay for the Actor. 3 Credit Hours.

Fighting with the sword is one of most exciting and rewarding skills that the actor can have in his bag of tricks. The ending of "Hamlet," "King Lear" and "Pirates of the Caribbean" conclude with a fight scene. The student will be exercised in the sword and work towards its perfection. An emphasis on fencing with the foil, epee and sabre may become part of the student's regimen to teach better coordination and focus as well as the practical applications thereof. The second half of the semester will be spent working on sword technique in rehearsal style classes. The students will perform two fight scenes. One will be for the mid-term and the other for the final/adjudication. Certification with the Society of American Fight Directors is possible at the end of the semester. NOTE: Prior to spring 2009, the course title was "Advanced Stage Combat."

Repeatability: This course may not be repeated for additional credits.

THTR 4282. Acting. 1 to 3 Credit Hour.

Arranged each semester, please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

THTR 4299. Thesis for Acting Emphasis. 4 Credit Hours.

Selection, preparation, and performance of one-act plays. Focus on characterization, scene analysis, and a deeper understanding of acting technique as applied to the dramatic structure of the one-act. Plays are presented at the end of the semester in a Festival of One-Acts. This opportunity enables the actor to grow and develop in a way that only a major performance challenge can provide. Requires intensive outside rehearsal for presentation in class.

Co-requisites: THTR 1087.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in THTR 4222.

THTR 4301. Advanced Directing. 4 Credit Hours.

The focus of this process-oriented class will be on advancing the director's storytelling techniques of script analysis, concept work, staging and working with actors and design elements by applying them to a challenging variety of material, through in depth scene study, including analysis of heightened texts from the works of Anton Chekhov to William Shakespeare, and longer forms beyond the single scene, culminating in the presentation of the work.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in THTR 3301, THTR 3241, and (THTR 2261 or 'Y' in CRTH06)

THTR 4401. Theater Management Capstone. 3 Credit Hours.

The capstone course is an opportunity for a BFA candidate to serve as a technical director, production manager, stage manager, or production stage manager for a main stage production in the Temple Theaters season. Under the mentorship of an industry professional, the student will follow a production from beginning to end, and make this the centerpiece of their portfolio moving forward. It will provide invaluable experience in the students' chosen field of study.

Department Restrictions: Must be enrolled in one of the following Departments: CA:Theater.

Repeatability: This course may not be repeated for additional credits.

THTR 4482. Technical Production. 1 to 3 Credit Hour.

This course will explore techniques and practices in technical theater production and technical direction for theater. Topics will include advanced carpentry, metalwork, theater rigging, structural design, drafting, budgeting and theater safety with a focus on proper technique, craftsmanship and efficiency. The class will consist of both lecture and hands-on work. Students will complete a series of projects relevant to the topics covered.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (THTR 1411 or 'Y' in CRTH03)

THTR 4511. Lighting Design II. 3 Credit Hours.

To provide a clear understanding and strong basis of language analysis and its application in lighting design. Various techniques in text interpretation will be used and explored. These techniques will then be used to the design process. There will also be a research project in the direct application of contemporary scientific developments. Throughout this course, the design process for the current Temple productions will continually be examined. Note: Prior to fall 2016, this course was called "Creativity in Lighting."

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (THTR 1411, THTR 1511, or 'Y' in CRTH03), (THTR 2411 or 'Y' in CRTH08), and (THTR 2512 or 'Y' in CRTH09)

THTR 4582. Lighting Design. 1 to 3 Credit Hour.

Arranged each semester, please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

THTR 4611. Costume Design II. 3 Credit Hours.

A continuation of Costume Design I, this course will explore the process of taking a costume from the page to the stage. We will learn to read scripts, do script analysis from a costume designer's point of view, create character and budget breakdowns, and research costume, hair, make-up and accessories for a variety of time periods. Hand-on projects will include the creation of character collages, "thumbnail" sketches, fabric swatching and painted costume renderings for a variety of plays, musicals, operas, films and commercials. NOTE: Graphic projects required.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (THTR 1411, THTR 1511, or 'Y' in CRTH03), (THTR 2411 or 'Y' in CRTH08), and THTR 2612.

THTR 4721. Scene Design II. 3 Credit Hours.

A project oriented course which deals with a wide variety of theatrical genre and with increasing degrees of complexity. The content is determined both by the needs of the students and by their particular interests. Students continue to develop drafting, rendering and model building skills.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (THTR 1411, THTR 1511, or 'Y' in CRTH03), (THTR 2411 or 'Y' in CRTH08), and (THTR 2721 or 'Y' in CRTH10)

THTR 4782. Scene Design. 1 to 3 Credit Hour.

Arranged each semester, please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

THTR 4801. Advanced Playwriting. 3 Credit Hours.

The course is designed to build upon skills and techniques learned in a basic playwriting class to create longer work. The course functions as a playwriting workshop, with students presenting in-class exercises and their play-in-progress to be discussed by their peers. We will also look at contemporary plays to understand their subjects and style. By the end of the semester, each student will complete a first draft of a full-length play.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in THTR 3801.

THTR 4841. Advanced Swordplay. 3 Credit Hours.

Advanced Swordplay covers the more advanced weaponry of stage combat and prepares the student for fighting on stage on a more advanced level. Weapons forms include: Rapier and Dagger and Longsword. Students will perform fight scenes, one with each weapons discipline. All disciplines will ultimately be rehearsed and performed as scenes.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in THTR 4241.

THTR 4997. Honors World of the Play. 3 Credit Hours.

This course is intended to provide an overview of the dramaturgical research process. It is the prerequisite for an advanced elective course in Production Dramaturgy, where the students will be assigned to serve as actual production dramaturges for our six main stage productions, providing research materials for the cast, the creative team, and for publicity/marketing purposes. Included will be approaches to creating study guides for both audiences and for educational purposes. NOTE: This is an Honors course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, WI

Repeatability: This course may not be repeated for additional credits.

Theater, Film and Media Arts (TFMA)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

TFMA 0810. GenEd Limited Edition GA. 3 or 4 Credit Hours.

This is a General Education Limited Edition course that will satisfy the GenEd Arts requirement. Topics vary by semester. Check the Class Schedule for the full description of specific topics offered. Students cannot repeat this course for additional credits, regardless of the topic.

Course Attributes: GA

Repeatability: This course may not be repeated for additional credits.

TFMA 0910. Honors GenEd Limited Edition GA. 3 or 4 Credit Hours.

This is an Honors General Education Limited Edition course that will satisfy the GenEd Arts requirement. Topics vary by semester. Check the Class Schedule for the full description of specific topics offered. Students cannot repeat this course for additional credits, regardless of the topic.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GA, HO

Repeatability: This course may not be repeated for additional credits.

Topical Studies (TS)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

TS 1185. Field Study - Extern. 2 to 3 Credit Hours.

Students participate in a field experience that varies according to interests and the number of credits the student wishes to pursue. Students in some colleges (SCT, for example) receive no credits for this experience. In the classroom component, students participate in discussions regarding career selection, search skills, resume writing and critiques, and interviewing skills. The field study may take place during a specific time period (Spring Break, the first two weeks of January, during an entire term) which is noted on the course at the time of registration.

Repeatability: This course may be repeated for additional credit.

TS 1285. Field Study - Extern. 2 to 3 Credit Hours.

Students who take Topical Studies 1185 (0084) may not take Topical Studies 1285 (0085). Course only available to those with an extern placement. Students participate in a field experience that varies according to interests and the number of credits the student wishes to pursue. Students in some colleges (SCT, for example) receive no credits for this experience. In the classroom component, students participate in discussions regarding career selection, search skills, resume writing and critiques, and interviewing skills. The field study may take place during a specific time period (Spring Break, the first two weeks of January, during an entire term) which is noted on the course at the time of registration.

Repeatability: This course may be repeated for additional credit.

TS 3082. Independent Study. 3 Credit Hours.

Students make arrangements with faculty in their departments to take an individual program of study. Course is by arrangement. Contact department chair for information.

Repeatability: This course may be repeated for additional credit.

TS 4082. Independent Study. 16 Credit Hours.

Students make arrangements with faculty in their departments to take an individual program of study. Course is by arrangement. Contact department chair for information.

Repeatability: This course may be repeated for additional credit.

Tourism and Hospitality Management (THM)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

THM 0877. Using Cultural Intelligence in a Globalized World. 3 Credit Hours.

Google "Cultural Intelligence" and you will see a common theme for all the search outcomes. Cultural Intelligence (CQ) is now considered the key intelligence to have in the rapidly globalizing and shrinking world! With technology pulling us all closer, cross-cultural communication is now the normal in both business and our leisure time. Accommodating those cultural differences is more challenging than it may seem, as culture is similar to an iceberg. Most of it exists under the surface, thus it is hard to comprehend if not impossible. How then can we succeed in these situations? One potential answer lies in the development and usage of our cultural intelligence. To truly become culturally intelligent, students of this course will come to first understand what culture is, and how unique social and geographical contexts spur the rise of cultural traits. Students will study and utilize Geert Hofstede's four cultural dimensions to further comprehend how culture colors our behaviors and perceptions of the world. With this foundational knowledge, students will then begin developing their understanding of the concept of cultural intelligence, how to train this skill and ultimately use it. Students will engage with numerous popular media and academic articles, as well as exciting educational approaches in their pursuit of developing their knowledge of cultural intelligence.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

THM 1311. The Business of Tourism and Hospitality. 3 Credit Hours.

The nature, scope and significance of the total field of tourism and hospitality; history and development, philosophies and theories, analysis of trends, issues and challenges.

Class Restrictions: May not be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

THM 2311. Global Issues in Travel. 3 Credit Hours.

This course concentrates on international and global issues in travel. Problems and characteristics specific to the international aspects of the travel industry will be examined. By the end of the course students will develop a comprehensive understanding of the factors influencing international travel and through global travel patterns, the influence of politics, the impact of globalization, the role of sustainability, and the influence of culture. Students will improve their knowledge of world geography and international players through the exploration of developed and potential tourist areas. Contemporary issues, as they relate to social, cultural and economic trends, are also explored.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

THM 2312. Tourism and Hospitality Sales. 3 Credit Hours.

The main objective of the course is to give a general overview of sales management discipline and its leadership role in the tourism and hospitality industry. The student will be exposed to the overall nature and dimensions of sales and sales management as it is relevant to and practiced by the tourism and hospitality industry. The student will be going through readings, assignments, interaction in group discussions and role-play, and a practical hands-on project that provides them with an opportunity to practice what they learn during the course.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

THM 2313. Financial Issues in Tourism and Hospitality. 3 Credit Hours.

This course is designed to provide students with knowledge of the fundamental concepts and tools that represent the core of financial management. The course will particularly emphasize the financial function and issues in a hospitality organization and will provide the student with applications of financial concepts in the context of hospitality financial management.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Sport Tourism Hospitality Mgt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (BA 2104 or STHM 1115), (ACCT 2101, ACCT 2501, or ACCT 2901), and (ECON 1101 or ECON 1901)

THM 3311. Organization Management in Tourism and Hospitality. 3 Credit Hours.

This course provides the knowledge required to formulate and effectively manage the unique work context of tourism or hospitality operations. This course will take an organizational behavior approach, focusing on the individual, team, and organizational needs. Topics that will be covered include job performance and satisfaction; organizational commitment; attitudes, emotions, moods, and stress; motivation; personality; cultural value and diversity; leadership; organizational structure and culture. The goal of this course is to build transferable skills, promote critical thinking and strategic application of theories, and equip innovative leaders to transform the industry.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Sport Tourism Hospitality Mgt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (HRM 1101 or HRM 1901)

THM 3312. Strategic Decision Making in Tourism and Hospitality Management. 3 Credit Hours.

This course will focus on how to make good decisions to solve practical industry problems in tourism and hospitality settings. Topics will include understanding the processes, tools, data, and organizational environments necessary for effective decision making. The overall goal will be to help students understand how to make a system (whether a collection of employees, customers, equipment and technology, or business locations) work more effectively. Written and oral communication skills, as well as the use of data analysis software, will be stressed.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Sport Tourism Hospitality Mgt.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in BA 2104.

THM 3314. Legal Issues in Tourism and Hospitality. 3 Credit Hours.

A comprehensive overview of laws and regulatory agencies governing the tourism and hospitality industry. Legal implications of civil laws, areas of tort and contract will be discussed, along with the law and legal relationships that exist in the business context. Hospitality law, especially when dealing with customers and business contracts, will be the main focus. Issues will be discussed from the points of view of innkeepers, restaurateurs, travel agents, and event planners. Attention will be given to labor relations laws, the Americans with Disabilities Act, risk management, zoning, and unions.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits.

Repeatability: This course may not be repeated for additional credits.

THM 3320. Special Topics in Hospitality Management. 3 Credit Hours.

This course is designed to provide students with an in-depth analysis of the current issues facing hospitality management. The course will address some of the major issues currently facing tourism and hospitality managers in the areas of advertising, public relations, information technology, and management systems. The course will build on the competencies students have already developed in their earlier courses, which introduced them to the basics of marketing, management, and finance. Given their working knowledge, students will be called upon in class to identify potential solutions to current issues.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may be repeated for additional credit.

THM 3321. Tourism Planning and Development. 3 Credit Hours.

An analysis of the socioeconomic planning process involved in developing tourism destinations in global, community, metropolitan, urban, and rural settings. Emphasis will be on policy and product development, regeneration and enhancement of facilities and services to meet the needs of tourists. Includes the adjustment process involved in integrating tourism into a developing economy, and the project management skills inherent in steering a development from inception to fruition. Extensive use is made of concepts from sociology, economics, political science, and business disciplines. Special readings from the current literature, case studies, guest speakers, and video cases will form an integral part of this course.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

THM 3322. Destination Management Organizations. 3 Credit Hours.

This course is designed to provide a comprehensive understanding of the role, the scope and the business of destination marketing organizations. The course will also provide an overview on the history, development and future of destination marketing organizations in the United States and around the world. Trends, issues and challenges are discussed. Current and past managers of destination marketing organizations will be invited to provide first hand examples and deeper insights into destination marketing organizations, such as politics that govern relationships, funding, and marketing strategies.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

THM 3324. Hospitality Operations. 3 Credit Hours.

Hospitality Operations will focus on an integration and application of planning, implementation, operation, and maintenance of accommodations, including hotels, motels, and resorts. The physical aspects, capital investments, layout, and design will be included with the operational component. The course will also provide students with guided learning and hands-on experience in using a property management system.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

THM 3325. Food and Beverage Management. 3 Credit Hours.

A survey course in commercial food and beverage management. Key financial, marketing, and managerial metrics that underscore effective food service management are prioritized. Topics include designing a cost-efficient menu, menu psychology, cost control and basic financial analysis, beverage control, customer service, food and beverage marketing, and employee management. Wine appreciation techniques and current food and beverage trends will be explored.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

THM 3327. Advanced Destination Marketing Systems. 3 Credit Hours.

Destination marketing has changed dramatically as the result of increasing competition and environmental change. This course takes a system approach and is designed to extend students' knowledge and experience in marketing to tourism and hospitality by first understanding the nature of competition within the tourism industry; second, by understanding the role of information technology; and third, by developing extensive analytical skills. NOTE: THM 3396 (formerly STHM 3396): Marketing in Tourism and Hospitality is strongly recommended prior to taking this course.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

THM 3328. Gaming and Casino Management. 3 Credit Hours.

This course is an overview of the role gambling plays in today's society. The course's goal is to provide students with the background necessary to understand the gaming industry and its relationship to tourism, hospitality, recreation, and sports. Topics include the evolution of legal gaming, its management and regulation, the structure of the various gaming industries, and key terminology. Analysis of participation patterns and impacts of gambling, both positive and negative, on society will be addressed. An introduction to game rules and basic concepts from probability and statistics necessary to understand gambling operations will be discussed.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

THM 3329. Revenue Management in Tourism and Hospitality Management. 3 Credit Hours.

In this course students will learn to identify and exploit opportunities for revenue optimization in different business contexts. Students will review the main methodologies that are used in each of these areas, discuss issues associated with different pricing strategies, and survey current practices in the industry. Within the broader area of pricing theory, the course places particular emphasis on tactical optimization of pricing and capacity allocation decisions, tackled using quantitative models of consumer behavior, demand forecasts and market segmentation.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

THM 3330. Special Topics in Destination and Event Management. 3 Credit Hours.

This course is designed to provide students with an in-depth analysis of the current issues facing destination and event management. The course will address some of the major issues currently facing tourism and event managers in the areas of advertising, public relations, information technology, and management systems. The course will build on the competencies students have already developed in their earlier courses, which introduced them to the basics of marketing, management, and finance. Given their working knowledge, students will be called upon in class to identify solutions to current issues.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Sport Tourism Hospitality Mgt.

Repeatability: This course may be repeated for additional credit.

THM 3396. Marketing in Tourism and Hospitality. 3 Credit Hours.

An analysis of essential marketing principles as currently applied in the tourism and hospitality industries. Concepts and tools in marketing research will be emphasized and practiced. The marketing mix will be evaluated in terms of specific applications set in both industry segments. Trends, issues and problems influencing tourism and hospitality marketing will also be examined. This writing-intensive course requires writing a marketing plan for a tourism or hospitality company.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Sport Tourism Hospitality Mgt.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MKTG 2101 or MKTG 2901)

THM 4321. Hospitality Management Systems. 3 Credit Hours.

The hospitality organization's use a variety of information technologies to facilitate various business activities such as reservation, marketing, operations, and management, with a direct impact on revenues and market share. A perfect synergy between information systems and the hospitality industry requires decision-makers to not only understand the functionalities of advanced systems, but also be able to successfully interpret systems' analyses for their current management practices (e.g., yield management). Using an advanced lodging management system as an effective instructional tool, this course focuses on the fundamentals of management systems within the today's hospitality organizations in general and lodging operations in particular. Students will be exposed to industry examples, in-depth discussions, and simulation projects about how to strategically integrate system applications such as property management, reservation management, sales & marketing management, point of sales systems, and meeting space rentals, etc. within a hotel setting, as well as their impacts on organizations and the industry as a whole.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Sport Tourism Hospitality Mgt.

Co-requisites: STHM 4112.

Repeatability: This course may not be repeated for additional credits.

THM 4322. Designing Tourism Experiences. 3 Credit Hours.

This course presents an overview of the process of designing effective tourism hardware (attractions, etc.) and software (programs, special events, etc.). Students will learn how to define effective tourism experiences that add value to the visitor experience and how to measure and evaluate these experiences using both qualitative and quantitative methods. Furthermore, students will learn customer experience marketing and management principles to promote affinity and loyalty among tourism consumer groups.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Sport Tourism Hospitality Mgt.

Repeatability: This course may not be repeated for additional credits.

THM 4396. Hospitality Management Systems. 3 Credit Hours.

Hospitality organizations use a variety of information technologies to facilitate various business activities such as reservation, marketing, operations, and management, with a direct impact on the firm's financial outcomes such as revenues and market share. Effective implementation requires decision-makers to not only understand the functionalities of these advanced systems, but also be able to successfully interpret the systems' output (e.g., relying on daily reports to make pricing decisions). Using an advanced lodging management system as an instructional tool, this course explores the fundamentals of hospitality and lodging management systems. Through multiple industry examples and in-depth discussions, this writing intensive course requires students to work on several simulation projects focusing on strategically integrate system applications such as property management, reservation management, sales & marketing management, point of sales systems, and meeting space rentals within a hotel setting. The impact of these advanced systems on hospitality organizations and on the hospitality industry will be discussed as well.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Sport Tourism Hospitality Mgt.

Co-requisites: STHM 4112.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

THM 4397. Designing Tourism Experience. 3 Credit Hours.

This course presents an overview of the process of designing effective tourism hardware (attractions, etc.) and software (programs, special events, etc.). Students will learn how to define effective tourism experiences that add value to the visitor experience and how to measure and evaluate these experiences using both qualitative and quantitative methods. Furthermore, students will learn customer experience marketing and management principles to promote affinity and loyalty among tourism consumer groups. This writing intensive course requires the development of an experience design concept.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

THM 4398. Contemporary Issues in Tourism, Hospitality and Event Management. 3 Credit Hours.

The nature, scope and significance of this capstone course is to review, discuss and analyze current issues in tourism, hospitality and event management. Students will utilize their knowledge and understanding from previous courses to address present-day topics that have various impact within the industry. Students will work in a variety of platforms to identify, address and potentially resolve these issues. Daily and weekly news sources serve as primary references for the content of this course.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Sport Tourism Hospitality Mgt.

Co-requisites: STHM 4112.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (STHM 3396 or THM 3396)

TUJ International Business Studies (JIBS)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

JIBS 3101. Introduction to Global Finance. 3 Credit Hours.

This course addresses corporate financing issues in the global financial environment relevant for international corporations or MNCs/MNEs. Topics to be discussed in the course will include: BOP accounts; foreign exchange-rate determination and markets; foreign exchange risk management; corporate strategy for foreign direct investment; valuation of foreign investments; global debt and equity financing, and project finance; international capital budgeting decision process associated with political, sovereign (country) and inflation risks. The perspective of cash versus equity purchases; mergers and acquisitions; comparisons of corporate governance practices around the world; and international taxation will also be touched upon and explored.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (ACCT 2102 or ACCT 2902)

JIBS 3102. Global Operations and Supply Chain Management. 3 Credit Hours.

This course is designed to present and discuss concepts, issues and problems critical to global operations, with some emphasis on global supply chains. The course seeks to provide an understanding of the importance of individual components (suppliers, manufacturers, distributors, and customers) in the operation of the supply chain. Coverage will include successful approaches in the areas of product and service design, global sourcing and logistics management, sales and operations planning, scheduling, resources planning, inventory management, and project management, among others, which have led to dramatic improvements in global business performance. Important recent developments and approaches for the effective and efficient operation of global supply chains will be identified and discussed. Also, in this course, a software package used for project management, such as MS Project, will be introduced.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (STAT 2103, STAT 2903, or MATH 2031)

JIBS 3501. Marketing in a Global Environment. 3 Credit Hours.

This course takes a culturally driven approach to International Marketing. It will examine how multinational companies adapt to international opportunity and constraints. Marketing topics covered include global marketing; government regulations; organizational structure; product, price, promotion, and credit policies and methods. The course will combine cases, discussions, and readings to provide a mix of integrating concepts and hands-on problem solving.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (MKTG 2101 or MKTG 2901)

JIBS 4197. Global Business Overview. 3 Credit Hours.

This course is about making business decisions in international environment. It takes the perspective of a general manager and will focus on the theme of valuation. Students will be challenged to evaluate the capital structure and business models of international enterprises in order to assess strategic options.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

JIBS 4596. International Business Capstone. 3 Credit Hours.

This is an integrated course that focuses on strategic management and decision making in international enterprises. Students are challenged to design real-time solutions through the use of comprehensive live case studies. The course is designed to help you develop state-of-the-art business writing skills that are appropriate in both academic and professional contexts. Other important objectives include: (1) Information literacy: To provide students with opportunities to search for outside sources and with instruction related to searching for, evaluating, and/or using sources; (2) Cross-functional (capstone) perspective: To integrate the knowledge accumulated in various functional areas such as accounting, finance, marketing, human resources management and operations management; (3) Hypothesis-driven, fact-based, and action-oriented case work: To provide students with meaningful experience in analyzing strategic problems through the use of the real-time case method. At the end of the course, students should be able to write a basic strategic report that meets the professional standards of an international management consulting firm on junior associate level.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in HRM 1101 and (JIBS 3501 (may be taken concurrently) or JIBS 3102 (may be taken concurrently))

Tyler School of Art (TYLE)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

TYLE 0805. Race, Identity and Experience in American Art. 3 Credit Hours.

How might investigating one's identity be a rich source of inspiration for artistic expression? And how can art and artists of the Americas assist in our understanding about identity, race, diversity, and ourselves? Arts of the Americas and United States are the focus of this course which achieves the race and diversity GenEd credit. Learning centers art forms and practices from the 1400s to today which highlight how race and racism are dynamic concepts intersecting with other group identifications such as gender, class, ethnicity, religion, age, sexual orientation, or ability. This course offers opportunities to explore, converse, and learn about racial identity, lived experience, and diversity through art history, and topics range from colonial contact in the Americas, to Civil Rights and disability activism of the 20th century, to LGBTQIA2+ art histories, to contemporary Indigenous art and Afrofuturism. Active learning will be engaged as we develop art analysis skills through visits to archives and art exhibitions. Note: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed TYLE 0905.

Course Attributes: GD

Repeatability: This course may not be repeated for additional credits.

TYLE 0810. GenEd Limited Edition GA. 3 or 4 Credit Hours.

This is a General Education Limited Edition course that will satisfy the GenEd Arts requirement. Topics vary by semester. Check the Class Schedule for the full description of specific topics offered. Students cannot repeat this course for additional credits, regardless of the topic.

Course Attributes: GA

Repeatability: This course may not be repeated for additional credits.

TYLE 0905. Honors Race, Identity and Experience in American Art. 3 Credit Hours.

Please refer to the Honors Course Guide for a more specific description of TYLE 0905 written by the professor who will be teaching it. The generic description is as follows: How might investigating one's identity be a rich source of inspiration for artistic expression? And how can art and artists of the Americas assist in our understanding about identity, race, diversity, and ourselves? Arts of the Americas and United States are the focus of this course which achieves the race and diversity GenEd credit. Learning centers art forms and practices from the 1400s to today which highlight how race and racism are dynamic concepts intersecting with other group identifications such as gender, class, ethnicity, religion, age, sexual orientation, or ability. This course offers opportunities to explore, converse, and learn about racial identity, lived experience, and diversity through art history, and topics range from colonial contact in the Americas, to Civil Rights and disability activism of the 20th century, to LGBTQIA2+ art histories, to contemporary Indigenous art and Afrofuturism. Active learning will be engaged as we develop art analysis skills through visits to archives and art exhibitions. Note: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed TYLE 0805.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GD, HO

Repeatability: This course may not be repeated for additional credits.

TYLE 0910. Honors GenEd Limited Edition GA. 3 or 4 Credit Hours.

This is an Honors General Education Limited Edition course that will satisfy the GenEd Arts requirement. Topics vary by semester. Check the Class Schedule for the full description of specific topics offered. Students cannot repeat this course for additional credits, regardless of the topic.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: GA, HO

Repeatability: This course may not be repeated for additional credits.

TYLE 1071. Visual Studies 1 Introduction to Visual Studies: History, Theory, Practice. 3 Credit Hours.

This course introduces students to the field of Visual Studies. Students will be introduced to histories and theories of analyzing visual communication from a variety of aesthetic, theoretical, sociological, and historical viewpoints. Students learn to think about representations of knowledge through visual imagery, will consider the impact of medium on the image and message of a piece, and will learn to think critically about visual culture's social and cultural context. Topics covered in class include but are not limited to: human vision and embodied experience; forms of art production including considerations of craft, concept, medium, and social practice; the viewers role in producing meaning; images as representations of social power; and the role of images in the social and material production of space. Critical reading, writing, and seeing will be taught through a base lecture format, in-class exercises, and discussion.

Repeatability: This course may not be repeated for additional credits.

TYLE 1111. Visualizing Urgency. 2 Credit Hours.

Tyler School of Art is offering a two-credit course through its art gallery Temple Contemporary that addresses urgent issues of local relevance and international significance. The content of this course will be shaped through the study of exhibitions, workshops, and guest lectures held in the gallery.

Repeatability: This course may be repeated for additional credit.

TYLE 1911. Honors Visualizing Urgency. 2 Credit Hours.

Tyler School of Art is offering a two-credit course through its art gallery Temple Contemporary that addresses urgent issues of local relevance and international significance. The content of this course will be shaped through the study of exhibitions, workshops, and guest lectures held in the gallery.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

TYLE 1971. Honors Visual Studies 1 Introduction to Visual Studies: History, Theory, Practice. 3 Credit Hours.

This course introduces students to the field of Visual Studies. Students will be introduced to histories and theories of analyzing visual communication from a variety of aesthetic, theoretical, sociological, and historical viewpoints. Students learn to think about representations of knowledge through visual imagery, will consider the impact of medium on the image and message of a piece, and will learn to think critically about visual culture's social and cultural context. Topics covered in class include but are not limited to: human vision and embodied experience; forms of art production including considerations of craft, concept, medium, and social practice; the viewer's role in producing meaning; images as representations of social power; and the role of images in the social and material production of space. Critical reading, writing, and seeing will be taught through a base lecture format, in-class exercises, and discussion.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

TYLE 2468. Search and Destroy: Punk's DIY Rebellion. 3 Credit Hours.

This course examines the far-reaching phenomena of punk music, fashion, and DIY culture that originated in the late 1970s, and its influential effects in later decades. Punk embodied an in-your-face class-consciousness mixed with the anti-aesthetics of negation and unbridled creativity. This class examines the formal manifestations of punk in music, fashion, graphics, and publishing, while attending to the ways that punk broke down the raced, classed and gendered barriers associated with traditional notions of beauty and form. Topics covered will include the shift away from 1960s idealism into 1970s nihilism; the performance of gender in Punk and New Wave, DIY publishing; the relationship of 1970s culture to class conflict and politics; the implications of unskilled production; critical theory of subcultures; and the influence of philosophy and theory on punk practice (Marquis de Sade, Marx, Nietzsche, Bataille, Brecht, Debord, and others).

Repeatability: This course may not be repeated for additional credits.

TYLE 2968. Honors Search and Destroy: Punk's DIY Rebellion. 3 Credit Hours.

This course examines the far-reaching phenomena of punk music, fashion, and DIY culture that originated in the late 1970s, and its influential effects in later decades. Punk embodied an in-your-face class-consciousness mixed with the anti-aesthetics of negation and unbridled creativity. This class examines the formal manifestations of punk in music, fashion, graphics, and publishing, while attending to the ways that punk broke down the raced, classed and gendered barriers associated with traditional notions of beauty and form. Topics covered will include the shift away from 1960s idealism into 1970s nihilism; the performance of gender in Punk and New Wave, DIY publishing; the relationship of 1970s culture to class conflict and politics; the implications of unskilled production; critical theory of subcultures; and the influence of philosophy and theory on punk practice (Marquis de Sade, Marx, Nietzsche, Bataille, Brecht, Debord, and others).

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

TYLE 3211. Creative Cottage Industrialist. 3 Credit Hours.

Creative Cottage Industrialist is a three-credit course designed to teach artists the skills they will need to effectively match their creative interests with the developing marketplace. Through a series of case studies, guest lectures, and presentations, students will be encouraged to work collaboratively and individually to develop venture cottage industry plans designed to support and expand their artistic capacity.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

TYLE 3349. Tyler School Japan Art, Media and Design Workshop. 6 Credit Hours.

A workshop designed to provide art students with study-abroad experience in Japan. Individual sections offered by departments or areas of the Tyler School introduce different specific topics, so that students may choose the area in which they wish to work. A Tyler faculty member will teach the studio. In addition to the studio component, there will be art history related lectures on topics in Japanese art, guest lectures and workshops by contemporary Japanese artists, field trips, and a multimedia interdisciplinary lab for all students. The goal of the workshop is to give art students a firm grounding in the social, cultural, historical, and practical facets of art in Japan.

Repeatability: This course may not be repeated for additional credits.

TYLE 3385. Field Internship. 3 Credit Hours.

A field internship must provide practical experience in a setting which is relevant to the student's course of study, such as in a gallery, museum or community art center, etc. A comprehensive paper must be written.

Repeatability: This course may be repeated for additional credit.

TYLE 3585. Diamond Peer Teachers - Internship I. 1 Credit Hour.

The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

Repeatability: This course may be repeated for additional credit.

TYLE 3586. Diamond Peer Teachers - Internship II. 1 Credit Hour.

The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

Repeatability: This course may be repeated for additional credit.

TYLE 4285. Rome Internship. 3 Credit Hours.

The objective of this course is to enable students to gain practical professional experience with Italian and multinational companies (publishing companies, film and media agencies, tourism companies), law firms, nonprofit organizations and government agencies, galleries, museums, artists' studios, schools, and a variety of other institutions in different fields. The internship program provides an excellent opportunity to gain a direct and deeper understanding of cultural business practices, build your resume, and experience another side of Italian life, while continuing regular coursework.

Repeatability: This course may be repeated for additional credit.

Undergraduate Studies Merit Scholar (USMS)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

USMS 4082. Independent Study: Internship. 0 to 1 Credit Hours.

Independent Study for Temple University Merit Scholars.

Repeatability: This course may be repeated for additional credit.

USMS 4182. Independent Study: Research. 0 to 1 Credit Hours.

Independent Study for Temple University Merit Scholars.

Repeatability: This course may be repeated for additional credit.

USMS 4282. Independent Study: Study Abroad. 0 to 1 Credit Hours.

Independent Study for Temple University Merit Scholars.

Repeatability: This course may be repeated for additional credit.

USMS 4382. Independent Study: Volunteer. 0 to 1 Credit Hours.

Independent Study for Temple University Merit Scholars.

Repeatability: This course may be repeated for additional credit.

University College (UC)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

UC 0701. Computer Literacy Workshop. 0 Credit Hours.

The intent of this workshop is to provide students with the basic computing skills necessary for success in the Fox School of Business. This workshop will provide students with instruction on how to utilize Microsoft Office tools, as well as basic computer and Internet navigation skills. This workshop will allow students to practice these skills in a lab setting.

Repeatability: This course may not be repeated for additional credits.

UC 3101. Sustainability in Action. 3 Credit Hours.

This class provides a deep dive into sustainability in action. Students will move from considering sustainability in action at Temple to thinking about it in the context of the city of Philadelphia and then zooming out even further to global conversations. Students will have the opportunity to bring together your interdisciplinary studies to date as you work on a final project of your choice, addressing a topic or question related to any aspect of sustainability at Temple or in the wider Temple community. Examples of projects may include final papers, art installations, film or other visual media, performance, building model, mapping tools, etc. (These projects can re-purpose and build upon ideas explored in prior coursework but cannot re-use work that was previously submitted to fulfill a course requirement.) All final projects must address the three pillars of sustainability - environmental, economic, and social. This course is the final requirement for the undergraduate Certificate in Sustainability.

Course Attributes: SF

Repeatability: This course may not be repeated for additional credits.

UC 4096. General Studies Integrative Seminar. 3 Credit Hours.

The General Studies Integrative Seminar is a culminating capstone experience for the Bachelor of General Studies (BGS) program. In this course, students will undertake a semester-long individually-defined project. The project will serve as an opportunity for students to synthesize and expand upon the interdisciplinary ideas and skills learned in their selected academic concentrations. The course will also provide students an opportunity to reflect on their development as learners, and to plan for and explore how their BGS degree will support their future professional and personal pathways. The BGS Integrative Seminar is a writing-intensive course. Students will have an opportunity to work closely with a Temple faculty member to understand the requirements of writing and communicating in their fields, and to develop their ability to communicate effectively. This course is limited to students in their final semester of the Bachelor of General Studies major.

College Restrictions: Must be enrolled in one of the following Colleges: University College.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CLA 2096.

University Seminar (UNVS)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

UNVS 1001. First Year Seminar I. 1 Credit Hour.

This course introduces first-year students to the opportunities and rigors of higher education, as well as to the skills needed to use academic resources successfully in college. The topics covered in the seminar help first year students articulate and reach their academic goals. There are no prerequisites or co-requisites for this course.

Class Restrictions: Must be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

UNVS 1002. First Year Seminar II. 1 Credit Hour.

This is a one-credit course that introduces first-year students to the opportunities to discover major interests through applied learning and other career-oriented experiences. The course exposes students to career paths and encourages major exploration through discussions with faculty, informational interviews, readings, and opportunities to practice skills needed to be a more effective student.

Class Restrictions: Must be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

UNVS 1003. Academic Bridge for International Students. 3 Credit Hours.

Academic Bridge for International Students is a three-credit course that includes instruction in all four language skills (reading, writing, speaking, and listening). It also focuses on additional academic skills and strategies necessary for students to succeed in undergraduate courses. Critical thinking and independent research will be emphasized along with the introduction to technologies that support course requirements. There are no prerequisites or co-requisites for this course. To take this course you must be an international student whose native language is not English.

Repeatability: This course may not be repeated for additional credits.

UNVS 1004. President's Seminar I: Organizational Change at Temple University. 1 Credit Hour.

Students will address key questions that focus on factors and issues that impact organizational change at Temple University. Conversations with guest faculty, a series of directed readings, group discussion and individual writing assignments will promote the development of students' understanding of the central questions and their practical implications. Through this course students will learn how to identify the need for change, approaches for implementation, the importance of goal setting, and a greater understanding of how these issues affect an organization like Temple.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

UNVS 1005. President's Seminar II: Organizational Change at Temple University. 0 or 1 Credit Hours.

Students will address key questions that focus on factors and issues that impact organizational change at Temple University. Conversations with guest faculty, a series of directed readings, group discussion and individual writing assignments will promote the development of students' understanding of the central questions and their practical implications. Students will work on implementing change on selected issues discussed in UNVS 1004, President's Seminar I.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

UNVS 1006. Academic Success Strategies. 1 Credit Hour.

Academic Success Strategies provides an opportunity for explicit instruction in critical thinking skills. Through the study of historical and contemporary learning theories and research-based cognitive strategies, students will be able to meaningfully reflect upon their learning. In addition to these opportunities in metacognitive practice, students will develop and implement techniques to improve their efficacy as students.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

UNVS 1007. Cecil B. Moore Scholars Summer Seminar. 2 Credit Hours.

This two-credit course introduces first-year students, who are also Cecil B. Moore scholarship recipients, to resources and strategies that contribute to a successful transition into college. Students will learn about the academic and social resources available at Temple University and how to utilize them throughout their undergraduate careers. Students will have opportunities to develop a network of peer and University support staff prior to their first Fall semester on campus. Topics include: academic strategies, campus involvement, major exploration, diversity and equity, financial literacy and goal setting.

Class Restrictions: Must be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

UNVS 1111. Success Strategies for Black, Latino, and Native-American First-Year Male-Identified Students. 1 Credit Hour.

This first-year seminar is a one-credit course which introduces Black, Latino, and Native American male-identified students to the opportunities and rigors of Temple University. The main topics will include developing the academic, social, professional, financial, and cultural capital of these students; health and well-being will be prioritized and infused into every unit. This course is taught by Black and Latino instructors, and students will connect with staff and student mentors who have experience as underrepresented students at Temple. Discussion-based class periods will be supplemented by hands-on activities, guest speakers, and in-depth conversations. Most requirements for the course will be completed during class periods, although students will be required to reflect on class themes via a video journal and end-of-semester presentation. Wide ranging topics will include tips for developing relationships with faculty, social identity, paths to lucrative careers, understanding taxes, overcoming trauma, and volunteering. There are no prerequisites or co-requisites for this course.

Class Restrictions: Must be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Repeatability: This course may not be repeated for additional credits.

UNVS 2001. Sophomore Seminar: Planning for Success. 1 Credit Hour.

Sophomore Seminar is a one-credit course that provides sophomore students an opportunity to work on career planning and development. Topics covered in this course will span the career development process from exploring individual strengths, academic majors, potential career paths, how to get an internship, explore research opportunities, how to get involved on campus, and preparing for graduate school.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

UNVS 2002. Transfer Seminar: Planning for Success. 1 Credit Hour.

This is a one-credit optional course that introduces new transfer students to the opportunities and resources at Temple University. This course would count as elective credit. Topics will include exploring individual strengths, academic majors, potential career paths, how to get an internship, research opportunities, getting involved on campus, and graduate school preparation. Additionally, we will familiarize students with the Temple community and offices. The topics covered in this seminar will help transfer students develop and meet short- and long-term career goals.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

UNVS 2003. Global Citizenship. 1 Credit Hour.

In our increasingly globalized society, the development of global perspectives and competencies are important for successful navigation of the world. This course explores topics and themes related to helping students prepare to move forward as global citizens.

Repeatability: This course may not be repeated for additional credits.

UNVS 2004. Tale of Two Cities: Paris & Rome - Histories, Legends, Imaginations. 3 Credit Hours.

Students will explore the multifaceted cultural, historical and artistic development of Paris and Rome. Students will engage in pre-departure sessions on the historical and political realities that shaped the often turbulent life of these cities. Students will learn to identify the many artistic/architectural movements as represented in Paris, as well as the roughly seven-layered historical/artistic strata that are visible in the "Eternal City." Students will learn about the diverse people that populate these two cultural capitals, and also the habits that make Parisians and Romans unique in the world. No previous experience with art, architecture, or cultural anthropology is required. No previous knowledge of France or Italy is needed. Students must be able to participate in both the pre-departure as well as in-country session. This course will require additional travel expenses.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

UNVS 2005. Writing About the Self: Exploring Opportunities and Communicating Strengths. 1 Credit Hour.

You have high aspirations, but how do you get there? What opportunities are most valuable? How can you successfully navigate the application process for graduate and professional school, and major awards? And how can you write about your accomplishments without bragging or rolling out tired clichés? In this course you will explore and clarify your strengths and goals, learn how to identify and assess opportunities relevant to those goals, and practice the art of writing about yourself. Over the course of the semester, you will be exposed to a variety of examples or autobiographical writing and will think about, and practice writing about your experiences.

Repeatability: This course may not be repeated for additional credits.

UNVS 3001. Junior Seminar: Pre-Professional Preparation. 1 Credit Hour.

This is a one-credit optional course that will provide junior level students with an opportunity to work on pre-professional planning and development. It will focus specifically on preparation for post-graduate educational opportunities and entrance exams for graduate and professional programs. This course will count toward graduation as elective credit.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits.

Repeatability: This course may not be repeated for additional credits.

UNVS 3002. Peer Mentor Development. 0 to 1 Credit Hours.

Peer Mentor Development is a course that introduces students to content and communication skills identified as integral to serving as a peer mentor in the college setting. Through this course, students will become proficient guides to Temple and community resources, well-versed in college and academic success strategies, and equipped with interpersonal communication skills to deliver their message and reach fellow students.

Repeatability: This course may not be repeated for additional credits.

UNVS 3003. Student Staff Development Seminar. 0 or 1 Credit Hours.

The Student Staff Development Seminar introduces students to Leadership Models and Theory to prepare them to serve as leaders in their Student Staff Roles in University Housing and Residential Life and beyond. In addition, this seminar encourages students to explore key competencies connected to Student Staff Leadership roles (e.g. Supervision, Crisis Management, Confrontation/Mediation, Critical Thinking, Administrative Resources, Professional Development, Inclusivity, and Student and Community Engagement).

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

Level Registration Restrictions: May not be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Upper Division Honors Program (HONS)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

HONS 3991. Honors Scholars Research/Creative Project Design. 3 Credit Hours.

This course focuses on design and development of an independent research/creative arts project developed with the guidance of a faculty mentor. While some topics covered in the seminar will be specific to the seminar participants, common topics will include project specific research or design methodology, discipline appropriate theoretical readings, and the development of project specific theoretical/secondary bibliography. For University Honors Scholars only. Junior standing required. Fulfills University Honors Scholars requirement.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

Urban Education (URBE)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

URBE 0855. Education for Liberation Here and Abroad. 3 Credit Hours.

This course explores educational issues in urban America and indigenous educational traditions in the "Third World." The course focuses on the connections between education and politics, cultural diversity and economics, and the existence and persistence of poverty in developing nations. Students will critically analyze international films, course readings, and presentations from guest speakers. Culturally responsive, post-modern, and comparative approaches are used to investigate the impact of culture, poverty and development, and the goals of education in each societal context. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

URBE 1006. Schooling and Development in Third World Societies. 3 Credit Hours.

Development in Third World Societies has been defined primarily in terms of economic growth. Schools have been designed largely to support this process and serve the primary function of developing human capital. Similar patterns can also be seen in the United States. The course presents these and alternative definitions of development and the functions of schooling, and compares the experience of third world societies to that of poor people in the cities in the United States. While journeying through different countries, school systems, and cultures, the course also focuses on the "Third World" inside the United States. Here we explore how knowledge of Third World economic and cultural issues can help us understand the life and challenges of urban students from minority, working class, and immigrant backgrounds. Students also learn from experiences with urban and Third World groups with whom they are involved in service learning activities. NOTE: (1) Must complete 20 hours of community-based service learning activities. (2) This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors.

Course Attributes: IS

Repeatability: This course may not be repeated for additional credits.

URBE 1909. Honors Schooling and Development in Third World Societies. 3 Credit Hours.

The Honors version of Urban Education 1006 (C060). NOTE: (1) Course requirements include the completion of 20 hours of community-based service learning activities. (2) This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO, IS

Repeatability: This course may not be repeated for additional credits.

URBE 2320. Special Seminar in Urban Education. 3 Credit Hours.

A special topics course. Topic varies each semester.

Repeatability: This course may be repeated for additional credit.

URBE 3990. Honors Special Seminar in Urban Education. 3 Credit Hours.

An honors special topics course. Topic varies each semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

URBE 4301. Partnerships between Schools and Communities. 3 Credit Hours.

This course focuses on the theory and practice of education-related collaborations and partnerships that cross social and professional divides. Partnerships and collaborations in pursuit of social (rather than economic) goals have become increasingly prominent since the 1980s. This is true internationally as well as in the United States, and in many fields besides education. While we explore what these collaborations entail and why they represent an important trend, a major emphasis will be on learning how to become a partner and how to support and facilitate collaborations in settings that bring together participants from different organizations, professional orientations, and social backgrounds. In other words, part of the work of this class is for you to focus on yourself as a partnership practitioner, learning from your practice and experiences. In this class you will learn in multiple ways, but especially by moving between practice and theory, and experiential and academic learning. You will analyze written cases as well as develop your own by being involved in a collaboration/partnership. Do expect to do a fair bit of critical reflection on your own positionality, assumptions and experiences as they relate to the course. The class will be conducted as a collaborative seminar and you are expected to bring your individual and collective interests to the table. The urban educational landscape has also experienced a growth in community organizing around such educational issues as funding, governance, etc. The final part of the course will look at these types of partnerships. This course requires fieldwork. In order to register for this course, students must submit full clearances to the Office of Field Placement.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Repeatability: This course may not be repeated for additional credits.

URBE 4496. Understanding Urban Communities. 3 Credit Hours.

This course will introduce students to key issues in urban education, focusing on both formal schooling and informal educational settings. It will use readings from history, sociology, and political science - as well as the popular media - to provide students with a deeper understanding of the larger social and political processes that shape cities and their schools. The course will also cover such key issues as the achievement gap, funding inequalities, high school dropout, school violence, and various approaches to school reform. A key focus of the course will be identifying strengths and assets within urban communities and countering the "deficit" narrative that dominates popular perceptions of urban education. Another key focus will be on identifying promising practices within schools and other organizations that serve urban youth. For this reason, students will conduct research on possible policy interventions, study a particular intervention in depth, and write about that intervention. As a Writing Intensive course, this class will provide students with significant instruction and support in the following areas: conducting research on social policy interventions, evaluating sources, using research to craft an argument, and writing one argument-focused social science research paper and one policy brief. Students will be encouraged to make connections between theory and research on urban education and the challenges and opportunities they may face as practitioners.

Course Attributes: SI, WI

Repeatability: This course may not be repeated for additional credits.

Virtual Media Management (VMM)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

VMM 1111. Introduction to Virtual Media Management. 3 Credit Hours.

This course is designed to introduce students to various theories and abilities that come from the study of organizational and mediated communication. These abilities include independent learning, working constructively with others toward achieving shared goals, managing workplace conflict constructively, and thinking critically and clearly about emerging problems and their solutions. Collaborative learning is used to practice and improve productivity, problem-solving skills, and social relationships in virtual environments.

Repeatability: This course may not be repeated for additional credits.

VMM 1112. Challenges of Virtual Media Management. 3 Credit Hours.

This course will review the major trends in virtual media management and will identify the challenges that are unique to virtual environments. This course will prepare students to view the broader landscape of media through a critical lens and to use a variety of tools to develop effective decision-making skills. Students will work collaboratively to create an in-depth analysis of one particular challenge and will generate recommendations based on research.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in VMM 1111.

VMM 3112. Experiential Learning in Virtual Media Management. 3 Credit Hours.

This course provides a structure for you to learn by doing in environments or organizations that make use of virtual media to accomplish their work and their goals. The work that you undertake in this experiential learning course can involve an internship, community service learning, or other capstone experience. The course provides you with the opportunity to reflect critically and analytically on culture and communication in virtual spaces and apply what you have learned to your own academic, professional, and personal goals.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in VMM 1111 and VMM 1112.

VMM 3890. Special Topics in Virtual Media Management. 3 Credit Hours.

Special topics course to cover subject matter not covered by regular courses offered in the major.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in VMM 1111 and VMM 1112.

VMM 4571. International Studies in Media and Communication. 3 Credit Hours.

This course is an immersive study of media and communication institutions, practices, norms, societal, governmental, and legal structures in a culture outside of the U.S. that is conducted during a Klein GO! program. Klein faculty lead students, while living abroad, in media consumption, in comparative analysis and evaluation of media and non-mediated communication, and in interaction with local media and communication leaders in the program location. The specific aspects of media and communication to be covered will vary from city to city, and semester to semester, depending on the events of the day. Available only to students participating in a Klein GO! Program.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in VMM 1111 and VMM 1112.

Visual Studies (VS)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

VS 1058. Visual Studies 1: Interdisciplinary Studio Seminar 1. 3 Credit Hours.

This introductory studio seminar introduces students to the concept of art production from the basis of self-examination. This introductory seminar course instills an understanding of creating art as a response to their cultural upbringing, which questions experiences of gender, ethnicity, politics, culture, religion, aesthetic preferences, and socioeconomic status. First year seminar students are expected to develop the appropriate skills to connect to current tendencies and phenomena in the contemporary art world. Students attend visiting artist series lectures and do research on contemporary artists whose practice is centered on identity. Seminar readings include topics addressing theories of post-identity, class, culture, sexuality and hyphenated identities. The primary focus of the class is on the production of an independent body of interdisciplinary studio artwork.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

VS 1151. Visual Studies 1 Foundation: Drawing. 3 Credit Hours.

An introductory black and white drawing course that emphasizes the development of perceptual, analytical, and structural drawing skills in responses to various problems. Issues of identity and its cultural, historic and aesthetic influence on art making and critical analysis will be explored through various drawing assignments, readings, and discussions. Students will work from life as well as imagination. Value, line, composition, space, and the manipulation of the different media will be among the topics covered. Field trips may be taken.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

VS 1351. Visual Studies 1 Foundation: 3D. 3 Credit Hours.

3D Design introduces the fundamentals of constructing and conceptualizing three-dimensional art forms by examining the theme of identity. The course emphasizes the utilization of a variety of basic materials and includes an intensive introduction to the woodshop.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

VS 1451. Visual Studies 1 Foundation: Composition and Color. 2 Credit Hours.

Students study the visual language of art, particularly the concepts and vocabulary in the elements and principles of visual language, stressing composition, color, and pattern. Through personal art-making and art-viewing, students will strengthen skills of perception, arrangement, spatial choices, knowledge of technical and scientific aspects of color, along with color's role in a cultural and linguistic context. This course offers opportunities to make and interpret art in a socially meaningful way, while investigating the visual decision-making process in constructing compositions.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

VS 1651. Visual Studies 1 Foundation: Digital Imaging. 3 Credit Hours.

This course introduces students to basic tools and ideas essential to digital art making. Students will learn technological skills as they bring them to bear to address questions of identity. The class will address the ways that virtual space and digital techniques change traditional notions of art and inform postmodern ideas of identity through discussions, readings, field trips, and, primarily, art making.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

VS 2001. VS Seminar: Identities. 3 Credit Hours.

This interdisciplinary studio seminar is oriented around the theme of personal identities. Art and visual culture are examined as creative responses to individuals' experiences of race, gender, ethnicity, politics, culture, religion, aesthetic preferences, and socioeconomic status. Given that art and visual culture do not just reflect already existing social identities, but help to form them over time, students will consider how their creative work might contribute to new social understandings of personal identities. The primary focus of the class is on the production of an independent body of studio artwork or visual culture that is informed by scholarly research. Students will engage in focused discussions, field trips, studio critiques, and one-on-one instruction with faculty.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (TYLE 1071 or 'Y' in CRTY01), (FDPR 1511 or 'Y' in CRFD01), (FDPR 1521 or 'Y' in CRFD05), and (FDPR 1531, FDPR 1532, 'Y' in CRFD03, or 'Y' in CRFD04)

VS 2002. VS Seminar: Narratives. 3 Credit Hours.

This interdisciplinary studio seminar is oriented around the theme of narratives. Art and visual culture are examined as individuals' constructions of narratives including mythological, biographical, autobiographical, communal, and fictional. The class explores ways of organizing narratives, including linearity, non-linearity and layering of disparate content in visual art or other modes of artistic expression and communication. Students may draw upon personal, sociological, cultural and/or imaginary history to construct artist books, time-based artwork, internet imaging or some other form of collected or multiple imagery and will research the work of relevant contemporary artists, writers, designers, and scholars. The primary focus of the class is on the production of an independent body of interdisciplinary studio artwork.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (TYLE 1071 or 'Y' in CRTY01), (FDPR 1511 or 'Y' in CRFD01), (FDPR 1521 or 'Y' in CRFD05), and (FDPR 1531, FDPR 1532, 'Y' in CRFD03, or 'Y' in CRFD04)

VS 2003. VS Seminar: Sites. 3 Credit Hours.

This interdisciplinary studio seminar is oriented around the theme of site and place. Students expand their individual studio practice through the exploration of site and place as a context for making and understanding art. This course includes ideas of public/private space, site-specificity, and geographical, institutional and discursive sites. Students will work to create interdisciplinary site based artworks or projects. Research includes the work of historical and contemporary artists who address diverse concepts of site and place. Writing, readings, exercises, critique and discussion inform and support their studio investigations. The seminar may include visits to site-specific artworks, public art organizations and/or talks by guest artists. The primary focus of the class is on the production of an independent body of interdisciplinary work that addresses site and place.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (TYLE 1071 or 'Y' in CRTY01), (FDPR 1511 or 'Y' in CRFD01), (FDPR 1521 or 'Y' in CRFD05), and (FDPR 1531, FDPR 1532, 'Y' in CRFD03, or 'Y' in CRFD04)

VS 2004. VS Seminar: Global Citizens. 3 Credit Hours.

This interdisciplinary studio seminar is oriented around the theme of global citizens. Art and visual culture are examined as creative responses to individuals' experiences of nation states, politics, law, the environment, exile, and language in 21st century life. Students are exposed to learning how to situate themselves in a global context, and how artwork can reflect empathy and commitment towards other people sharing the globe. The seminar may include visits to galleries and museums, non-profit institutions and organizations, and/or talks by guest speakers. The primary focus of the class is on the production of an independent body of interdisciplinary work that addresses global citizenry.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (TYLE 1071 or 'Y' in CRTY01), (FDPR 1511 or 'Y' in CRFD01), (FDPR 1521 or 'Y' in CRFD05), and (FDPR 1531, FDPR 1532, 'Y' in CRFD03, or 'Y' in CRFD04)

VS 2058. Visual Studies 2: Interdisciplinary Studio Seminar 2. 3 Credit Hours.

Students continue their development of individual studio practice by investigating ideas of story/history. The class explores ways of organizing narratives, including linearity, non-linearity and layering of disparate content in visual art or other modes of artistic expression and communication. Students may draw upon personal, sociological, cultural and/or imaginary history to construct artist books, time-based artwork, internet imaging or some other form of collected or multiple imagery. Students research the work of contemporary artists who deal with creative non-fiction, fiction, myth, etc. from the autobiographical to the communal. The primary focus of the class is on the production of an independent body of interdisciplinary studio artwork.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in VS 1058 (may be taken concurrently), VS 1151 (may be taken concurrently), VS 1351 (may be taken concurrently), and VS 1651 (may be taken concurrently)

VS 2152. Visual Studies 2 Concept Studio: Drawing. 3 Credit Hours.

An intermediate level drawing course continuing the development begun in the introductory level drawing course. Models and still life are among the subjects considered although not exclusively. A variety of dry and wet media are used with an emphasis on the student finding her own voice through various drawing problems. Topics covered include color, composition, and space as well as the manipulation of the media. Emphasis is on exploring and developing narrative themes through readings, discussions, and various studio assignments. Field trips may be taken.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in VS 1058 (may be taken concurrently), VS 1151, VS 1351 (may be taken concurrently), and VS 1651 (may be taken concurrently)

VS 2252. Visual Studies 2 Concept Studio: Painting. 3 Credit Hours.

An introductory level painting course that emphasizes the development of objective and subjective responses to a variety of studio problems. Students work from life and imagination. Among the concepts covered in the course are color theory, color and light, composition, the creation of space, and the manipulation of the medium. The theme of narrative is explored through various studio problems, readings, and discussions. Field trips may be taken.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in VS 1058 (may be taken concurrently), VS 1151, VS 1351 (may be taken concurrently), and VS 1651 (may be taken concurrently)

VS 2352. Visual Studies 2 Concept Studio: 3D Structures. 3 Credit Hours.

This 3D Structures class builds on the principles taught in the 3D Foundations course to provide more in depth exploration of three-dimensional art in contemporary practice by investigating the element of space. An expanded palette of materials, construction techniques, design principles and aesthetic concepts is utilized. Studio projects are supplemented by readings, lectures and field trips. Installation is introduced as a presentation medium. The development of a personal body of work is evaluated through peer critique.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in VS 1058 (may be taken concurrently), VS 1151 (may be taken concurrently), VS 1351, and VS 1651 (may be taken concurrently)

VS 2452. Visual Studies 2 Studio: Making Democracy: Visual Tactics. 3 Credit Hours.

This studio-based course explores art-making practices in relation to the histories of political and socially engaged movements of the 19th, 20th and 21st centuries, with the aim of fostering political engagement through creative practice. Students will be exposed to and taught historic and contemporary techniques of socially engaged art making such as printmaking, banner and sign making, pamphleteering, puppetry, performance, and historical reenactment. These techniques, in conjunction with reading primary historical texts and contemporary theory, writing, and conducting archival research, will serve as the foundation for the development of a research-based practice that generates new socially engaged artworks. The latter will culminate in a focused research project that students will present to each other at the end of the semester.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in VS 1058, VS 1151, VS 1351, and VS 1651.

VS 2552. Visual Studies 2 Concept Studio: Print Imaging. 3 Credit Hours.

Print Imaging (Focus: Screen Printing) introduces a broad range of historic and contemporary concepts and technologies and encourages a multi-disciplinary approach to fine art printmaking. Studio projects, supplemented by readings, lectures and field trips, focus upon the printed image and the impact it has upon the development of story/history: personal, political, social and cultural thought and communication. Initial projects are very structured and involve the more traditional concepts, skills and processes. As students become more comfortable with the fundamentals of the medium, they are encouraged to develop a more personal approach to concept, subject, scale, material and process.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

VS 2652. Visual Studies 2 Concept Studio: Digital Imaging. 3 Credit Hours.

This course focuses on the use of the computer as a tool with which to create and explore the uses of narrative in art. Students develop technological competency as they create artworks that examine the structures of narrative. Readings, lectures and field trips augment the development of a sense of personal, social and art historical narrative. Students work in time based and non-time based media to create artwork that investigates their own artistic relationship to narrative.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in VS 1058 (may be taken concurrently), VS 1151 (may be taken concurrently), VS 1351 (may be taken concurrently), and VS 1651.

VS 2852. Visual Studies 2 Concept Studio: Photo Imaging / Digital. 3 Credit Hours.

An introduction to the basic principles of digital photography, including shooting with a digital camera, manipulating images within the computer, toning and printing with inkjet printers. Various types of alternative cameras and unorthodox digital processing methods are explored to expand the range of expression. The course focuses on monochromatic photography, including duotones, as a fine art medium. Emphasis is placed on technical expertise, creative development, an understanding of the potential of imaging software and the development of the subjective use of story/history based on a clear understanding of personal identity. The effect of image on audience is evaluated through peer critique.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in VS 1058 (may be taken concurrently), VS 1151 (may be taken concurrently), VS 1351 (may be taken concurrently), and VS 1651.

VS 2862. Visual Studies 2 Concept Studio: Photo Imaging / Darkroom. 3 Credit Hours.

An introduction to the basic principles of darkroom photography, including shooting with a film camera, developing film in the darkroom, and printing on silver gelatin paper. This course then goes beyond the usual photography course to introduce the use of various types of alternative cameras, unorthodox chemical processing methods and the use of different types of materials to expand the range of expression. The course focuses on black & white photography as a fine art medium. Emphasis is placed on technical expertise, creative development, and the subjective use of story/history based on a clear understanding of personal identity. The effect of image on audience is evaluated through peer critique.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in VS 1058 (may be taken concurrently), VS 1151 (may be taken concurrently), VS 1351 (may be taken concurrently), and VS 1651.

VS 3058. Visual Studies 3 Interdisciplinary Studio Seminar 3. 3 Credit Hours.

Students expand their individual studio practice through the exploration of site and place as a context for making and understanding art. This course includes ideas of interior/exterior space, natural, constructed and virtual environments. Students will also work to create interdisciplinary site based installations. Research includes the work of historical and contemporary artists who address diverse concepts of site and place. Writing, readings, exercises, critique and discussion inform and support their studio investigations. The seminar may include visits to site-specific artworks, public art organizations and/or talks by guest artists. The primary focus of the class is on the production of an independent body of interdisciplinary work that addresses site and place.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Visual Studies.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in VS 1058, VS 1151, VS 1351, VS 1651, and VS 2058 (may be taken concurrently)

VS 3100. Visual Studies 3 Studio: Special Topics. 3 Credit Hours.

This studio-based course explores a special topic or theme deemed especially relevant to contemporary visual culture. Material techniques and Tyler studio facilities that relate to the topic will be taught and utilized.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in VS 1058, VS 1151, VS 1351, VS 1651, and VS 2058.

VS 3253. Visual Studies 3 Concept Studio: Hybrid Painting. 3 Credit Hours.

An intermediate level painting course that builds on the conceptual and technical skills learned in Art 2252. An expanded palette of materials and techniques are utilized. This course considers the painting studio and the painting canvas as a laboratory space and metaphorical territory. It investigates notions of border, home, landscape, ecology, etc. Studio projects explore these themes in figurative and abstract modes, and are supplemented by lectures and research into artists who share these concerns in content and form. Students are encouraged to develop their own voice through a variety of painting problems. The theme of narrative is explored through readings, discussions, and a variety of studio assignments. Field trips may be taken.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in VS 1058, VS 1151, VS 1351, VS 1651, VS 2058 (may be taken concurrently), and VS 2252 (may be taken concurrently)

VS 3553. Visual Studies 3 Concept Studio: Hybrid Print Imaging. 3 Credit Hours.

Students continue to develop personal approaches to the concepts, materials, and processes of traditional and digital fine art printmaking. Studio projects, supplemented by readings, lectures and field trips, focus upon the print medium as a multidisciplinary means of creative expression and communication. Special emphasis will be placed upon printed images as unique, large-scale multiples in site-specific installations.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in VS 1058, (VS 1151 or FDPR 1511), (VS 1351, FDPR 1531, or FDPR 1532), (VS 1651 or ARTU 2601), and VS 2058 (may be taken concurrently)

VS 3653. Visual Studies 3 Concept Studio: Hybrid Digital Imaging. 3 Credit Hours.

The theme of site/place is explored in relation to technology. This class explores ideas of virtual sites, the relationship between digital images and real sites, and how technology and media produce and interact with non-virtual sites. Students gain technological competencies in relation to readings, lectures and field trips that explore site/place as a theme.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in VS 1058, (VS 1151 or FDPR 1511), (VS 1351, FDPR 1531, or FDPR 1532), (VS 1651 or ARTU 2601), and VS 2058 (may be taken concurrently)

VS 3863. Visual Studies 3 Concept Studio: Hybrid Photo Imaging/Darkroom. 3 Credit Hours.

This course introduces students to numerous aesthetics and techniques that are both traditional and non-traditional to create images that break the boundaries of traditional Darkroom Photography. The course begins with demonstrations in basic darkroom techniques and expands into extended developing, processing and printing techniques. The course then introduces processes that utilize techniques from the worlds of Painting, Printmaking, Fibers and 3D to make hybridized photo art pieces. The results can be original prints or 'photo objects' on surfaces other than paper, but still all made with film and chemicals. The development of a personal aesthetic is pursued through the use of sophisticated shooting, processing and printing techniques, supported by professional level presentation. Research into conceptual means of working is employed to consider the context of the image as related to site/place. The effect of image on audience is evaluated through peer critique.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in VS 1058, (VS 1151 or FDPR 1511), (VS 1351, FDPR 1531, or FDPR 1532), and (VS 1651 or ARTU 2601)

VS 4096. Visual Studies Thesis Seminar. 3 Credit Hours.

This course facilitates senior Visual Studies students' completion of original research and study towards the development of a qualifying practice-based project or written paper. Completing an undergraduate thesis helps students hone their creative vision and more clearly articulate their academic and studio interests, which ultimately makes them more competitive for further academic study and careers in diverse arts professions. Through regular meetings with faculty and peers, students will learn how to develop the language and writing skills needed to discuss, strengthen, and promote their creative and scholarly pursuits. Students work closely with the course instructor, another faculty advisor, and fellow students to complete a written proposal, a bibliography, and a final written or project-based work that is ready for public presentation.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in VS 1071, (VS 1651 or 'Y' in CRVS03), (VS 2001 (may be taken concurrently) or 'Y' in CRVS01), (VS 2002 (may be taken concurrently) or 'Y' in CRVS04), (VS 2003 (may be taken concurrently) or 'Y' in CRVS02), VS 2004 (may be taken concurrently), (FDPR 1511, FDPR 1512, 'Y' in CRFD01, or 'Y' in CRFD02), (FDPR 1531, FDPR 1532, 'Y' in CRFD03, or 'Y' in CRFD04), and (FDPR 1521 or 'Y' in CRFD05)

VS 4098. Visual Studies 4 Interdisciplinary Studio Seminar 4. 3 Credit Hours.

The purpose of this writing intensive studio course is to help students begin the process of translating the themes of the Visual Studies curriculum (Identity, Stories, Site/Place) into work that reflects a personal voice and vision, and to familiarize students with the ways that writing is used in fine arts and visual culture. This class brings together students working across all media. You will be responsible for your own research, and for finding a place to create the work. While pursuing studio projects you will also be completing writing assignments. The writing projects are designed to make you aware of different approaches to writing in the visual arts. You will create a proposal for your studio projects and a research paper. The challenge to writing about art is to clearly define the artist's choices, techniques, medium and personal vision. You are translating the visual into language. Details are a critical part of the descriptive process, using the vocabulary of the discipline of art making. Clarity, organization and a command of grammar and style will be key to creating a successful research paper.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Visual Studies.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in VS 1058, VS 1151, VS 1351, VS 1651, VS 2058, and VS 3058 (may be taken concurrently)

VS 4485. Field Internship. 1 to 3 Credit Hour.

This course offers experiential learning and hands-on training relevant to the student's course of study.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C- in VS 1058, VS 1151, VS 1351, VS 1651, and VS 2058.

VS 4511. Curatorial Lab. 3 Credit Hours.

This class provides students with hands-on experience curating an exhibition as a team, from initial idea to final installation. We will explore traditional museums and other kinds of exhibition spaces from small galleries to artist-run coops. Visits and conversations with local curators and museum professionals in Philadelphia will offer some practical insights into the challenges of creating exhibitions within a complex institution. Philadelphia's robust contemporary art community and its rich historical landscape provide opportunities to explore and reflect on a variety of curatorial practices in different contexts. Although this course focuses on contemporary work, we will learn about the goals and techniques of museum and gallery displays in centuries past in order to place current strategies in context.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College, Theater, Film & Media Arts, Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

VS 4554. Visual Studies 4 Concept Studio: Interdisciplinary Print Imaging. 3 Credit Hours.

Advanced Printmaking students approach contemporary printmaking as a vital, interdisciplinary art form that maintains its important traditions and incorporates new technological methods, such as photographic and digital imaging, for producing, translating and disseminating visual information to a broadly diverse, global audience. Emphasis is on creative growth, individual instruction and the preparation of analog and digital print portfolios. Intermediate-level printmaking experience is required and basic computer imaging experience is recommended.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in VS 1058, VS 1151, VS 1351, VS 1651, VS 2058, and VS 3553.

VS 4654. Visual Studies 4 Concept Studio: Interdisciplinary Digital Imaging. 3 Credit Hours.

An upper-level class that deals with the relationships between digital and non-digital art materials. Students make work that approaches ideas of translation in terms of materials, as well as discussing ideas of translating ideas to an audience, notions of originality in the digital realm, and art as a medium for communication. Digital images will be integrated with other media to create interdisciplinary work.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies.

Class Restrictions: May not be enrolled in one of the following Classes: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits.

College Restrictions: Must be enrolled in one of the following Colleges: Art Architecture, Tyler School.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in VS 1058, VS 1151, VS 1351, VS 1651, VS 2058, and VS 3653.

VS 4754. Visual Studies 4 Interdisciplinary Moving Image. 3 Credit Hours.

This course provides an introduction to basic principles of digital animation and onscreen interactivity for artists. Students will experiment with traditional and nontraditional digital animation techniques and learn to use interactivity to broaden and articulate their relationships with viewers. The course will build upon digital techniques taught in "Visual Studies 1 Foundation: Digital Imaging" as well as on each student's interests in terms of content and studio techniques. We will explore ideas of translation in terms of virtual and fictional space.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in VS 1058, VS 1151, VS 1351, and VS 1651.

Academic Calendar

The Temple University Academic Calendar is maintained by the Office of the University Registrar.

Fall 2023

Wednesday, August 9 - Sunday, August 27	Early Term Start (ETS) Courses
Monday, August 28	Full Term 16-week Courses (1) and 7-week Courses (7A) begin
Monday, September 4	Labor Day (no classes held)
Tuesday, September 5	Last day to add or <u>drop</u> a 7-week (7A) course
Monday, September 11	Last day to add or <u>drop</u> a Full Term 16-week (1) course
Monday, October 2	Undergraduate midterm progress ratings for Full Term 16-week Courses (1) begin
Monday, October 9	Last day to <u>withdraw</u> from a 7-week (7A) course
Friday, October 13	Fall Wellness Day (no classes held)
Monday, October 16	7-week Courses (7A) end; Undergraduate midterm progress ratings for Full Term 16-week Courses (1) end
Tuesday, October 17	7-week Courses (7B) begin
Thursday, October 19 at 11:59 p.m. (ET)	Final grading for 7-week Courses (7A) ends
Monday, October 23	Last day to add or <u>drop</u> a 7-week (7B) course
Monday, October 30	Priority registration for Spring 2024 begins
Monday, November 20 - Wednesday, November 22	Fall Break (no classes held)
Thursday, November 23 - Sunday, November 26	Thanksgiving holiday (no classes held)
Monday, December 4	Last day to <u>withdraw</u> from a 7-week (7B) course
Monday, December 11	Full Term 16-week Courses (1), 7-week Courses (7B), and Short Duration Courses (SDC) end; Last day to <u>withdraw</u> from a Full Term 16-week course
Tuesday, December 12	Study Day (no exams held)
Wednesday, December 13 - Friday, December 15	Days 1-3 of Final Exams for Full Term 16-week Courses (1)
Thursday, December 14 at 11:59 p.m. (ET)	Final grading for 7-week Courses (7B) and Short Duration Courses (SDC) ends
Saturday, December 16 - Sunday, December 17	Study Days (no exams held)
Monday, December 18 - Tuesday, December 19	Days 4 & 5 of Final Exams for Full Term 16-week Courses (1)
Wednesday, December 20	Diploma date (effective)
Friday, December 22 at 11:59 p.m. (ET)	Final grading for Full Term 16-week Courses (1) ends

Dates may be subject to change. Updated on September 14, 2023.

Spring 2024

Wednesday, December 20 - Sunday, January 14	Early Term Start (ETS) Courses
Monday, January 15	Dr. Martin Luther King, Jr. Day (no classes held)
Tuesday, January 16	Full Term 16-week Courses (1) and 7-week Courses (7A) begin
Monday, January 22	Last day to add or <u>drop</u> a 7-week (7A) course
Monday, January 29	Last day to add or <u>drop</u> a Full Term 16-week (1) course
Monday, February 19	Undergraduate midterm progress ratings for Full Term 16-week Courses (1) begin
Monday, March 4	Last day to <u>withdraw</u> from a 7-week (7A) course
Monday, March 4 - Sunday, March 10	Spring Break (no classes held)
Monday, March 11	7-week Courses (7A) end; Undergraduate midterm progress ratings for Full Term 16-week Courses (1) end
Tuesday, March 12	7-week Courses (7B) begin
Thursday, March 14 at 11:59 p.m. (ET)	<u>Final grading for 7-week Courses (7A)</u> ends
Monday, March 18	Last day to add or <u>drop</u> a 7-week (7B) course
Monday, March 25	Priority registration for Summer 2024 begins
Monday, April 1	Priority registration for Fall 2024 begins
Monday, April 22	Last day to <u>withdraw</u> from a 7-week (7B) course
Monday, April 29	Full Term 16-week Courses (1), 7-week Courses (7B), and Short Duration Courses (SDC) end; Last day to <u>withdraw</u> from a Full Term 16-week (1) course
Tuesday, April 30	Study Day (no exams held)
Wednesday, May 1 - Friday, May 3	Days 1-3 of Final Exams for Full Term 16-week Courses (1)
Thursday, May 2 at 11:59 p.m. (ET)	<u>Final grading for 7-week Courses (7B) and Short Duration Courses (SDC)</u> ends
Saturday, May 4 - Sunday, May 5	Study Days (no exams held)
Monday, May 6 - Tuesday, May 7	Days 4 & 5 of Final Exams for Full Term 16-week Courses (1)
Wednesday, May 8	<u>University Commencement</u> and <u>Diploma date</u> (effective)
Friday, May 10 at 11:59 p.m. (ET)	<u>Final grading for Full Term 16-week Courses (1)</u> ends

Dates may be subject to change. Updated on September 14, 2023.

Summer I 2024

Monday, May 13	Full Term 6-week Courses (1), 4-week Courses (4A), 12-week Courses (12A), and Short Duration Courses (SDC) begin
Thursday, May 16	Last day to add or drop a 4-week (4A) course
Friday, May 17	Last day to add or drop a Full Term 6-week (1) course
Wednesday, May 22	Last day to add or drop a 12-week (12A) course
Monday, May 27	Memorial Day (no classes held)
Monday, June 3	Last day to withdraw from a 4-week (4A) course
Monday, June 10	4-week Courses (4A) end
Thursday, June 13	4-week Courses (4B) begin
Thursday, June 13 at 11:59 p.m. (ET)	Final grading for 4-week Courses (4A) ends
Friday, June 14	Last day to add or drop a 4-week (4B) course
Monday, June 17	Last day to withdraw from a Full Term 6-week (1) course
Wednesday, June 19	Juneteenth (no classes held -- students in the schools of Dentistry, Pharmacy, Medicine, Law, and Podiatric Medicine should consult their respective school calendars regarding classes and clinical activity)
Monday, June 24	Full Term 6-week Courses (1) end
Tuesday, June 25	Diploma date (effective; Summer I Full Term Courses only)
Thursday, June 27 at 11:59 p.m. (ET)	Final grading for Full Term 6-week Courses (1) ends
Thursday, July 4	Independence Day (no classes held)
Friday, July 5	Last day to withdraw from a 4-week (4B) course
Thursday, July 11	4-week Courses (4B) end
Sunday, July 14 at 11:59 p.m. (ET)	Final grading for 4-week Courses (4B) ends
Thursday, August 1	Last day to withdraw from a 12-week (12A) course
Thursday, August 8	12-week Courses (12A) and Short Duration Courses (SDC) end
Sunday, August 11 at 11:59 p.m. (ET)	Final grading for 12-week Courses (12A) and Short Duration Courses (SDC) ends

Dates may be subject to change. Updated on September 14, 2023.

Summer II 2024

Thursday, June 27	Full Term 6-week Courses (1) and Short Duration Courses (SDC) begin
Monday, July 1	Last day to add or drop a Full Term 6-week (1) course
Thursday, July 4	Independence Day (no classes held)
Friday, July 12	4-week Courses (4A) begin
Monday, July 15	Last day to add or drop a 4-week (4A) course
Thursday, August 1	Last day to withdraw from a Full Term 6-week (1) or 4-week (4A) course
Thursday, August 8	Full Term 6-week Courses (1), 4-week Courses (4A), and Short Duration Courses (SDC) end
Friday, August 9	Diploma date (effective; Summer II and Summer I 4B and 12A)
Sunday, August 11 at 11:59 p.m. (ET)	Final grading for Full Term 6-week Courses (1), 4-week Courses (4A), and Short Duration Courses (SDC) ends

Dates may be subject to change. Updated on September 14, 2023.

Academic Programs List

Temple University's Board of Trustees meets regularly to consider recommendations to establish, terminate or change academic programs. To see the full list of academic programs by school and college, including programs that have been terminated, please read Temple's Policy on Establishing, Restructuring and Terminating Academic Programs.

The following Academic Programs Chart lists Temple University's active degrees, majors, minors and certificates alphabetically, along with the school or college that grants each degree, major, minor and certificate.

Students should be aware that, while all programs cannot be completed on all campuses, courses in many programs are offered on multiple campuses. To learn what specific courses are offered on which campuses in a given semester, refer to the Class Schedule.

Major	A cohesive combination of courses including introductory, intermediate, and advanced coursework that designates a student's primary area of study. Academic programs may include required or optional concentrations. An undergraduate major is typically 36-76 credit hours of the total degree. Majors are designated on university transcripts when the degree is awarded.
Minor	A designated combination of courses in a discipline or area of study. Like the major, it is expected to have coherence and increasing sophistication. A minor is typically 18-24 credit hours (or approximately half of the major) and is outside of, but may complement, the discipline of a student's major. A school/college can determine if a minor is restricted to students in specific schools, colleges or majors and can include rules as to how certain courses can be used to meet requirements. Minors are designated on university transcripts when the degree is awarded.
Concentration	A coordinated grouping of courses, typically 18-24 credits in an undergraduate program of study and 6-12 credits in a graduate program, representing a sub-specialization or emphasis within a major field available for students majoring in that discipline. Concentrations may be offered at the undergraduate, graduate, or professional level and can be required or optional. Concentrations are designated on university transcripts when the degree is awarded.
Certificate	A designated combination of courses in an area of study, typically requiring 9-15 credits. A certificate is outside of, but may complement, the discipline of a student's major. It may also be offered to non-degree seeking students. Certificates can be established at the undergraduate, graduate or professional level. A school/college can determine if a certificate is restricted to students in specific schools, colleges or majors and can include rules as to how certain courses can be used to meet requirements. For matriculated undergraduates, a certificate is designated on university transcripts when the degree is awarded. For graduate students, a certificate may be conferred upon completion and prior to degree conferral. For nonmatriculated students, the certificate is designated on university transcripts and conferred upon completion.

Academic Programs Chart: Degrees, Majors, Minors, Certificates

Asterisks (*) and carets (^) denote multiple option areas (emphasis/concentration) within a program.

Degree Programs (emphasis)	Undergraduate	Graduate	Professional	School/College
Accomplished Teaching		MSEd		ED
Accountancy		MAcc		BU
Accounting	BBA (p. 807), Minor (p. 816)			BU
Accounting (Data Analytics)	BBA (p. 812)			BU
Accounting and Financial Management		MS		BU
Acting	Cert. (p. 489)			CA
Actuarial Science	BBA (p. 817)	MS		BU
Adult and Organizational Development	BA (p. 565), Minor (p. 569)			ED
Advanced Biotherapeutics: Manufacturing and Regulatory Affairs		MS		PH
Advanced Core Science Studies	Postbacc. Cert. (p. 1448)			ST
Advanced Education in General Dentistry			Cert.	DN
Advanced Manufacturing and Robotics		Cert.		EN

Advanced Regulatory Affairs and Quality Assurance		Post-Master's Cert.	PH
Advertising (Account Management, International Communication*)	BA (p. 1189), Conc.* (p. 1193)		CO
Advertising (Art Direction, International Communication*)	BA (p. 1196), Conc.* (p. 1200)		CO
Advertising (Brand Strategy and Research, International Communication*)	BA (p. 1204), Conc.* (p. 1208)		CO
Advertising (Copywriting, International Communication*)	BA (p. 1212), Conc.* (p. 1216)		CO
Advertising (Media Planning, International Communication*)	BA (p. 1219), Conc.* (p. 1223)		CO
Advocacy and Organizational Development		MEd	ED
Africology and African American Studies	BA (p. 959), Minor (p. 963)	MA, PhD	LA
American Legal Studies (TU Japan)		Cert.	LW
American Sign Language	Cert. (p. 1360)		HP
American Studies	BA (p. 963), Minor (p. 967)		LA
American and International Law		LLM	LW
American and International Law - China		LLM	LW
Ancient Mediterranean Studies	Minor (p. 969)		LA
Anthropology	BA (p. 970), Minor (p. 973)	MA (not currently accepting applications), PhD (not currently accepting applications)	LA
Applied Behavior Analysis	Cert. (p. 569)	MSEd, Cert.	ED
Applied Biostatistics		MPH	HP
Applied Epidemiology	Minor (p. 1361)		HP
Applied Mathematics	BS (p. 1449)		ST
Applied Physical Activity and Health Promotion		MS (not currently accepting applications)	HP
Applied Research and Evaluation		PSM	ED
Applied Sociology		PSM (not currently accepting applications)	LA
Arabic	Cert. (p. 974), Minor (p. 975)		LA
Architecture (Advanced Technologies and Design*, Health and Design*, Urban Ecologies and Design*)	BSArch (p. 117)	MArch, MS*	TA
Art	BA (active in Japan) (p. 122), Minor (p. 136)		TA
Art Education	BSEd (p. 125)	MEd	TA
Art History	BA (p. 130), Minor (p. 135)	MA, PhD	TA
Art Therapy	BA (p. 137)		TA
Asian Business and Society	Cert. (p. 975)		LA

Asian Law		LLM	LW
Asian Studies	BA (p. 976), Minor (p. 980)		LA
Astrophysics	Cert. (p. 1454), Minor (p. 1455)		ST
Athletic Training		MSAT, DAT	HP
Audio and Live Entertainment	BA (p. 1227)		CO
Autism Endorsement		Cert.	ED
Basic Core Science Studies	Postbacc. Cert. (p. 1455)		ST
Basic Pharmaceutical Development		Cert.	PH
Biochemistry	BS (p. 1457)		ST
Bioengineering		MSBioe, PhD	EN
Bioengineering (Cellular Engineering)	BSBioe (p. 657)		EN
Bioengineering (Engineering Devices)	BSBioe (p. 663)		EN
Bioengineering (Pre-Health)	BSBioe (p. 668)		EN
Bioinformatics		PhD, Cert.	ST
Bioinformatics and Biological Data Science (Bioinformatics, Biological Data Science)		PSM	ST
Bioinnovation		PSM, Cert.	ST
Biologics and Biosimilars Manufacturing		Cert., Post-Master's Cert.	PH
Biologics and Biosimilars: Regulatory Aspects		Cert., Post-Master's Cert.	PH
Biology	BA (p. 1465), BS (p. 1471), Minor (p. 1476)	MA, MS, PhD	ST
Biology with Teaching	BS (p. 1478)		ST
Biology/Neuroscience		PhD	ST
Biomedical Anthropology	Minor (p. 981)		LA
Biomedical Sciences (Cancer Biology and Genetics*, General Biomedical Sciences^, Infectious Disease and Immunity*, Molecular and Cellular Biosciences*, Neuroscience*, Organ Systems and Translational Medicine*)		MS (thesis)*, MS (non-thesis)^, PhD*	ME
Biopharmaceutical Manufacturing and Regulatory Affairs		Cert., Post-Master's Cert.	PH
Biophysics	BS (p. 1484)		ST
Biotechnology		PSM, Cert.	ST
Business	Minor (p. 826)		BU

Business Administration (Business Analytics [STEM]*, Finance [STEM]*, Health Sector Management*, Human Resource Management*, Information Systems and Digital Innovation*, Information Technology Management [STEM]*, Innovation Management and Entrepreneurship*, Marketing Management*, Sport Business*, Strategic Management*		MBA*, Cert. (not currently open for enrollment)	BU
Business Administration Executive Program		MBA, DBA	BU
Business Administration/ Accounting		PhD	BU
Business Administration/ Entrepreneurship		PhD (not currently accepting applications)	BU
Business Administration/ Finance		PhD	BU
Business Administration/ Human Resource Management and Organizational Behavior		PhD	BU
Business Administration/ Interdisciplinary Study		PhD (not currently accepting applications)	BU
Business Administration/ International Business Administration		PhD	BU
Business Administration/ Management Information Systems		PhD	BU
Business Administration/ Marketing		PhD	BU
Business Administration/ Operations and Supply Chain Management		PhD	BU
Business Administration/Risk Management and Insurance		PhD	BU
Business Administration/ Strategic Management		PhD	BU
Business Administration/ Tourism and Sport		PhD	BU
Business Analytics	Minor (p. 821)	MS*, Cert.	BU
Business Basics	Cert. (p. 822)		BU
Business Economics		MA (applications to first be accepted for Fall 2025 admission)	LA
Business Law		Juris Doctor Cert.	LW
Business Management	BBA (p. 822)		BU
Business Plus	Cert. (p. 827)		BU
Business Research		MS	BU
Career and Technical Education	BSEd (p. 570)	MEd, MEd	ED

Career and Technical Education/Business, Computer and Information Technology Education	BSEd (p. 574)		ED
Career and Technical Education/K-12		Cert. (not currently open for enrollment)	ED
Career and Technical Education/Marketing Education	BSEd (p. 578)		ED
Ceramics (Art Education*)	BFA (p. 144), Conc.*	MFA	TA
Ceramics with Entrepreneurial Studies	BFA (p. 151)		TA
Chamber Music	Cert. (p. 333)		BC
Chemistry	BA (p. 1489), BS (p. 1494), BS/MS (5 year) (p. 1436), Minor (p. 1501)	MS, PhD	ST
Chemistry with Teaching	BS (p. 1503)		ST
Children's Media	Cert. (p. 1232)		CO
Chinese	BA (p. 982), Cert. (p. 985), Minor (p. 986)		LA
Choral Conducting		MM	BC
City and Regional Planning (Sustainable Community Planning*, Transportation Planning*)	Minor (p. 156)	MS*	TA
Civil Engineering	BSCE (p. 674)	MSCE, PhD	EN
Civil Engineering (Cooperative Education Program)	BSCE (p. 680)		EN
Civil Engineering (Environmental Engineering with Cooperative Education Program)	BSCE (p. 686)		EN
Civil Engineering (Environmental Engineering)	BSCE (p. 691)		EN
Classical Languages and Literature	Minor (p. 987)		LA
Classical Piano	Cert. (p. 334)		BC
Classical Voice	Cert. (p. 335)		BC
Classics (Classical Civilizations)	BA (p. 988)		LA
Classics (Classical Languages and Literature)	BA (p. 992)		LA
Clinical Health Services Research		Cert.	HP
Clinical Trial Management		Cert., Post-Master's Cert.	PH
Clinical and Health Psychology	Minor (p. 996)		LA
Cognitive Neuroscience	Minor (p. 996)		LA
Collaborative Piano and Chamber Music		MM	BC
Collaborative Piano and Opera Coaching		MM	BC
College Access and Success		Cert.	ED

Communication Management (Conflict Management and Dispute Resolution, Public Relations, Strategic Communication and Cross- Cultural Leadership)		MS	CO
Communication Sciences and Disorders		PhD	HP
Communication Studies	Minor (p. 1290)		CO
Communication Studies (Communication Studies Thesis, International Communication*)	BA (p. 1250), Conc.* (p. 1254)		CO
Communication Studies (Communication and Entrepreneurship, International Communication*)	BA (p. 1242), Conc.* (p. 1246)		CO
Communication Studies (Contemporary Media Environments, International Communication*)	BA (p. 1258), Conc.* (p. 1262)		CO
Communication Studies (Global Civil Society, International Communication*)	BA (p. 1266), Conc.* (p. 1270)		CO
Communication Studies (Policy, Regulation and Advocacy, International Communication*)	BA (p. 1274), Conc.* (p. 1278)		CO
Communication Studies (Production - active in Japan, International Communication*)	BA (p. 1282), Conc.* (p. 1286)		CO
Communication and Activism	Minor (p. 1234)		CO
Communication and Social Influence (International Communication*)	BA (p. 1235), Conc.* (p. 1238)		CO
Communication for Development and Social Change		MS	CO
Community Arts Practices	Cert. (not currently open for enrollment) (p. 157)	Cert. (not currently open for enrollment)	TA
Community Development	BS (p. 157), Minor (p. 162)		TA
Computational Data Science		MS	ST
Computer Science	BA (p. 1513), BS (p. 1518), Minor (p. 1523)	MS, Cert.	ST
Computer Science Instruction		Cert.	ST
Computer Science and Physics	BS (p. 1509)		ST
Computer Security and Digital Forensics	Cert. (p. 1524)		ST
Computer and Information Science (Artificial Intelligence and Applications, Computer and Network Systems, Information Systems, Software Systems)		PhD	ST

Computer and Systems Security		PSM (not currently accepting applications), Cert. (not currently open for enrollment)	EN
Conflict Management and Dispute Resolution		Cert.	CO
Conflict Process		Cert.	ED
Construction Engineering Technology	BSCET (p. 696)		EN
Construction Engineering Technology (Cooperative Education Program)	BSCET (p. 701)		EN
Content Creation	Minor (p. 1291)		CO
Corporate Compliance and Ethics		MS (not currently accepting applications)	BU
Corporate Compliance and Regulatory Policy	Minor (p. 828)		BU
Corporate Instructional Design		Cert. (not currently open for enrollment)	BU
Counseling Psychology (Mental Health Counseling*, School Counseling*)		MEd*, PhD (not currently accepting applications)	ED
Creative Entrepreneurship	Cert. (p. 164)		TA
Creative Writing	Minor (p. 998)	MFA	LA
Crime Science		Cert. (not currently open for enrollment)	LA
Criminal Justice	BA (p. 999), Minor (p. 1003)	MA, PhD	LA
Cultural Analytics		Cert.	CO
Cyber Defense and Information Assurance		PSM, Cert.	ST
Cybersecurity and Human Behavior	Cert. (p. 1004)		LA
Dance	BFA (p. 339), Minor (p. 345), Cert. (p. 344)	MA, MFA, PhD	BC
Data Science (Computation and Modeling)	BS (p. 1526)		ST
Data Science (Computational Analytics)	BS (p. 1530)		ST
Data Science (Genomics and Bioinformatics)	BS (p. 1535)		ST
Data Science: Computational Analytics	Cert. (p. 1540), Minor (p. 1541)		ST
Data-Driven Decision Making		Cert.	ED
Decision Neuroscience		MS (not open for direct admission), PhD	BU
Decision Neuroscience		MS (not open for direct admission), PhD	LA
Dental Public Health		Cert.	DN
Dentistry		DMD	DN
Dentistry/Advanced Standing Program for Internationally Trained Dentists		DMD	DN
Destination Management		Cert.	TH
Digital Marketing	Minor (p. 829)	MS	BU
Digital Media Engagement	Minor (p. 1291)		CO
Digital Media Technologies	Minor (p. 1796)		ST, CO
Disability Studies		Cert.	ED

Diversity Leadership in Higher Education		Cert.	ED
Diversity and Inclusion	Cert. (p. 581)		ED
Diversity, Equity and Inclusive Leadership in Organizations		Cert.	BU
Documentary Arts and Ethnographic Research		Cert.	CA
Documentary Arts and Visual Research		PhD	CA
Drug Development		Cert.	PH
Early Childhood Education		MEd	ED
Early Childhood Education and Special Education		MEd	ED
Early Childhood-Elementary Ed (PreK-4)	BSEd (p. 582)		ED
Early Childhood-Elementary Ed (PreK-4) (Special Education)	BSEd (p. 585)		ED
Earth and Space Science with Teaching	BS (p. 1544)		ST
Ecological Planning and Design	Minor (p. 165)		TA
Ecology, Evolution and Biodiversity	BS (p. 1549)		ST
Economics	BBA (p. 830), Minor (p. 834)		BU
Economics (Econometrics*, Health Economics*, International Economics*, Labor*, Quantitative Macroeconomics*)	BA (p. 1005), Minor (p. 1009)	MA* (not currently accepting applications), PhD (not currently accepting applications)	LA
Education	Minor (p. 589)		ED
Education/Applied Linguistics		PhD	ED
Education/Educational Psychology		PhD	ED
Education/Literacy and Learners		PhD	ED
Education/Science, Mathematics and Educational Technology		PhD	ED
Education/Special Education		PhD	ED
Educational Leadership (K-12*, Higher Education*)		MEd* (open only to students in Jamaica in collaboration with Church Teachers' College), EdD	ED
Educational Leadership and Policy		MEd	ED
Electrical Engineering	BSEE (p. 706)	MSEE, PhD	EN
Electrical Engineering (Bioelectrical Engineering with Cooperative Education Program)	BSEE (p. 711)		EN
Electrical Engineering (Bioelectrical Engineering)	BSEE (p. 716)		EN

Electrical Engineering (Computer Engineering with Cooperative Education Program)	BSEE (p. 721)		EN
Electrical Engineering (Computer Engineering)	BSEE (p. 726)		EN
Electrical Engineering (Cooperative Education Program)	BSEE (p. 731)		EN
Emergency and Sports Injury Management	Cert. (p. 1361)		HP
Employee Benefits Law		Cert.	LW
Endodontics		Cert.	DN
Engineering	BSE (p. 737)	MEng	EN
Engineering (Electromechanical Engineering)	BSE (p. 742)		EN
Engineering (Energy and Power Engineering)	BSE (p. 747)		EN
Engineering Management		MS, Cert.	EN
Engineering Project Management		Cert.	EN
Engineering Technology	BSET (p. 752)		EN
Engineering Technology (Cooperative Education Program)	BSET (p. 757)		EN
English	BA (p. 1010), Minor (p. 1014)	MA, PhD	LA
English Education/7-12		Cert. (not currently open for enrollment)	ED
English Language Teaching	Cert. (p. 589)	Cert.	ED
English as a Second Language	Cert.	Cert.	ED
Entertainment Industry Studies	Cert. (p. 490)		CA
Entrepreneurship and Innovation Management	BBA (p. 835), Minor (p. 842), Cert. (p. 840)		BU
Environmental Engineering	BSEnvE (p. 762), Minor (p. 766)	MSEnvE, PhD	EN
Environmental Geoscience		MS	ST
Environmental Health		MPH, MS (not currently accepting applications)	HP
Environmental Horticulture	Minor (p. 166)		TA
Environmental Professional Training	Cert. (p. 1556)		ST
Environmental Science (Applied Ecology)	BS (p. 1558)		ST
Environmental Science (Climate)	BS (p. 1564)		ST
Environmental Science (Environmental Geochemistry)	BS (p. 1569)		ST
Environmental Science (Hydrology)	BS (p. 1574)		ST
Environmental Studies	BA (p. 1014), Minor (p. 1020)		LA
Environmental Sustainability	Cert. (p. 167)		TA
Epidemiology		MPH, MS, PhD	HP

Esports	Cert. (p. 1758)		TH
Estate Planning		Cert.	LW
Ethics	Cert. (p. 1020)		LA
Event Management		Cert.	TH
Event and Entertainment Management	Cert. (p. 1763), Minor (p. 1764)		TH
Event and Entertainment Management (Live Entertainment*, Tourism and Hospitality Management*)	BS* (p. 1759)		TH
Exercise and Sport Science	BS (p. 1362)		HP
Facilities Management	BS (p. 169)		TA
Facilities Planning (Health Facilities)		MS	TA
Fibers and Material Studies with Entrepreneurial Studies	BFA (p. 174)		TA
Fibers and Materials Studies (Art Education*)	BFA (p. 179), Conc.*	MFA	TA
Film	Cert. (p. 525)		CA
Film and Media Arts (Cinematic Arts: Narrative and Documentary*, Media Arts*, Screenwriting*)	BA (p. 490)	MFA*	CA
Film and Media Arts (Cinematography)	BA (p. 495)		CA
Film and Media Arts (Directing)	BFA (p. 511)		CA
Film and Media Arts (Media Arts)	BFA (p. 517)		CA
Film and Media Arts (Post Production)	BA (p. 499)		CA
Film and Media Arts (Producing)	BA (p. 503)		CA
Film and Media Arts (Screen Studies)	BA (p. 507)		CA
Film and Media Arts (Screenwriting)	BFA (p. 521)		CA
Finance	BBA (p. 844), Minor (p. 849)	MS (open only to students affiliated with an international partner institution)	BU
Financial Analysis		MS	BU
Financial Analysis and Quantitative Risk Management		MS	BU
Financial Planning	BBA (p. 850)		BU
Food Regulatory Affairs and Quality Assurance		Cert., Post-Master's Cert.	PH
Forensic Chemistry		PSM, Cert.	ST
French	BA (p. 1021), Minor (p. 1025), Cert. (p. 1024)		LA
Fundamentals of Physics	Cert. (p. 1580)		ST
Fundamentals of Programming	Cert. (p. 1581)		ST
Gender, Sexuality and Women's Studies	BA (p. 1026), Minor (p. 1032), Cert. (p. 1032)		LA
General Business Studies	Minor (p. 853)		BU

General Program (active in Japan)	AA (p. 1033), BA (p. 1034)		LA
General Science and Technology with Teaching	BS (p. 1582)		ST
General Science with Teaching	BS (p. 1587)		ST
General Studies	BGS (p. 1779)		UC
Generic Drugs		Cert., Post-Master's Cert.	PH
Genomic Medicine (Pre-Medicine*)	BS (p. 1592), Conc.* (p. 1599), Cert. (p. 1605)		ST
Geographic Information Systems	Cert. (p. 1037)	PSM, Cert.	LA
Geography		MA, PhD	LA
Geography and Urban Studies	BA (p. 1038), Minor (p. 1043)		LA
Geography of Sports, Recreation and Tourism Planning	Cert.		LA
Geography of Tourism	Cert.		LA
Geology	BA (p. 1608), BS (p. 1612), Minor (p. 1618)	MS	ST
Geoscience		PhD	ST
Geospatial Data Science		PSM, Cert.	LA
German	Cert. (p. 1043)		LA
German Language and Cultural Studies	BA (p. 1044), Minor (p. 1048)		LA
Glass (Art Education*)	BFA (p. 186), Conc.*	MFA	TA
Glass with Entrepreneurial Studies	BFA (p. 194)		TA
Global Clinical and Pharmacovigilance Regulations		MS	PH
Global Communication and Media Arts	Minor (p. 1294)		CO
Global Finance		MS (not open for direct admission), DS (not currently accepting applications)	BU
Global Health	Minor (p. 1365)	Cert.	HP
Global Pharmacovigilance/Benefit-Risk Management		Cert., Post-Master's Cert.	PH
Global Studies (Global Cultures*, Global Economy*, Global Security*)	BA* (p. 1049), Minor (p. 1056)		LA
Global Tourism		Cert.	TH
Graphic and Interactive Design (Art Education*)	BFA (p. 198), Conc.*	MFA	TA
Graphic and Interactive Design with Entrepreneurial Studies	BFA (p. 208)		TA
Health Administration		MHA	BU
Health Facilities Planning		Cert.	TA
Health Informatics		MS, PhD, Cert.	HP
Health Information Management	BSHIM (p. 1366), Minor (p. 1370)		HP
Health Policy and Health Services Research		PhD	HP

Health Policy and Management	Minor (p. 1371)	MPH	HP
Health Professions	BS (p. 1372)		HP
Health Research	Cert. (p. 1059)		LA
Health Studies	BA (p. 1376)		HP
Healthcare Financial Management		MS (not currently accepting applications)	BU
Healthcare Innovation Management		Cert.	BU
Healthcare Management	Minor (p. 855)		BU
High-Performance Computing for Scientific Applications		PSM, Cert.	ST
Higher Education		MEd, EdD	ED
Hip Hop Dance and Culture	Minor (p. 346)		BC
Historic Preservation	BS (p. 214), Cert. (p. 219)		TA
History (Public History*)	BA (p. 1060), Minor (p. 1064)	MA*, PhD	LA
Horticultural Therapy	Cert. (p. 220)		TA
Horticulture	AS (p. 221), BS (p. 226)		TA
Hospitality Management		MS (not currently accepting applications)	TH
Human Development and Community Engagement (Applied Behavior Analysis*, Community Education*, Human Services*, Non-Profit Management and Social Entrepreneurship*)	BS* (p. 590), Minor (p. 594)		ED
Human Resource Management	BBA (p. 856)	MS, Cert.	BU
Industrial and Systems Engineering	BSISE (p. 767)		EN
Information Science and Technology	BA (p. 1619), BS (p. 1623), Minor (p. 1629)	MS, Cert.	ST
Information Technology Auditing and Cyber Security (Information Technology Auditing*, Cyber Security*)		MS*, Cert.	BU
Innovation Management and Entrepreneurship		MS, Cert.	BU
Institutional Effectiveness		Cert.	ED
Instructional Coaching Endorsement		Cert. (not currently open for enrollment)	ED
Instructional Learning Technology		Cert.	ED
Instrumental Conducting: Wind-Band Emphasis		MM	BC
Interdisciplinary German Studies	BA (p. 1065), Minor (p. 1068)		LA
Interdisciplinary Health Communication		Cert.	HP
Interdisciplinary Studies/ Liberal Arts	BA		LA
International Affairs (active in Japan)	BA (p. 1069)		LA
International Business (International Economics)	BBA (p. 863)		BU

International Business (International Entrepreneurship)	BBA (p. 867)		BU
International Business (International Finance)	BBA (p. 872)		BU
International Business (International Marketing)	BBA (p. 877)		BU
International Business (International Sales and Business Development)	BBA (p. 881)		BU
International Business (International Supply Chain Management Transportation and Logistics)	BBA (p. 885)		BU
International Business Administration	Minor (p. 861)		BU
International Business Studies (active in Japan)	BS (p. 1076)		LA
International Business and Compliance		Cert.	LW
International Communication	Minor (p. 1295)		CO
International Law (TU Japan)		Cert.	LW
Italian	BA (p. 1079), Minor (p. 1083), Cert. (p. 1083)		LA
Italian Studies	BA (p. 1084), Minor (p. 1087)		LA
Japanese	BA (active in Japan) (p. 1088), Minor (p. 1092), Cert. (p. 1092)		LA
Jazz Arranging	Cert. (p. 347)		BC
Jazz Improvisation	Cert. (p. 348)		BC
Jazz Piano	Cert. (p. 349)		BC
Jazz Studies (Bassoon, Cello, Clarinet, Double Bass, Euphonium, Flute, French Horn, Guitar, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice)		MM	BC
Jazz Studies Composition	Cert. (p. 350)		BC
Jazz Studies/Composition (Bassoon, Cello, Clarinet, Double Bass, Euphonium, Flute, French Horn, Guitar, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice)	BM (p. 351)		BC
Jazz Studies/Performance (Bassoon, Cello, Clarinet, Double Bass, Euphonium, Flute, French Horn, Guitar, Harp, Oboe, Percussion, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin)	BM (p. 358)		BC
Jazz Studies/Performance (Piano)	BM (p. 362)		BC

Jazz Studies/Performance (Voice)	BM (p. 366)		BC
Jazz Voice	Cert. (p. 370)		BC
Jewish Secular Studies	Cert. (p. 1093)		LA
Jewish Studies	BA (not currently accepting applications) (p. 1094), Minor (p. 1097)		LA
Journalism (International Communication*)	BA (p. 1299), Conc.* (p. 1306)	MJ	CO
Journalism, Society and Culture	Minor (p. 1309)		CO
Kinesiology	BS (p. 1379)		HP
Landscape Architecture (Horticulture*)	BS (p. 229), Conc.* (p. 233)	MLArch	TA
Landscape Plants	Cert. (p. 237)		TA
Landscape Studies	Minor (p. 238)		TA
Language and Cross-Cultural Communication	Cert. (p. 1099)		LA
Latin American Studies	BA (p. 1099), Minor (p. 1103), Cert. (p. 1103)		LA
Law		JD, SJD	LW
Leadership	Minor (p. 1310)		CO
Leadership and Military Science	Cert. (p. 595)		ED
Leadership in Instructional Technology for Higher Education		Cert.	ED
Legal Education		LLM (not currently open for enrollment)	LW
Legal Studies	BBA (p. 890), Minor (p. 893)		BU
Lesbian, Gay, Bisexual and Transgender Studies	Minor (p. 1104)		LA
Liberal Arts		MLA	LA
Liberal Studies	BA (p. 1105)		LA
Linguistics	Cert. (p. 1382)		HP
Management (TU Japan)		MiM	BU
Management Career	Cert. (p. 1110)		LA
Management Consulting		Cert. (not currently open for enrollment)	BU
Management Information Systems	BBA (p. 894), Minor (p. 899), Cert. (p. 898)	MS (not currently accepting applications)	BU
Marketing	BBA (p. 900), Minor (p. 904)		BU
Marketing Research and Analytics		MS (not currently accepting applications)	BU
Materials Science	BS (p. 1630)		ST
Maternal and Child Health		Cert.	HP
Mathematical Economics (CLA)	BA (p. 1112)		LA
Mathematical Economics (CST)	BA (p. 1635)		ST
Mathematics (Applied and Computational Mathematics*)	BA (p. 1661), BS (p. 1665), BA/MS (5 year) (p. 1441), BS/MS (5 year) (p. 1442), Minor (p. 1669)	MS*, PhD	ST
Mathematics Education/7-12		Cert. (not currently open for enrollment)	ED

Mathematics and Computer Science	BS (p. 1640)		ST
Mathematics and Computer Science with Teaching	BS (p. 1645)		ST
Mathematics and Physics	BS (p. 1650)		ST
Mathematics and Technology with Teaching	BS (p. 1654)		ST
Mathematics for Teaching		Cert.	ST
Mathematics with Teaching	BS (p. 1670)		ST
Mechanical Engineering	BSME (p. 772)	MSME, PhD	EN
Mechanical Engineering (Cooperative Education Program)	BSME (p. 779)		EN
Mechanical Engineering Technology	BSMET (p. 784)		EN
Media Arts	Cert. (p. 526)		CA
Media Studies and Production		MA	CO
Media Studies and Production (Media Analysis, International Communication*)	BA (p. 1311), Conc.* (p. 1316)		CO
Media Studies and Production (Media Business, International Communication*)	BA (p. 1320), Conc.* (p. 1325)		CO
Media Studies and Production (Media Production, International Communication*)	BA (p. 1329), Conc.* (p. 1334)		CO
Media and Communication		PhD	CO
MediaXarts: Cinema for New Technologies and Environments		MA	CA
Medical Device		Cert., Post-Master's Cert.	PH
Medicine		MD	ME
Medicine Combination		PhD/MD	ME
Metals/Jewelry/CAD-CAM (Art Education*)	BFA (p. 239), Conc.*	MFA	TA
Metals/Jewelry/CAD-CAM with Entrepreneurial Studies	BFA (p. 247)		TA
Middle Grades Education/4-8		Cert. (not currently open for enrollment)	ED
Middle Grades Education/ Language Arts	BSEd (p. 596)	MEd	ED
Middle Grades Education/ Mathematics	BSEd (p. 610)	MEd	ED
Middle Grades Education/ Mathematics and Language Arts	BSEd (p. 601)	MEd	ED
Middle Grades Education/ Mathematics and Science	BSEd (p. 605)	MEd	ED
Middle Grades Education/ Science	BSEd (p. 619)	MEd	ED
Middle Grades Education/ Science and Language Arts	BSEd (p. 614)	MEd	ED

Middle Grades Education/ Social Studies	BSEd (p. 624)	MEd	ED
Middle Grades Education/ Social Studies and Language Arts		MEd	ED
Middle Grades Education/ Social Studies and Mathematics		MEd	ED
Middle Grades Education/ Social Studies and Science		MEd	ED
Mobile Application Development	Cert. (p. 1676)		ST
Music (Composition*, Music Studies*, Music Theory*, Musicology*)	BS (p. 371), Minor (p. 424), Cert. (p. 374)	MA, MS, PhD*	BC
Music Composition	BM (p. 336), Cert. (p. 376)	MM	BC
Music Education (Bassoon*, Cello*, Clarinet*, Classical Guitar*, Double Bass*, Euphonium*, Flute*, French Horn*, Harp*, Harpsichord*, Oboe*, Percussion*, Piano*, Saxophone*, Trombone*, Trumpet*, Tuba*, Viola*, Violin*, Voice*)	BM* (p. 377)	MM, PhD	BC
Music Education/Jazz (Bassoon, Cello, Clarinet, Double Bass, Euphonium, Flute, French Horn, Guitar, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice)	BM (p. 395)		BC
Music History (Bassoon*, Cello*, Clarinet*, Classical Guitar*, Double Bass*, Euphonium*, Flute*, French Horn*, Harp*, Harpsichord*, Oboe*, Percussion*, Piano*, Saxophone*, Trombone*, Trumpet*, Tuba*, Viola*, Violin*, Voice*)	BM* (p. 417), Cert. (p. 423)	MM	BC
Music Performance (Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Harpsichord, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice)	BM (p. 450), Cert. (p. 425), Diploma		BC
Music Performance (Classical Guitar)	BM (p. 458)		BC
Music Performance (Harpsichord)	BM (p. 464)		BC
Music Performance (Piano)	BM (p. 467)		BC
Music Performance (Voice)	BM (p. 471)		BC
Music Performance/Bassoon		MM, DMA	BC

Music Performance/Cello		MM, DMA	BC
Music Performance/Clarinet		MM, DMA	BC
Music Performance/Classical Guitar		MM	BC
Music Performance/Double Bass		MM, DMA	BC
Music Performance/ Euphonium		MM, DMA	BC
Music Performance/Flute		MM, DMA	BC
Music Performance/French Horn		MM, DMA	BC
Music Performance/Harp		MM, DMA	BC
Music Performance/ Harpsichord		MM	BC
Music Performance/Historical Keyboard		DMA	BC
Music Performance/Oboe		MM, DMA	BC
Music Performance/ Percussion		MM, DMA	BC
Music Performance/Piano		MM, DMA	BC
Music Performance/ Saxophone		MM	BC
Music Performance/ Trombone		MM, DMA	BC
Music Performance/Trumpet		MM, DMA	BC
Music Performance/Tuba		MM, DMA	BC
Music Performance/Viola		MM, DMA	BC
Music Performance/Violin		MM, DMA	BC
Music Performance/Voice		MM, DMA	BC
Music Teaching		Cert.	BC
Music Technology	BS (p. 426), Cert. (p. 435)	MS	BC
Music Technology (Interdisciplinary Studies)	BS (p. 431)		BC
Music Theory (Bassoon*, Cello*, Clarinet*, Classical Guitar*, Double Bass*, Euphonium*, Flute*, French Horn*, Harp*, Harpsichord*, Oboe*, Percussion*, Piano*, Saxophone*, Trombone*, Trumpet*, Tuba*, Viola*, Violin*, Voice*)	BM* (p. 478)	MM	BC
Music Theory (Jazz)	Cert. (p. 436)		BC
Music Theory (Traditional)	Cert. (p. 437)		BC
Music Therapy (Bassoon*, Cello*, Clarinet*, Classical Guitar*, Double Bass*, Euphonium*, Flute*, French Horn*, Harp*, Harpsichord*, Oboe*, Percussion*, Piano*, Saxophone*, Trombone*, Trumpet*, Tuba*, Viola*, Violin*, Voice*)	BM* (p. 438)	MMT, PhD	BC

Music Therapy/Jazz (Bassoon, Cello, Clarinet, Double Bass, Euphonium, Flute, French Horn, Guitar, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice)	BM (p. 444)		BC
Musical Theater	BFA (p. 527)		CA
Musical Theater Collaboration (Bookwriting, Composing/Lyricist, Directing)		MFA (applications accepted every 3 years with next admission for Fall 2025)	CA
Narrative Medicine		Cert.	ME
Native Perennial Garden Design	Cert. (p. 252)		TA
Natural Sciences	Minor		ST
Natural Sciences (Biology)	BA (p. 1677), BS (p. 1699)		ST
Natural Sciences (Chemistry)	BA (p. 1682), BS (p. 1705)		ST
Natural Sciences (Earth and Environmental Sciences)	BA (p. 1688), BS (p. 1711)		ST
Natural Sciences (Physics)	BA (p. 1694), BS (p. 1716)		ST
Neuromotor Science		MS, PhD	HP
Neuroscience		Cert.	LA
Neuroscience Research	Minor (p. 1116)		LA
Neuroscience: Cellular and Molecular	BS (p. 1723)		ST
Neuroscience: Systems, Behavior and Plasticity	BS (p. 1117)	MS	LA
New Product Development		Cert.	EN
Non-Profit Management		Cert.	LA
Nursing (Adult-Gerontology Primary Care Nurse Practitioner*, Family and Individual Across the Lifespan Nurse Practitioner*, Health Systems Leadership*)	BSN (p. 1383)	DNP*	HP
Nutrition	Minor (p. 1387)	MPH, Cert.	HP
Occupational Therapy		OTD	HP
Occupational Therapy Transitional Program		OTD	HP
Opera		MM	BC
Oral Health Sciences		MS	DN
Oral and Maxillofacial Surgery		Cert.	DN
Orchestral Music	Cert. (p. 449)		BC
Organizational Leadership	Minor (p. 905)	Cert.	BU
Orthodontics			Cert. DN
Painting (Art Education*)	BFA (p. 253), Conc.*	MFA	TA
Painting with Entrepreneurial Studies	BFA (p. 262)		TA
Performing Arts	Cert. (p. 475)		BC
Periodontics			Cert. DN
Pharmaceutical Labeling, Advertising and Promotions		Cert., Post-Master's Cert.	PH

Pharmaceutical Manufacturing: Process Development and Analysis		Cert., Post-Master's Cert.	PH
Pharmaceutical Regulatory Sciences		MS	PH
Pharmaceutical Sciences	BS (p. 1729)		ST
Pharmaceutical Sciences/ Medicinal Chemistry		MS, PhD	PH
Pharmaceutical Sciences/ Pharmaceutics		MS, PhD	PH
Pharmaceutical Sciences/ Pharmacodynamics		MS, PhD	PH
Pharmaceutical Sciences/ Regulatory Affairs and Quality Assurance		PhD	PH
Pharmacy		PharmD	PH
Philosophy	BA (p. 1121), Minor (p. 1127)	MA, PhD	LA
Photography (Art Education*)	BFA (p. 268), Conc.*	MFA	TA
Photography with Entrepreneurial Studies	BFA (p. 275)		TA
Physical Therapy		DPT	HP
Physician Assistant		MMS	ME
Physics	BA (p. 1734), BS (p. 1738), BA/MS (p. 1446), BS/MS (p. 1447), Minor (p. 1742)	MS, PhD	ST
Physics with Teaching	BS (p. 1743)		ST
Piano Pedagogy	BM (not currently open for enrollment) (p. 476)	MM	BC
Piano Performance and Music Theory		MM	BC
Piano Performance/ Collaborative Piano and Chamber Music		MM	BC
Piano Performance/Piano Pedagogy		MM	BC
Play Therapy		Cert.	UC
Podiatric Medicine		DPM	PM
Police Leadership		Cert. (not currently open for enrollment)	LA
Policy and Organizational Studies (Adult and Organizational Development, Higher Education, Urban Education)		PhD	ED
Political Economy	Cert. (p. 1127)		LA
Political Science	BA (p. 1129), Minor (p. 1135)	MA, PhD	LA
Portuguese	Minor (p. 1136)		LA
Printmaking (Art Education*)	BFA (p. 280), Conc.*	MFA	TA
Printmaking with Entrepreneurial Studies	BFA (p. 287)		TA
Professional Health Education (The Scholarship of Teaching and Learning in Health-Based Instruction*)		MSEd*, Cert.	ED

Professional Studies (Brass, Cello, Classical Guitar, Double Bass, Historical Keyboard Instruments, Opera, Percussion, Piano, Viola, Violin, Voice, Woodwinds)		Cert.	BC
Professional Writing	Cert. (p. 1136)		LA
Prosthodontics		Cert.	DN
Psychological Research		MS	LA
Psychological Studies (active in Japan)	BA (p. 1137), Minor		LA
Psychology (Quantitative Methods*)	BA (p. 1140), Minor (p. 1147)	MA (not open for direct admission), PhD*	LA
Psychology/Neuroscience		PhD	LA
Public Health	BS (p. 1388), Minor (p. 1393)		HP
Public Health Data Science		MS	HP
Public Health Law Research		Cert.	HP
Public Health Preparedness and Response		Cert.	HP
Public Policy	Minor (p. 1148)	MPP, Cert.	LA
Public Relations (International Communication*)	BA (p. 1338), Conc.* (p. 1341), Minor (p. 1344)	Cert.	CO
Quantitative Finance and Risk Management		MS	BU
Real Estate	BBA (p. 906), Minor (p. 910)	MS (not currently accepting applications), Cert. (not currently open for enrollment)	BU
Recreational Therapy	BS (p. 1394)	MS	HP
Regulatory Affairs and Quality Assurance		MS	PH
Religion	BA (p. 1150), Minor (p. 1154)	MA, PhD (not currently accepting applications)	LA
Risk Management and Insurance (Healthcare Risk Management)	BBA (p. 911)		BU
Risk Management and Insurance (Human Capital Risk)	BBA (p. 917)	MS (not currently accepting applications)	BU
Risk Management and Insurance (Managing Corporate Risk)	BBA (p. 914)		BU
Sales	Minor (p. 921)		BU
School Psychology		MEd (not open for direct admission), EdS, PhD	ED
Science Education/7-12		Cert. (not currently open for enrollment)	ED
Science and Technology Writing	Cert. (p. 1748)		ST
Scientific Writing		PSM, Cert.	ST
Screen Studies	Cert. (p. 531), Minor (p. 531)		CA
Sculpture (Art Education*)	BFA (p. 292), Conc.*	MFA	TA
Sculpture with Entrepreneurial Studies	BFA (p. 300)		TA

Secondary Education/English Education	BSEd (p. 629)	MEd	ED
Secondary Education/Mathematics Education	BSEd (p. 632)	MEd	ED
Secondary Education/Science Education		MEd	ED
Secondary Education/Social Studies Education	BSEd (p. 636)	MEd	ED
Secondary Education/World Languages Education	BSEd (p. 640)		ED
Secondary Education/World/Foreign Languages Education		MEd	ED
Service Excellence		Cert.	TH
Social Science Research	Cert. (p. 1154)		LA
Social Studies Education/7-12		Cert. (not currently open for enrollment)	ED
Social Work	BSW (p. 1407)	MSW	SW
Social and Behavioral Sciences		MPH, PhD	HP
Sociology	BA (p. 1155), Minor (p. 1163)	MA, PhD	LA
Sociology of Health	Minor (p. 1163)		LA
Spanish	BA (p. 1166), Minor (p. 1177), Cert. (p. 1177)	MA, PhD	LA
Spanish and Latin American Studies for Business	Cert. (p. 1164)		LA
Spanish and Latinx Studies for Health and Human Services Professions	Cert. (p. 1165)		LA
Spanish for Health Professions		Cert.	LA
Special Education		MEd	ED
Special Education (Pre-K-12)	BSEd (p. 643)		ED
Specialized Studies in Science and Mathematics	Post-Secondary Cert. (p. 1782)		UC
Speech, Language and Hearing Science	BA (p. 1399)	MA	HP
Sport Business (Athletics Administration, Recreation and Event Management, Sport Analytics, Sport Marketing and Promotions)		MS	TH
Sport Business Executive Program		MS (not currently accepting applications)	TH
Sport Management	Cert. (p. 1769), Minor (p. 1770)		TH
Sport Marketing	Cert. (p. 1771)		TH
Sport and Recreation Management (Esports*, Event Management*, Governance and Policy*, Sport and Recreation Promotion*)	BS* (p. 1764)		TH
Sports Media	Cert. (p. 1345)		CO
Sports and Society	Cert. (p. 1178)		LA
Stage Management	Cert. (p. 532)		CA

Statistical Science and Data Analytics	BS (p. 922), Minor (p. 926)		BU
Statistics		MS (not open for direct admission), PhD	BU
Statistics and Data Science		MS (not currently accepting applications)	BU
Sterile Process Manufacturing		Cert., Post-Master's Cert.	PH
Stormwater Management		Cert.	EN
Strategic Communication and Cross-Cultural Leadership		Cert.	CO
String Pedagogy		MM	BC
Student Affairs Leadership		Cert.	ED
Superintendency		Cert.	ED
Supply Chain Management	BBA (p. 927), Minor (p. 930)		BU
Sustainability	Cert. (p. 1783)		UC
Sustainable Community Planning		Cert.	TA
Sustainable Food Systems	Cert. (p. 305), Minor (p. 307)		TA
Taxation		MS LLM	LW
Teaching Art Education		Post-Master's Cert.	TA
Teaching English to Speakers of Other Languages		MSEd	ED
Teaching in Higher Education		Cert.	ED
Teaching in Higher Education for the Creative Disciplines		Cert.	ED
Technical Production and Management	BFA (p. 533)		CA
Theater (Acting*, Design and Production*, Directing*)	BA* (p. 537), Minor (p. 549)		CA
Theater Education	Cert. (p. 548)		CA
Theater Instruction		MA, Cert.	CA
Theater and Community Engagement	Cert. (p. 537)		CA
Theater/Acting		MFA (applications accepted every 3 years with next admission for Fall 2025)	CA
Theater/Design		MFA	CA
Theater/Directing		MFA (applications accepted every 3 years with next admission for Fall 2025)	CA
Theater/Playwriting		MFA (applications accepted every 3 years with next admission for Fall 2025)	CA
Tourism Analytics		Cert.	TH
Tourism and Hospitality Management (2+2 program, active in Japan)	BS		TH
Tourism and Hospitality Management (Destination Management*, Event Management*, Hospitality Operations*)	BS* (p. 1772), Cert. (p. 1776), Minor (p. 1777)		TH
Transnational Law		LLM	LW
Transportation Planning		Cert.	TA

Travel and Tourism		MS (not currently accepting applications)	TH
Trial Advocacy		LLM	LW
Trial Advocacy and Litigation		Juris Doctor Cert.	LW
Urban Bioethics		MA, Cert.	ME
Urban Education		Cert.	ED
Validation Sciences		Cert., Post-Master's Cert.	PH
Virtual Media Management	BA (p. 1346)		CO
Visual Anthropology	Minor (p. 1179)		LA
Visual Studies	BA (p. 308)		TA
Vocal Arts		MM	BC
Voice and Speech for the Actor	Cert. (p. 551)		CA
World/Foreign Languages Education/K-12		Cert. (not currently open for enrollment)	ED

Key for Schools and Colleges

BC	Esther Boyer College of Music & Dance in the Center for the Performing & Cinematic Arts
BU	Fox School of Business & Management
CA	School of Theater, Film & Media Arts in the Center for the Performing & Cinematic Arts
CO	Lew Klein College of Media & Communication
DN	Maurice H. Kornberg School of Dentistry
ED	College of Education & Human Development
EN	College of Engineering
HP	College of Public Health
LA	College of Liberal Arts
LW	Beasley School of Law
ME	Lewis Katz School of Medicine
PH	School of Pharmacy
PM	School of Podiatric Medicine
ST	College of Science & Technology
SW	School of Social Work
TA	Tyler School of Art & Architecture
TH	School of Sport, Tourism & Hospitality Management
UC	University College
US	University Studies

Degree Symbols and Classifications

AA	Associate in Arts
AS	Associate in Science
BA	Bachelor of Arts
BA/MA	Five-year Bachelor's and Master's Program
BA/MS	Five-year Bachelor's and Master's Program
BBA	Bachelor of Business Administration
BFA	Bachelor of Fine Arts
BGS	Bachelor of General Studies
BM	Bachelor of Music
BS	Bachelor of Science
BS/MA	Five-year Bachelor's and Master's Program
BS/MS	Five-year Bachelor's and Master's Program
BSArch	Bachelor of Science in Architecture
BSBioe	Bachelor of Science in Bioengineering
BSCE	Bachelor of Science in Civil Engineering

BSCET	Bachelor of Science in Construction Engineering Technology
BSEng	Bachelor of Science in Engineering
BSEd	Bachelor of Science in Education
BSEnvE	Bachelor of Science in Environmental Engineering
BSEE	Bachelor of Science in Electrical Engineering
BSET	Bachelor of Science in Engineering Technology
BSHIM	Bachelor of Science in Health Information Management
BSISE	Bachelor of Science in Industrial and Systems Engineering
BSME	Bachelor of Science in Mechanical Engineering
BSMET	Bachelor of Science in Mechanical Engineering Technology
BSN	Bachelor of Science in Nursing
BSW	Bachelor of Science in Social Work
DAT	Doctor of Athletic Training
DBA	Doctor of Business Administration
DMA	Doctor of Musical Arts
DMD	Doctor of Dental Medicine
DNP	Doctor of Nursing Practice
DPM	Doctor of Podiatric Medicine
DPT	Doctor of Physical Therapy
DS	Doctor of Science
EdD	Doctor of Education
EdS	Education Specialist
JD	Juris Doctor (first professional degree for law)
LLM	Master of Laws (further specialization after J.D. degree)
MA	Master of Arts
MAcc	Master of Accountancy
MArch	Master of Architecture
MBA	Master of Business Administration
MD	Doctor of Medicine
MEd	Master of Education
MEng	Master of Engineering
METM	Master of Engineering Technology Management
MFA	Master of Fine Arts
MHA	Master of Health Administration
MiM	Master in Management
MJ	Master of Journalism
MLA	Master of Liberal Arts
MLArch	Master of Landscape Architecture
MM	Master of Music
MMS	Master of Medical Science
MMT	Master of Music Therapy
MOT	Master of Occupational Therapy
MPH	Master of Public Health
MPP	Master of Public Policy
MS	Master of Science
MSAT	Master of Science in Athletic Training
MSBioe	Master of Science in Bioengineering
MSCE	Master of Science in Civil Engineering
MSEd	Master of Science in Education
MSEE	Master of Science in Electrical Engineering
MSEnvE	Master of Science in Environmental Engineering
MSME	Master of Science in Mechanical Engineering

MSW	Master of Social Work
MTHM	Master of Tourism and Hospitality Management
OTD	Clinical Doctorate in Occupational Therapy
PhD	Doctor of Philosophy
PharmD	Doctor of Pharmacy
PSM	Professional Science Master's
SJD	Doctor of Juridical Science

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